

Section 32 Evaluation Report for the Proposed Otago Land and Water Regional Plan

Chapter 6: Evaluation of Objectives

**This Section 32 Evaluation Report should be read together with the Proposed
Otago Land and Water Regional Plan**



**Otago
Regional
Council**

Contents

Contents	2
List of figures	3
List of tables	3
Abbreviations	4
Evaluation of objectives	5
1. Introduction	5
2. Methodology	5
3. Status quo – regional plans	6
4. Evaluation	9
4.1. IM – Integrated management	12
4.2. CL – Contaminated land	27
4.3. EARTH – Earthworks and land disturbance.....	29
4.4. EFL – Environmental flows, levels and allocation	31
4.5. FLOOD – Flood protection and drainage	32
4.6. WASTE – Waste and landfills	34
4.7. WW – Wastewater	36
4.8. WET – Wetlands.....	38
4.9. FMU chapters – Environmental outcomes	39
5. Summary of how the Objectives address the freshwater issues in Otago	81

List of figures

Figure 1: Criteria for assessing objectives (Ministry for the Environment, 2017)	6
--	---

List of tables

Table 1: Objectives from the Water Plan.....	6
Table 2: Objectives from the Waste Plan.....	8
Table 3: Objectives in the pLWRP that relate to the section 30 functions of ORC.....	9
Table 4: Gap analysis against pORPS IM objectives.....	12
Table 5: Assessment of IM objectives.....	13
Table 6: Assessment of CL objectives	28
Table 7: Assessment of EARTH objectives	29
Table 8: Assessment of EFL objectives.....	31
Table 9: Assessment of FLOOD objective	33
Table 10: Assessment of WASTE objectives.....	35
Table 11: Assessment of WW objectives	36
Table 12: Assessment of WET objectives.....	38
Table 13: Assessment of FMU objectives: Ecosystem health	41
Table 14: Assessment of FMU objectives: Human contact.....	45
Table 15: Assessment of FMU objectives: Threatened species	48
Table 16: Assessment of FMU objectives: Mahika kai.....	51
Table 17: Assessment of FMU objectives: Natural form and character	54
Table 18: Assessment of FMU objectives: Drinking water supply	57
Table 19: Assessment of FMU objectives: Animal drinking water.....	60
Table 20: Assessment of FMU objectives: Wāhi tupuna	62
Table 21: Assessment of FMU objectives: Taoka Species.....	66
Table 22: Assessment of FMU objectives: Fishing	69
Table 23: Assessment of FMU objectives: Cultivation, and production of food, beverages and fibre.....	72
Table 24: Assessment of FMU objectives: Cultivation, and production of food, beverages and fibre.....	75
Table 25: Assessment of FMU objectives: Hydro-electricity generation.....	78
Table 26: Summary of freshwater issues in Otago	81

Abbreviations

FMU	Freshwater Management Unit
NESTF	National Environmental Standards for Telecommunication Facilities 2008
NOF	National Objectives Framework
NPSET	National Policy Statement on Electricity Transmission 2008
NPSFM	National Policy Statement for Freshwater Management 2020
NPSREG	National Policy Statement for Renewable Electricity Generation 2011
ORC	Otago Regional Council
ORPS	Otago Regional Policy Statement 2019
pORPS	Proposed Otago Regional Policy Statement 2021
pLWRP	Proposed Otago Land and Water Regional Plan 2024
RPS	Regional Policy Statement
RMA	Resource Management Act 1991

Draft

Evaluation of objectives

1. Introduction

1. A regional plan must state:¹ the objectives for the region, the policies to implement the objectives; and the rules (if any) to implement the policies. Additionally, clause 3.9 of the NPSFM requires a regional council to identify an environmental outcome for every value that applies to an FMU or part of an FMU and that the council must include the environmental outcomes as an objective, or multiple objectives, in its regional plan.
2. An objective in a regional plan is a statement of what is to be achieved through the resolution of a particular issue. Objectives should clearly state what is aimed for in overcoming the issue or promoting a positive outcome, or what the community has expressed as being desirable in resolving an issue (Quality Planning, 2013). Like other types of provisions, they must be evaluated when preparing a plan however the criteria for evaluation are different for objectives. This chapter outlines the methodology adopted and assessments of the objectives of the pLWRP.

2. Methodology

3. The RMA requires an examination of the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of the RMA.² “Most appropriate” does not mean the superior method. Rather, in this context “most appropriate” means what is suitable. It is a value judgement as to what on balance, is the most appropriate, when measured against the relevant objectives.³
4. Section 5 sets out the purpose of the RMA:
 - (1) *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
 - (2) *In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—*
 - (a) *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
 - (b) *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
 - (c) *avoiding, remedying, or mitigating any adverse effects of activities on the environment.*
5. Section 32 does not require different options for objectives to be identified, but it is considered that, at a minimum, proposed objectives should be assessed against the policy status quo, which is determined by the policy context and varies for each topic. The Ministry for the Environment’s guidance on section 32 identifies three main criteria for evaluating

¹ Section 67(1), RMA.

² Sections 32(1)(a) and 32(6), RMA.

³ *Rational Transport Society Inc v New Zealand Transport Agency* CIV-2011-485-2259, 15 December 2011 at [45].

objectives (Ministry for the Environment, 2017): relevance, feasibility, and acceptability. Figure 1 below describes these criteria in more detail.

Category	Criteria	Comments
Relevance	Directed to addressing a resource management issue	
	Focused on achieving the purpose of the Act	This could either be identified as one overall assessment, or separated out into each relevant Part 2 matter.
	Assists a council to carry out its statutory functions	That is, section 30 or 31.
	Within scope of higher level documents	That is, objectives of national policy statement, regional policy statement.
Feasibility	Acceptable level of uncertainty and risk	This will not be known until after the provisions have been assessed.
	Realistically able to be achieved within council's powers, skills and resources	This will not be known until after the provisions have been identified and assessed.
Acceptability	Consistent with identified iwi/Māori and community outcomes	This should be informed by earlier community outcomes processes, or further consultation.
	Will not result in unjustifiably high costs on the community or parts of the community	This will not be known until after the provisions have been identified and assessed.

Figure 1: Criteria for assessing objectives (Ministry for the Environment, 2017)

6. This approach has been used in the evaluations of objectives in this chapter.

3. Status quo – regional plans

7. The objectives of the Water Plan and Waste Plan are the regional plan status quo for the management of land and fresh water in Otago. These objectives are listed in Table 1 and Table 2 below for reference.

Table 1: Objectives from the Water Plan

Water Plan	
Natural and Human Use Values of Lakes and Rivers	
5.3.1	To maintain or enhance the natural and human use values, identified in Schedules 1A, 1B and 1C, that are supported by Otago's lakes and rivers.
5.3.2	To maintain or enhance the spiritual and cultural beliefs, values and uses of significance to Kai Tahu, identified in Schedule 1D, as these relates to Otago's lakes and rivers.
5.3.3	To protect the natural character of Otago's lakes and rivers and their margins from inappropriate subdivision, use or development.
5.3.4	To maintain or enhance the amenity values associated with Otago's lakes and rivers and the margins.
5.3.5	To maintain or enhance public access to and along the margins of Otago's lakes and rivers.
5.3.6	To provide for the sustainable use and development of Otago's water bodies, and the beds and margins of Otago's lakes and rivers.
5.3.7	To maintain the heritage values associated with Otago's lakes and rivers, and their margins.

5.3.8	To avoid the exacerbation of any natural hazard or the creation of a hazard associated with Otago's lakes and rivers.
Water Quantity	
6.3.1	To retain flows in rivers sufficient to maintain their life-supporting capacity for aquatic ecosystems, and their natural character.
6.3.2	To provide for the water needs of Otago's primary and secondary industries, and community domestic water supplies.
6.3.2A	To maintain long term groundwater levels and water storage in Otago's aquifers.
6.3.3	To minimise conflict among those taking water
6.3.4	To maximise the opportunity for diverse consumptive uses of water which is available for taking.
6.3.5	To minimise adverse effects on the quality of receiving water, including its ecology and mauri, where such water is subject to any new inter-catchment transfer of water.
6.3.6	To minimise any adverse downstream effect of managed flows.
6.3.7	To minimise the adverse effects from fluctuations in the levels of controlled lakes.
Water Quality	
7.A.1	To maintain water quality in Otago lakes, rivers, wetlands, and groundwater, but enhance water quality where it is degraded.
7.A.2	To enable the discharge of water or contaminants to water or land, in a way that maintains water quality and supports natural and human use values, including Kāi Tahu values.
7.A.3	To have individuals and communities manage their discharges to reduce adverse effect, including cumulative effects, on water quality.
The Beds and Margins of Lakes and Rivers	
8.3.1	To maintain: <ul style="list-style-type: none"> (a) The stability and function of existing structure located in, on, under or over the bed or margin of any lake or river; (b) The stability of the bed and bank of any lake or river; and (c) The flood and sediment carrying capacity of any lake or river.
8.3.2	To minimise reduction in water clarity caused by bed disturbance.
8.3.3	To maintain the integrity of existing defences against water.
8.3.4	To remedy any adverse effect resulting from the failure or overtopping of any dam structure.
8.3.5	To maintain the passage of fish, or improve the passage of fish, by instream structure, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats.
Groundwater	
9.3.1	To sustain the recognised uses of Otago's groundwater.
9.3.3	To maintain the quality of Otago's groundwater.
9.3.5	To avoid degradation of soils arising from the inappropriate application of poor quality groundwater.
Wetlands	

10.3.1	Otago's wetlands and their individual and collective values and uses will be maintained or enhanced for present and future generations.
10.3.2	Otago's Regionally Significant Wetlands and their values and uses are recognised and sustained.
Replacement Water Take & Use Permits	
10A.1.1	Facilitate an efficient and effective transition from the operative freshwater planning framework toward a new integrated regional planning framework, by managing: <ul style="list-style-type: none"> (a) The take and use of freshwater; and (b) The replacement of Deemed Permits, and (c) The replacement of water permits for takes and uses of freshwater where those water permits expire prior to 31 December 2025.

Table 2: Objectives from the Waste Plan

Waste Plan	
Mana Whenua Waste	
3.3.1	To ensure that the quality of Otago's natural and physical resources is not degraded by wastes.
3.3.2	To protect the mauri of Otago's natural and physical resources and restore the mauri of waste-affected resources.
3.3.3	To ensure waste management practices are compatible with kai Tahu values.
3.3.4	To adopt a holistic approach to waste management which integrates Kai Tahu cultural concepts.
Waste Minimisation	
4.3.1	To minimise the amount of waste generated at source in Otago.
4.3.2	To maximise the opportunities for the reuse, recycling and recovery of materials from the waste stream.
Contaminated Sites	
5.3.1	To avoid, remedy or mitigate any adverse effects of contaminated sites.
5.3.2	To avoid further site contamination.
Hazardous Substances and Hazardous Waste Objectives	
6.3.1	To avoid, remedy and mitigate the risk to the environment and human health from hazardous substances and hazardous wastes.
6.3.2	To avoid, remedy and mitigate the harmful effects of hazardous substances and hazardous wastes on traditional water, land and Mahika kai values of importance to Kai Tahu.
Landfill	
7.3.1	To avoid, remedy or mitigate the adverse environmental effects arising from the discharge of contaminants at and from landfills.
7.3.2	To eliminate illegal, uncontrolled, unmanaged, poorly managed and poorly located landfill sites.
7.3.3	To avoid, remedy or mitigate the adverse effects of discharges from composting and silage production.

8. As outlined previously in Chapter 5 of this report, there have been important changes to the regulatory framework since the Water Plan and Waste Plan became operative in 2004 and 1997 respectively. These changes include new national direction, along with the notification of the pORPS, which the pLWRP will need to give effect to once it is operative. The objectives in these plans are drafted at a broad level that does not necessarily reflect the more specific direction now contained in the higher order documents (e.g. a national or regional policy statement). Consequently, the objectives in the Water Plan and the Waste Plan do not contain enough detail about the specific outcomes sought, either in an environmental sense or as a management framework. To address this issue, the objectives in the pLWRP are detailed and seek to specify, as far as possible, the outcomes sought from implementing the pLWRP.

4. Evaluation

9. This section evaluates the objectives included in the pLWRP by chapter, using the methodology set out in section 2 above. The IM – Integrated Management chapter and FMU chapters contain objectives that apply in addition to all other chapters. Some other chapters in the pLWRP contain topic-specific objectives that set out desired outcomes relevant for that particular topic. Other chapters do not contain any topic-specific objectives because all of the outcomes being sought are contained in either the IM or FMU objectives. The chapters without topic-specific objectives are:
- BED – Beds of lakes and rivers
 - DAM – Damming and diversion
 - OTH – Other discharges
 - FF – Farming and Forestry
 - SW – Stormwater
10. To avoid duplication in the ‘Relevance’ section of this evaluation, Table 3 lists ORC’s section 30 functions under the RMA. It also notes which objectives will assist the council in carrying out its statutory functions.

Table 3: Objectives in the pLWRP that relate to the section 30 functions of ORC

Section 30 function	Relevant objective
Establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region (s30(1)(a)).	<ul style="list-style-type: none"> • IO-01 – Te Mana o te Wai • IO-04 – Ki uta ki tai/integrated management • IO-05 – Manahau āhuarangi/climate change • IO-08 – Land and soil resources • IO-09 – Community well-being • IO-010 – Significant infrastructure
Preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance.	<ul style="list-style-type: none"> • IO-03 – Long-term visions and environmental outcomes • IO-05 – Manahau āhuarangi/climate change • IO-08 – Land and soil resources • IO-09 – Community well-being • IO-010 – Significant infrastructure
Control the use of land for the purpose of:	<ul style="list-style-type: none"> • IO-01 – Te Mana o te Wai

Section 30 function	Relevant objective
i. soil conservation, ii. maintaining and enhancing the quality of water in water bodies and coastal water, iii. maintaining the quantity of water in water bodies and coastal water, iv. maintaining and enhancing ecosystems in water bodies and coastal water, v. avoiding or mitigating natural hazards. (s30(1)(c)).	<ul style="list-style-type: none"> • IO-O2 – Relationship of Kāi Tahu to freshwater • IO-O3 – Long-term visions and environmental outcomes • IO-O4 – Ki uta ki tai/integrated management • IO-O5 – Manahau āhuarangi/climate change • IO-O6 – Fish passage • IO-O7 – Freshwater species • IO-O8 – Land and soil resources • IO-O9 – Community well-being • IO-O10 – Significant infrastructure • CL-O1 – Natural hazard risks • EARTH-O1 – Earthworks and bores • FLOOD-O1 – River function in relation to natural hazards • WASTE-O1 – Location of waste deposition and processing sites • WW-O1 – Discharges of wastewater • WET-O1 – Protecting wetlands •
Investigating land for the purposes of identifying and monitoring contaminated land. (s30(1)(ca))	<ul style="list-style-type: none"> • IO-O8 – Land and soil resources • IO-O9 – Community well-being • CL-O1 – Natural hazard risks • WASTE-O1 – Location of waste deposition and processing sites
Control the taking, use, damming, and diversion of water and the control of the quantity, level, and flow of water in any water body, including – i. Setting maximum or minimum levels or flows of water, ii. Controlling the range, or rate of change, of levels or flows of water, iii. Controlling the taking or use of geothermal energy. (s30(1)(e))	<ul style="list-style-type: none"> • IO-O1 – Te Mana o te Wai • IO-O2 – Relationship of Kāi Tahu to freshwater • IO-O3 – Long-term visions and environmental outcomes • IO-O4 – Ki uta ki tai/integrated management • IO-O5 – Manahau āhuarangi/climate change • IO-O6 – Fish passage • IO-O7 – Freshwater species • IO-O9 – Community well-being • IO-O10 – Significant infrastructure • WET-O1 – Protecting wetlands
Control discharges of contaminants into or onto land or water, or discharges of water into water. (s30(1)(f))	<ul style="list-style-type: none"> • IO-O1 – Te Mana o te Wai • IO-O2 – Relationship of Kāi Tahu to freshwater • IO-O3 – Long-term visions and environmental outcomes • IO-O4 – Ki uta ki tai/integrated management • IO-O5 – Manahau āhuarangi/climate change • IO-O7 – Freshwater species

Section 30 function	Relevant objective
	<ul style="list-style-type: none"> • IO-08 – Land and soil resources • IO-09 – Community well-being • IO-010 – Significant infrastructure • WW-01 – Discharges of wastewater:
<p>Establishment of rules to allocate any of the following –</p> <ol style="list-style-type: none"> the taking or use of water, the taking or use of heat or energy from water, the taking or use of heat or energy from the material surrounding geothermal water, the capacity of water to assimilate a discharge of a contaminant. <p>(s30(1)(fa))</p>	<ul style="list-style-type: none"> • IO-01 – Te Mana o te Wai • IO-02 – Relationship of Kāi Tahu to freshwater • IO-03 – Long-term visions and environmental outcomes • IO-04 – Ki uta ki tai/integrated management • IO-05 – Manahau āhuarangi/climate change • IO-07 – Freshwater species • IO-09 – Community well-being • IO-010 – Significant infrastructure • WET-01 – Protecting wetlands
<p>In relation to any bed of a water body, control of the introduction or planting of any plant in, on, or under that land, for the purpose of –</p> <ol style="list-style-type: none"> Soil conservation, Maintaining and enhancing the quality of water in that water body, Maintaining the quantity of water in that water body, Avoiding or mitigating natural hazards. <p>(s30(1)(g))</p>	<ul style="list-style-type: none"> • IO-01 – Te Mana o te Wai • IO-02 – Relationship of Kāi Tahu to freshwater • IO-03 – Long-term visions and environmental outcomes • IO-04 – Ki uta ki tai/integrated management • IO-05 – Manahau āhuarangi/climate change • IO-06 – Fish passage • IO-07 – Freshwater species • IO-08 – Land and soil resources • IO-09 – Community well-being • IO-010 – Significant infrastructure • FLOOD-01 – River function in relation to natural hazards • WET-01 – Protecting wetlands
<p>Establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity.</p> <p>(s30(1)(ga))</p>	<ul style="list-style-type: none"> • IO-01 – Te Mana o te Wai • IO-02 – Relationship of Kāi Tahu to freshwater • IO-03 – Long-term visions and environmental outcomes • IO-04 – Ki uta ki tai/integrated management • IO-05 – Manahau āhuarangi/climate change • IO-06 – Fish passage • IO-07 – Freshwater species • IO-08 – Land and soil resources • IO-09 – Community well-being • IO-010 – Significant infrastructure • WET-01 – Protecting wetlands

Section 30 function	Relevant objective
Strategic integration of infrastructure with land use through objectives, policies, and methods. (s30(1)(gb))	<ul style="list-style-type: none"> IO-O5 – Manahau āhuarangi/climate change IO-O8 – Land and soil resources IO-O10 – Significant infrastructure FLOOD-O1 – River function in relation to natural hazards

4.1. IM – Integrated management

11. The IM chapter sets out how the integrated management of Otago’s natural and physical resources will be achieved. The pORPS contains a comprehensive set of IM – Integrated management provisions. A gap analysis was carried out to assess whether any additional IM objectives are needed in the pLWRP to achieve the purpose of the RMA over and above those provisions contained in the pORPS. The gap analysis was informed by the issues outlined with freshwater and land resources in Otago (summarised in Chapter 2) and the current regional planning framework (discussed in Chapter 3). The results of the gap analysis are set out in Table 4 below. A further assessment of how the pLWRP will implement these provisions is set out in Chapters 7 to 21 of this report.

Table 4: Gap analysis against pORPS IM objectives

pORPS 2021 Provision(s)	Any gaps in pORPS provision
IM-O1 – Long term vision The management of natural and physical resources, by and for the people of Otago, in partnership with Kāi Tahu, achieves a healthy and resilient natural environment, including the ecosystem services it provides and supports the well-being of present and future generations.	This objective addresses many of the current issues with the management of resources in Otago, including adverse water quantity and water quality outcomes, cultural deprivation for Kāi Tahu, and that community well-being relies on the access and use of Otago’s natural and physical resources. However, this objective is framed at a high-level and does not explain what these outcomes mean in the context of managing freshwater and land. These gaps have been addressed in the pLWRP by IO-O1, IO-O2, IO-O3, IO-O7, IO-O8 and IO-O9, see section 9.2 pORPS – IM of Chapter 5 of this report for more detail.
IM-O2 – Ki uta ki tai The management of natural and physical resources embraces ki uta ki tai, recognising that the environment is an interconnected system which depends on its connections to flourish and must be managed as an interdependent whole.	This objective seeks to address the issues related to the current lack of integrated management of resources in Otago and the adverse effects of cumulative impacts on natural and physical resources. This high-level objective does not set out the specific relationships or interconnections relevant for ki uta ki tai in the context of managing freshwater and land. Further specificity as to the types of connections could be provided by the pLWRP to ensure that the freshwater issues discussed in Chapter 2 of this report and summarised above, are addressed. This gap has been addressed in the pLWRP by IO-O4 and IP-P4, see section 9.2 of Chapter 5 of this report – assessment of pORPS – IM for more detail.
IM-O3 – Sustainable impact	This objective recognises that community well-being relies on the access and use of Otago’s natural and physical

pORPS 2021 Provision(s)	Any gaps in pORPS provision
Otago's communities provide for their social, economic, and cultural well-being in ways that support or restore environmental integrity, form, functioning, and resilience, so that the life-supporting capacities of air, water, soil, and ecosystems are sustainably managed, for future generations.	resources, and that such access and use can lead to adverse outcomes for those resources. The objective is high-level and does not set out what sustainable management of these natural and physical resources means in the context of managing freshwater and land. This gap has been addressed in the pLWRP by IO-O1, IO-O3, IO-O8, IO-O9, IP-P5, IP-P6, IP-P7, IP-P16, see section 9.2 of Chapter 5 of this report – assessment of pORPS – IM for more detail.
IM-O4 – Climate change Otago's communities, including Kāi Tahu, understand what climate change means for their future, and responses to climate change in the region (including climate change adaptation and climate change mitigation): <ol style="list-style-type: none"> (1) are aligned with national level climate change responses, (2) assist with achieving the national target for emissions reduction, including by having a highly renewable energy system, and (3) are recognised as integral to achieving the outcomes sought by this RPS. 	This Objective responds to the issue that climate change is affecting Otago's natural and physical resources, and that these changes will continue for the foreseeable future. This Objective directs that climate change responses are to align with national level responses to ensure a consistent and integrated approach is taken to managing, responding to, and preparing for the effects of climate change. While this objective sets out this outcome, further policy guidance on how this will be achieved in the context of the management of land and freshwater in Otago would be a helpful addition to the pLWRP and to ensure that these matters are considered or flow through into decision-making on resource consent applications. This gap has been addressed in the pLWRP by IO-O5, IP-P14 and IP-P16, see section 9.2 of Chapter 5 of this report – assessment of pORPS – IM for more detail.

12. Table 5 below assesses whether the objectives in the IM Chapter are the most appropriate way to achieve the purpose of the RMA.

Table 5: Assessment of IM objectives

Objective	Assessment
IO-O1 - Te Mana o te Wai	Relevance This objective responds to issues with the health and well-being of water bodies and freshwater ecosystems in Otago, which are outlined in detail in Chapter 2 of this report. It is focused on achieving the purpose of the Act by setting out a management framework that manages the use, development, and protection of fresh water and freshwater ecosystems in a way that enables people and communities to provide for their well-being and health and safety, while sustaining the potential of fresh water and freshwater ecosystems to meet the reasonably foreseeable needs of future generations and safeguarding the life-supporting capacity of water and ecosystems. Objective IO-O1 implements the objective of the NPSFM and LF-WAI-O1 in the pORPS.
	Feasibility This objective is realistically able to be achieved within ORC's powers and functions under the RMA, as set out above. However, it is not feasible for

Objective	Assessment
	<p>the objective to be achieved immediately. Resource users will need time to adjust their practices in order to achieve this objective. Achievement of the objective will rely on the actions of all resource users in Otago, including through non-regulatory programmes of work such as ORC's Integrated Catchment Management programme.</p> <p>There is uncertainty about the level of change in resource use and management required to achieve this objective. The level of change will be different for different types of activities and is assessed in more detail in the relevant topic-specific parts of Chapters 8 to 20 of this report. To assist with this uncertainty, and to manage the potential impacts on communities, many provisions in the pLWRP implement a staged approach to change. For example, some environmental flows and levels will be phased in over time, requirements applying to stormwater and wastewater infrastructure will be implemented over time, and achievement of target attribute states is phased over time through the use of interim target attribute states.</p> <p>Acceptability</p> <p>The acceptability of this objective to communities is mixed, as evidenced through feedback provided during clause 3 pre-notification consultation on the pLWRP. Several clause 3 parties considered that the clause 3 version of IO-O1 contained an overly stringent interpretation of Te Mana o te Wai as it directly referenced the relevant Te Mana o te Wai provisions in the pORPS. They noted that including this interpretation ahead of the Government's signalled changes to the NPSFM posed risks, particularly if the direction for Te Mana o te Wai was amended or removed. Many of these parties cited concerns about the costs required to implement Te Mana o te Wai, particularly if the concept is to be amended. Some parties sought the removal of this objective in its entirety.</p> <p>The objective was not removed because, at the time of writing, the requirement to manage land and freshwater resources using the concept of Te Mana o te Wai was still included in the NPSFM in clause 1.3 and the objective. While the Resource Management (Freshwater and Other Matters) Bill 2024 has been introduced, the amendments proposed to Te Mana o te Wai relate to its applicability in consent decision-making and do not affect the requirement to implement Te Mana o te Wai when developing plans. Additionally, the concept of Te Mana o te Wai is still included in the pORPS (as required by the NPSFM) which the pLWRP must have regard to. Removing the concept would mean the pLWRP did not give effect to higher order direction.</p> <p>Implementing Te Mana o te Wai will incur costs, particularly for resource users and some may consider those costs to be unjustifiably high. However, as outlined previously, this is not certain and, for areas where larger degrees of change are required to resource use or practices, there are transitional arrangements in the pLWRP to phase in changes over time. Further, and discussed in more detail below, there are costs associated with continuing the status quo which other parties may consider unjustifiably high.</p>

Objective	Assessment
	<p>Other clause 3 parties, including mana whenua, supported the objective but sought that the desired outcomes were made more explicit. In response, amendments were made to the objective to refer directly to the definition of Te Mana o te Wai rather than specific pORPS provisions.</p> <p>Comparison with status quo</p> <p>As discussed in section 3.1.1 of this report, the Water Plan contains objectives that are often in tension. In particular, it contains objectives which seek particular outcomes for the health and well-being of waterbodies at the same time as enabling various uses of land and water that can contribute to degradation. This tension is not explicitly addressed anywhere in the Water Plan. While no Water Plan-specific analysis has been undertaken, the description of the state and trends in fresh water outlined in Chapter 2 of this report indicate that the status quo has not supported sustainable management of water in some parts of Otago. While not Otago-specific, when introducing the NPSFM 2020, and the requirement for land and fresh water to be managed using the concept of Te Mana o te Wai, supporting documentation was produced that indicated that:</p> <ul style="list-style-type: none"> • There are strong correlations between the state of freshwater ecosystems and the state of the values (ecological, cultural, social, and economic) that flow from these ecosystems, meaning that degradation of ecosystems also means degradation of those values (Dorner, 2019) <p>Delaying reductions in external sources of nutrient inputs to water will increase the subsequent recovery time for rivers, lakes, and estuaries and make remediation more difficult (Graham, et al., 2020) Continuing the status quo is likely to continue the current costs arising from degraded health of water bodies and freshwater ecosystems. It is also likely to make remediation more difficult (and likely more expensive) in the future.</p>
IO-O2 – Relationship of Kāi Tahu to <i>freshwater</i>	<p>Relevance</p> <p>The resource management issues this objective seeks to address are set out in RMIA – Resource Management Issues of Significance to Iwi Authorities in the region in the pORPS. In particular, the objective responds to the material and cultural deprivation experienced by Kāi Tahu ki Otago (RMIA-WAI-I1) and the lack of consideration of Kāi Tahu values and interests in resource management in Otago (RMIA-WAI-I2).</p> <p>IO-O2 is relevant to achieving the purpose of the RMA as section 6(e) of the RMA requires that the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taoka, is recognised and provided for. Section 7(a) requires having particular regard to kaitiakitaka, and section 8 requires that the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) are taken into account.</p> <p>In the context of freshwater management, these requirements have been expanded on further by clause 3.4 of the NPSFM, which requires that local authorities actively involve takata whenua in freshwater management. For Kāi Tahu, this involvement includes the exercise of kaitiakitaka and rakatirataka, which is addressed by IO-O2.</p>

Objective	Assessment
	<p>This objective gives effect to the provisions in the MW – Mana whenua chapter in the pORPS. These pORPS provisions require that the principles of Te Tiriti are given effect to in resource management processes and decisions, including by utilising a partnership approach between ORC and papatipu rūnaka.</p> <p>ORC has a range of functions under s30 and in exercising those functions in relation to manage the use, development, and protection of natural and physical resources, must recognise and provide for the matter outlined in s6(e) above.</p> <p>Feasibility</p> <p>This objective relates to the relationship of Kāi Tahu to freshwater. Achieving this objective is within the powers of ORC to the extent that ORC is responsible for managing freshwater and freshwater ecosystems, including their uses. Protecting and restoring the mauri of all water bodies is unlikely to be achievable as an objective on its own, however this objective must be read in the context of objective LF-WAI-O1 – Te Mana of te Wai in the pORPS, which clarifies that protecting and restoring mauri is an outcome to be achieved by implementing the concept of Te Mana o te Wai. In that context, this objective is considered feasible.</p> <p>To fully achieve the objective requires other skills and resources for ORC to work alongside mana whenua in resource management. The relationship between ORC and mana whenua is described in the MW – Mana whenua chapter of the pORPS and includes written arrangements (including a memorandum of understanding and protocol and charter of understanding) as well as relationship-based mechanisms such as the Mana to Mana forum. This objective is considered to be realistically achievable within ORC's powers under the RMA as well as its skills and resources for working with mana whenua.</p> <p>Acceptability</p> <p>This objective is generally considered to be acceptable to the wider community and mana whenua. Feedback received during clause 3 consultation</p> <p>Several clause 3 parties sought the deletion of references to 'rakatirataka' in the objective, as they considered that the meaning and intent of the term was uncertain. Other parties supported the objective and noted it was consistent with Te Mana o te Wai. The concept of rakatirataka is expressed through the principles that are encompassed by Te Mana o te Wai (see cl1.3(4) NPSFM), particularly <i>mana whakahaere</i>: the power, authority, and obligations of tangata whenua to make decisions that maintain, protect, and sustain the health and well-being of, and their relationship with, fresh water.</p> <p>While IO-O2 is specific to the relationship of mana whenua with freshwater, achieving the objective will impact all resource users. There are likely to be costs from implementing the provisions to achieve this objective which are, collectively, the costs assessed across this report. There will be benefits to</p>

Objective	Assessment
	addressing the deprivation experienced by Kāi Tahu whānui, as well as wider benefits to the community as a result of improvements to the health and well-being of waterbodies.
	<p>Comparison with status quo</p> <p>The key objective in the Water Plan for Kāi Tahu values is Objective 5.3.2 which is to protect or enhance the spiritual and cultural beliefs, values and uses of significance to Kāi Tahu identified in Schedule 1D, as these relate to Otago's lakes and rivers. The issues with this objective, Schedule 1A in particular, are discussed in detail in section 3.1.1.2 of this report. The most relevant objectives in the Waste Plan are objectives 3.3.1 to 3.3.4.</p> <p>It is evident from the resource management issues of significance to iwi authorities contained in the pORPS, which were developed in 2021, and from the consultation undertaken with mana whenua as part of the development of the pLWRP, that the freshwater management framework as a whole in Otago has not been effective from a mana whenua perspective.</p>
IO-O3 – Long-term visions ⁴ and environmental outcomes	<p>Relevance</p> <p>This objective responds to issues with the health and well-being of water bodies and freshwater ecosystems in Otago, which are outlined in detail in Chapter 2 of this report. It connects the long-term visions for fresh water set out in the pORPS with the content of the pLWRP, including the environmental outcomes set for Otago's FMUs and rohe in chapters FMU1 to FMU5 of the pLWRP. Both the long-term visions and the environmental outcomes (which are assessed separately at the end of this section) describe the outcome sought from the sustainable management of Otago's fresh water, in order to achieve the purpose of the RMA.</p> <p>Clause 3.3 of the NPSFM requires long-term visions to be developed and included in regional policy statements. Achieving the visions must then inform the development of:</p> <ul style="list-style-type: none"> • Environmental outcomes • Target attribute states • Setting limits on resource use • Environmental flows and levels. <p>This objective connects those long-term visions (as expressed in the pORPS) to the content of the pLWRP to ensure they are implemented through the plan's provisions. It also recognises the role of environmental outcomes in FMUs and rohe which are set out in chapters FMU1 to FMU5, and their contribution to achieving the visions (as required by the NPSFM).</p> <p>Feasibility</p> <p>In some FMUs and rohe, the timeframes set to achieve the long-term visions extend beyond the life of the pLWRP and it will not be feasible to achieve them earlier (i.e. within the ten-year life span of the pLWRP). This objective</p>

⁴ pORPS, LF-FW – Freshwater

Objective	Assessment
	<p data-bbox="564 248 1388 539">focuses on managing land and water to achieve these outcomes within the timeframes specified. ORC has the appropriate functions under section 30 of the RMA to ensure that this objective can be achieved, as described in relation to IO-O1. This objective is considered to be feasible to achieve, however there is uncertainty about the degree of change required in management practices and resource use needed to achieve it. How those changes are implemented, and over what time period, will affect how feasible achievement of the objective is.</p> <p data-bbox="564 555 1388 696">ORC is also required by the NPSFM to monitor progress towards achieving target attribute states and environmental outcomes. Progress towards achieving IO-O3 will therefore be tracked and transparent for the community as part of this monitoring programme.</p> <p data-bbox="564 719 715 752">Acceptability</p> <p data-bbox="564 768 1388 1205">The long-term visions in the pORPS were developed in accordance with clause 3.3 of the NPSFM, including engagement with communities and tangata whenua. The visions have also been subject to further public engagement through the notification and hearing of submissions on the pORPS. They are therefore considered to be consistent with community and mana whenua outcomes. Clause 3.9(5)(b) of the NPSFM requires that environmental outcomes set in a regional plan, when achieved, fulfil the long-term visions. The environmental outcomes in chapters FMU1 to FMU5 of the pLWRP have been prepared on this basis, and subject to public engagement described in section 4.5 of this report. For these reasons, IO-O3 is considered to be consistent with community and mana whenua outcomes.</p> <p data-bbox="564 1220 1388 1435">There will be costs associated with achieving these outcomes. The magnitude of costs, and on whom they fall, will be determined primarily by the management framework (i.e. the policies and rules) in the pLWRP and any non-regulatory actions. The costs of the provisions of the pLWRP are described in each of the topic-specific evaluations in Chapters 8 to 20 of this report.</p> <p data-bbox="564 1458 879 1491">Comparison with status quo</p> <p data-bbox="564 1507 1388 1798">Long-term visions and environmental outcomes are requirements of the NPSFM 2020, which the Water Plan does not give full effect to. While there are objectives in the Water Plan that relate to similar outcomes as those in the long-term visions and environmental outcomes (for example, objective 5.3.3 – protect the natural character of Otago’s lakes and rivers and their margins from inappropriate subdivision, use or development), these objectives have not been developed in accordance with the requirements of the NPSFM.</p>
IO-O4 – Ki uta ki tai/integrated management	<p data-bbox="564 1823 683 1856">Relevance</p> <p data-bbox="564 1872 1388 2007">Chapter 2 describes the state and trends in the health and well-being of water in Otago, and Chapter 3 describes the issues identified with the current planning framework. In part, the issues with degradation in some parts of Otago have arisen from a regional planning framework that has not</p>

Objective	Assessment
	<p>adopted an integrated approach to managing the region's resources. In particular, there has been little integration between land management and its effects on the health and well-being of water. This issue is described in particular detail in RMIA-WAI-I5 of the pORPS: "Poor integration of water management, across agencies and across a catchment, hinders effective and holistic freshwater management."</p> <p>One of the functions of regional councils is the establishment, implementation, and review of objectives, policies and methods to achieve integrated management of the natural and physical resources of the region. Integrated management is important for managing natural and physical resources in a way, or at a rate, which enables people and communities to provide for their well-being and health and safety in accordance with section 5 of the RMA. IO-O4 also implements Policy 3 and clause 3.5 of the NPSFM, which require adopting an integrated management approach, ki uta ki tai, that recognises the interconnectedness of the whole environment, and the interactions between fresh water, coastal water, land, and ecosystems.</p> <p>In addition to the NPSFM, this objective gives effect to the IM chapter of the pORPS, which has similar requirements to the NPSFM. The objective assists with ORC's functions under section 30 of the RMA, notably the establishment and implementation of objectives, policies and methods to achieve integrated management of the natural and physical resources of the region.</p>
	<p>Feasibility</p> <p>Integrated management is a common and necessary approach to managing land and water resources due to the many and varied interactions between these resources. ORC has the appropriate functions under section 30 of the RMA to ensure that the objective can be achieved. There is low uncertainty and risk with this objective, which responds directly to the statutory functions of ORC.</p>
	<p>Acceptability</p> <p>This objective is considered to be acceptable to the wider community and mana whenua as the requirement to recognise and provide for ki uta ki tai/integrated management of land and water was consulted on and there was general support for the desired outcomes sought. One clause 3 party sought changes to the objective to clarify that implementing ki uta ki tai would require a "whole-of-a-catchment" management approach. These requested changes were accepted and included in IM-O4. There are not considered to be high costs associated with achieving this objective, given that it responds directly to requirements in the NPSFM.</p>
	<p>Comparison with status quo</p> <p>As discussed above under the 'relevance' assessment for IO-O4 (and further detailed in Chapter 3 of this report) the issues identified with the current planning framework include that it has not adopted an integrated approach to managing the region's resources. Neither the Water Plan or Waste Plan contain objectives that set out how integrated management of natural and</p>

Objective	Assessment
	physical resources is to be achieved in Otago. This contributes to the Water Plan and Waste Plan not giving full effect to the NPSFM, ORPS and the pORPS.
IO-O5 – Manahau āhuarangi/climate change	<p>Relevance</p> <p>This objective is relevant to achieving the purpose of the RMA as section 7(i) of the RMA requires having particular regard to the effects of climate change and 7(i) requires having particular regard to the benefits to be derived from the use and development of renewable energy. This direction is expanded further in Policy 4 of the NPSFM, which requires fresh water to be managed as part of New Zealand’s integrated response to climate change. This objective also assists with achieving the objective of the NPSREG. Supporting the national adaptation plan and the achievement of national targets for emissions reductions is consistent with IM-O4 and the visions for each FMU and rohe in LF-FW-O1A(9) of the pORPS and sections 66(2)(f) and (g) of the RMA, which require councils to have regard to any emissions reduction plan or national adaptation plan when preparing regional plans. This objective also recognises the effects of climate change on water and ecosystems.</p>
	<p>Feasibility</p> <p>It is not feasible for New Zealand’s climate change objectives to be achieved solely through the pLWRP. However, achieving any national-level target or objective requires contributions by all regions, including Otago. This is outlined in Policy 4 of the NPSFM which requires ORC to manage fresh water as part of New Zealand’s integrated response to climate change. As outlined in the previous section, ORC has a range of functions that assist with achieving this objective. This objective is limited to the functions that ORC has.</p> <p>There is uncertainty about the extent to which activities managed under the pLWRP can reasonably contribute to achieving the emissions reduction plan and national targets for greenhouse gas emissions reductions, however this objective does not require absolute achievement; rather, that land and water is managed in a way that supports achieving these. This is considered to appropriately mitigate any uncertainty.</p>
	<p>Acceptability</p> <p>This objective is considered to be acceptable to the wider community and mana whenua as the outcomes for managing land and water as part of New Zealand’s integrated response to climate change were consulted on and there was general support for the desired outcomes sought. Several clause 3 parties sought more specificity about how communities and ecosystems will improve resilience, and better recognition of natural hazards management. In response, amendments were made to clause (3) to clarify the role of promoting climate change adaptation, providing for changes in land use, and recognising the importance of water availability and security, and to include clause (4) to avoid or mitigate natural hazards. This objective connects requirements of other legislation such as the Climate Change</p>

Objective	Assessment
	<p>Response Act 2002 to the pLWRP and, due to its wording, is not considered likely to result in unjustifiably high costs to communities.</p> <p>In relation to renewable electricity generation, there was general support for the provision by clause 3 parties. Clause 3 feedback included that the role of regional and district targets for emissions reduction be clearly specified in the objective. This feedback was accepted and amendments were made to include reference to regional and district targets, insofar as they are relevant.</p> <p>In their clause 4A feedback, iwi authorities sought to incorporate the objective on renewable electricity generation into this objective, given both were focused on responding to climate change. That amendment was made, which resulted in what was IO-O11 being incorporated into IO-O5 and IO-O11 deleted.</p> <p>Due to the scope and wording of the objective it is not considered likely to result in unjustifiably high costs to communities.</p> <hr/> <p>Comparison with status quo</p> <p>There are no objectives in the Water Plan or the Waste Plan that explicitly relate to the management of land and water in relation to climate change. There are also no objectives in the Water Plan or the Waste Plan that explicitly recognise or provide for renewable electricity generation activities. Objective 5.3.6 is to provide for the sustainable use and development of Otago's water bodies, and the beds and margins of Otago's lakes and rivers. This would include renewable electricity generation activities. Objective 6.3.7 seeks to minimise the adverse effects from fluctuations in the levels of controlled lakes, which relates to these activities, but does not also provide for them. This lack of objectives contributes to the Water Plan and Waste Plan not fully implementing the requirements of the RMA, particularly those related to the Climate Change Response Act, NPSREG, ORPS and the pORPS.</p>
IO-O6 – Fish passage	<p>Relevance</p> <p>This objective is relevant to achieving the purpose of the RMA as it implements clause 3.26(1) of the NPSFM which requires a mandatory objective (or words to the same effect) set out in the clause to be included in regional plans. It is also relevant for recognising and providing for significant habitats of indigenous fauna under section 6(c) of the RMA, and having particular regard to intrinsic values of ecosystems and the protection of the habitat of trout and salmon under sections 7(d) and 7(h) of the RMA. IM-O6 implements the NPSFM requirements along with similar direction in LF-FW-P7 of the pORPS.</p> <hr/> <p>Feasibility</p> <p>As outlined previously, ORC has a range of functions under the RMA, which means the objective is realistically able to be achieved within ORC's powers, skills, and resources. This objective is required to be included by clause 3.26(1) of the NPSFM. It is assumed that if a provision is required by the NPSFM, it is therefore feasible.</p>

Objective	Assessment
	<p>Acceptability</p> <p>This objective is considered to be acceptable to the wider community and mana whenua as the requirement to maintain and improve fish passage was consulted on and there was general support for the desired outcomes sought. One clause 3 party sought that the objective refer to “migratory fish” to reflect that some fish in Otago are non-migratory. This amendment was not made as connectivity between currently disconnected habitats is needed for these non-migratory fish allowing individuals of these non-migratory species to move between habitat types and providing for larval movements.</p> <p>Clause 4a feedback from iwi authorities suggested to amend this objective with IO-07. This amendment was also not accepted as it was considered that both objectives have a different focus and combining these into one objective would dilute the clarity and readability provided by sperate objectives.⁵</p> <p>The assessment of the provisions which seek to achieve this objective demonstrate that the benefits of implementing this objective outweigh the costs.</p> <p>Comparison with status quo</p> <p>While there are objectives in the Water Plan that seek to provide for some instream values, including freshwater species, there are no objectives in the Water Plan that explicitly relate to the provision of fish passage. This lack of objectives contributes to the Water Plan not fully implementing the requirements of:</p> <ul style="list-style-type: none"> • the RMA, particularly <ul style="list-style-type: none"> ○ the protection of areas of significant habitats of indigenous fauna (s6(c)) and • the NPSFM, particularly <ul style="list-style-type: none"> ○ Policy 9 <i>The habitats of indigenous freshwater species are protected</i>; and ○ Clause 3.26(1), which requires the inclusion of a fish passage objective within the regional plan.
IO-07 – Freshwater fish	<p>Relevance</p> <p>This objective is relevant to achieving the purpose of the RMA, particularly section 6(c) which requires the protection of significant habitats of indigenous fauna. Policy 9 of the NPSFM provides specific direction and requires that the habitats of indigenous freshwater species are protected.</p> <p>Section 7(h) of the RMA requires having particular regard to the protection of the habitat of trout and salmon. In Otago, salmonids can negatively impact indigenous species through predation and habitat competition. This</p>

⁵ As part of their feedback provided under Clause 4a of the First Schedule of the RMA mana whenua also sought to move some fish passage provisions to the BED chapter. Including these provisions in the IM chapter means that they apply to any chapter in the plan managing activities that may affect fish passage, including BED but also, for example, damming and diversion activities managed by the DAM chapter and flood protection and drainage works managed by the FLOOD chapter. Staff therefore recommended retaining the provisions in the IM chapter so that they can continue to apply to any chapter managing structures in water bodies.

Objective	Assessment
	<p>objective reflects the more nuanced approach set out in the NPSFM, whereby Policy 10 requires protecting the habitats of trout and salmon insofar as that is consistent with protecting the habitats of indigenous freshwater species. In other words, priority is given to indigenous freshwater species.</p> <p>Feasibility</p> <p>As outlined previously, ORC has a range of functions under the RMA, which means the objective is realistically able to be achieved within ORC's powers, skills, and resources. This objective implements Policies 9 and 10 of the NPSFM. This objective is assumed to be feasible by virtue of the requirements in the NPSFM.</p> <p>Acceptability</p> <p>This objective is considered to be acceptable to the wider community and mana whenua as the requirement to protect freshwater fish habitats was consulted on and there was general support for the desired outcomes sought. Several clause 3 parties sought amendments to an early draft of the objective to clarify the relationship between protecting the habitats of indigenous species versus the habitats of trout and salmon. The objective was amended to address this concern and state specific outcomes for the habitat of indigenous freshwater fish species and the habitat of trout and salmon. Feedback on the objective was also received from iwi authorities under clause 4a consultation. Specifically, Iwi requested for the objective to be merged with IO-06, for the reference to indigenous freshwater fish species to be amended and for the scope of the objective to be widened to include the restoration of habitat. Some amendments were made in response to this feedback. IO-07 was amended to make reference to <i>indigenous species that rely on water bodies for at least part of their life</i> to ensure alignment with pORPS policy LF-FW-P14 and with the wording from threatened species definition in the plan.</p> <p>However, no amendment was made to IO-07 to provide for or require the restoration of habitats of indigenous species, as this wording did not align with Policy 9 of the NPSFM. Also, it was considered that objectives IO-06 and IO-07 were best kept separate as both provisions have a different focus. IO-06 focusses on the management fish passage, including the role of fish passage in the management of species interactions, while IO-07 focusses on the management of habitat of both indigenous and exotic fish species. Keeping these as separate objectives ensures greater clarity.</p> <p>The assessment of the provisions which seek to achieve this objective demonstrate that the benefits of implementing this objective outweigh the costs.</p> <p>Comparison with status quo</p> <p>While there are objectives in the Water Plan that seek to provide for some instream values, including freshwater species, or seek to maintain the life-supporting capacity of the region's water bodies there are no objectives in the Water Plan that explicitly relate to the protection of the habitat of</p>

Objective	Assessment
	<p>indigenous freshwater species or trout and salmon. This lack of specificity in the objectives contributes to the Water Plan not fully implementing the requirements of:</p> <ul style="list-style-type: none"> • the RMA, particularly <ul style="list-style-type: none"> ○ the protection of areas of significant habitats of indigenous fauna (s6(c)) and ○ the protection of the habitat of trout and salmon (s7(h)) • the NPSFM, particularly <ul style="list-style-type: none"> ○ Policy 9 <i>The habitats of indigenous freshwater species are protected</i>; and ○ Policy 10 <i>The habitat of trout and salmon is protected, insofar as this is consistent with Policy 9.</i>
IO-O8 – Land and soil resources	<p>Relevance</p> <p>This objective is relevant to achieving the purpose of the RMA as it seeks to ensure that the life-supporting capacity of soil is not permanently reduced, and to recognise the role of land and soil resources in providing for the well-being of people and their health and safety. The objective is also relevant to sections 7(f) and (g), which require having particular regard to the maintenance and enhancement of the quality of the environment and any finite characteristics of natural and physical resources. Soil health and quality is required for ecosystem services, including productivity and water quality. This objective also implements clause 3.2 of the NPSHPL which requires regional councils to consider how land-based primary production interacts with freshwater management at a catchment level and to take a long-term strategic approach to protecting and managing highly productive land for future generations.</p> <p>This objective assists with implementing those requirements, as well as the direction in the LF-LS chapter of the pORPS. In relation to indigenous biodiversity, it reflects the statement of responsibilities in ECO-M1 of the pORPS, which states that ORC (and territorial authorities) are responsible for specifying provisions in plans for managing the margins of wetlands, rivers, and lakes and that ORC is solely responsible for managing indigenous biodiversity in wetlands, and in, on, or under the beds of rivers and lakes.</p> <p>Feasibility</p> <p>ORC has a range of functions relating to the management of land and ecosystems which mean that this objective is realistically able to be achieved within the powers and functions ORC has under the RMA.</p> <p>Alongside regional council functions, territorial authorities also have functions to control any actual or potential effects of the use, development, of protection of land. There is therefore some overlap between the functions of ORC and territorial authorities. However, regional and district plans must both give effect to regional policy statements and cannot be inconsistent with one another, which assists with ensuring that the documents are not in conflict.</p>

Objective	Assessment
	<p>There is some uncertainty about the extent to which this objective can be achieved solely by the pLWRP given the role of territorial authorities in managing land and soil resources as well. It is intended that this objective relates to ORC's functions as they are exercised in the pLWRP and work alongside the functions exercised by territorial authorities in district plans. This combination of regional councils and territorial authorities is not new and is already regularly navigated in the context of earthworks management in Otago. For that activity, where there are both regional council and territorial authority requirements for resource users to meet, ORC works closely with the relevant territorial authority to ensure an integrated, aligned, and efficient process is provided to users. An example of this is ORC's guide to <i>Residential earthworks in Otago</i> (ORC, 2023c).</p> <p>Acceptability</p> <p>This objective responds to direction in the LF-LS chapter of the pORPS which was sought by many submitters during the hearing of submissions. During clause 3 consultation, there was general support for the objective. Some parties sought to clarify the extent to which this objective is relevant to ORC's functions and/or amendments to better link the objective to freshwater health. Others sought that the objective referred to indigenous biodiversity as well as healthy habitats for indigenous species, and to the health and safety of people. The amendments sought were made, with the exception of changing 'permanently reduced' to 'reduced' as there are a range of activities that could temporarily affect the productive capacity of land, such as earthworks. With the amendments made in response to clause 3 feedback, this objective is not likely to result in unjustifiably high costs to communities. Rather, it will support their ongoing use.</p> <p>Comparison with status quo</p> <p>There are no objectives in the Water Plan that relate to the management of land or soil resources. The objectives in the Waste Plan may apply to land and soil resources, but are targeted at the management of specific activities, such as landfills. This contributes to the Water and Waste Plans not giving full effect to the NPSHPL, ORPS, or pORPS.</p>
IO-O9 – Community well-being	<p>Relevance</p> <p>This objective responds to the concept of sustainable management set out in section 5 of the RMA, as it seeks to enable Otago's people and communities to provide for their social, economic, and cultural well-being and for their health and safety now and in the future. The direction in section 5 of the RMA is expanded on in Policy 15 of the NPSFM which requires that communities are enabled to provide for their social, economic, and cultural well-being in ways that are consistent with the NPSFM. In addition to section 5 of the RMA and the NPSFM, this objective also implements the IM chapter of the pORPS, which seeks that land and water are managed in a way that provides for the well-being of present and future generations (in particular IM-O1 and IM-O3).</p> <p>Feasibility</p>

Objective	Assessment
	<p>ORC's functions in section 30 are for the purpose of giving effect to the RMA, and therefore the exercise of these functions all contribute to community well-being in some form. This objective is limited in scope to the functions ORC has and the assessment of the full suite of provisions in the pLWRP demonstrates that it is realistically able to be achieved within ORC's powers, skills and resources. There is low uncertainty and risk with this objective, which responds directly to the purpose of the RMA, particularly that sustainable management means managing the use, development, and protection of natural and physical resources <u>in a way, or at a rate</u>, that enabled people and communities to provide for their social, economic, and cultural well-being and for their health and safety.</p> <p>Acceptability</p> <p>This objective is considered to be acceptable to the wider community and mana whenua as it directly seeks to enable Otago's people and communities to provide for their social, economic and cultural well-being and for their health and safety now and in the future. Clause 3 parties requested several changes. These changes included removing reference to "innovative" practices as they did not consider that land and water management practices needed to be both sustainable and innovative. They also suggested removing the qualifier "within limits" from the objective of enabling people and communities to provide for their social, economic, and cultural well-being, as these limits are addressed elsewhere in the pLWRP and should be considered collectively. Additionally, they proposed including recognition of people's health and safety in accordance with section 5 of the RMA. These requested changes were accepted and included in IO-O9.</p> <p>There are not considered to be high costs associated with achieving this objective, given that it is directed at the well-being of people and communities.</p> <p>Comparison with status quo</p> <p>The concept of sustainable management (which encompasses community well-being) underlies or is implicit in many of the objectives in the Water Plan and Waste Plan. The most relevant objective is objective 5.3.6 of the Water Plan which is to provide for the sustainable use and development of Otago's waterbodies, and the beds and margins of Otago's lakes and rivers. However, there is no explicit recognition of the concept of the well-being of people or the community in the management of natural resources in either the Water Plan or the Waste Plan. This contributes to the Water and Waste Plans not giving full effect to the NPSFM or pORPS.</p>
IO-O10 – Significant infrastructure	<p>Relevance</p> <p>This objective is relevant to achieving the purpose of the RMA as it assists with achieving the requirement in section 7(i) of the RMA to have particular regard to the benefits to be derived from the use and development of renewable energy, as those activities are also covered by IO-O10. It also assists with achieving the objectives of the NPSREG and NPSET, particularly by recognising the benefits of nationally significant infrastructure and</p>

Objective	Assessment
	regionally significant infrastructure. IO-O10 also implements the direction in the EIT chapter of the pORPS.
	<p>Feasibility</p> <p>Nationally and regionally significant infrastructure can be located in or near water bodies or require the take or use of water, or discharge of contaminants,⁶ which are all within the scope of ORC's functions to manage. The benefits of these activities are commonly recognised in decision-making on resource consent applications as well as through the provisions in a plan, including, for example, the activity classification for rules providing for these activities.</p>
	<p>Acceptability</p> <p>This objective is considered to be acceptable to the wider community and mana whenua as the requirement to recognise and provide for the benefits of nationally significant infrastructure and regionally significant infrastructure was consulted on and there was general support for the desired outcomes sought. One clause 3 party suggested that it was unnecessary to specify the scale of the benefits of significant infrastructure and sought the deletion of the terms "national, regional and local". This request was accepted and IO-O10 was amended to address this feedback.</p> <p>The assessment of the provisions which seek to achieve this objective demonstrate that the benefits of implementing this objective outweigh the costs.</p>
	<p>Comparison with status quo</p> <p>The objectives in the Water Plan are very broad and do not explicitly provide for the benefits of significant infrastructure. While the objectives may implicitly provide for these activities (for example, Objective 5.3.5 to provide for the sustainable use and development of water bodies and their beds and margins), the lack of explicit recognition of this activity contributes to the Water Plan not fully implementing the NPSREG, ORPS and pORPS.</p>

13. Based on the assessments in table above, it is considered that the objectives in the IM chapter of the pLWRP are the most appropriate way to achieve the purpose of the RMA and, in addition give effect the relevant higher order documents including the NPSFM, NPSREG, ORPS and implement the direction in the pORPS. The reasons for this conclusion are included in the table.

4.2. CL – Contaminated land

14. Contaminated land is widely dispersed throughout Otago. Understanding the location and level of contamination through effective policy direction and community participation is vital to managing the present-day effects of contamination. The CL chapter has one objective,

⁶ Section 30(1)(c), (e), (f), RMA.

which provides guidance on managing the risks arising from natural hazards and climate change (CL-O1). The objective is assessed in Table 6.

Table 6: Assessment of CL objectives

Objective	Assessment
CL-O1 - Natural hazard risks	<p>Relevance</p> <p>This objective is relevant to implementing the RMA, specifically matters of national importance in sections 6 and 7, such as the management of significant risks from natural hazards (6(h)). maintenance and enhancement of the quality of the environment (7(f)). It also comes to the purpose of the RMA.</p> <p>The objective in the CL chapter of the pLWRP is also relevant as it assists the council to carry out its functions relating to the control of land use under Section 30(c) of the RMA, particularly in relation to the avoidance or mitigation of natural hazards⁷.</p> <p>CL-O1 gives effect to recent decisions on the pORPS 2021, specifically HAZ-CL-P13 and HAZ-CL-P14. Increased risk of contaminated land erosion from the effects of climate change, rising sea levels and weathering has been identified as a critical area of requiring immediate attention for some parts of Otago, for instance in Dunedin's Kettle Park.</p>
	<p>Feasibility</p> <p>CL-O1 is a relatively feasible objective and gives clearer direction to ongoing efforts for contaminated land management than what exists in objectives the Waste Plan. Many of Otago's contaminated sites are recorded in ORC's HAIL register, however, understanding the risks of climate change and natural hazards may be a resource heavy exercise for the whole region so will take time and effort.</p>
	<p>Acceptability</p> <p>The objective is likely to be received well as it was incorporated into the pLWRP to respond to Iwi and community feedback and recommendations during the Clause 3 consultation. Landowners and territorial authorities will likely incur some costs as a result; however, there is strong community support for action for the ongoing remediation of contaminated land.</p>
	<p>Comparison with status quo</p> <p>Two objectives from the Waste Plan are relevant to contaminated land: Objective 5.3.1: To avoid, remedy, or mitigate any adverse effects of contaminated sites, and Objective 5.3.2: To avoid further site contamination.</p> <p>CL-O1 is a key change from the previous direction under the Waste Plan. It directs that contaminated land be identified and remediated to avoid the risks associated with natural hazards and climate change. As noted above, this is in line with Iwi and community feedback on this topic and responds to the issues raised with the status quo.</p>

15. The provisions that implement this objective are contained in the CL – Contaminated Land chapter of the pLWRP and are assessed in Chapter 10 of this report. For the purposes of the pLWRP it is expected that these objectives will be the most appropriate to achieving the purpose of the RMA.

⁷ RMA, S30(c)(iv).

4.3. EARTH – Earthworks and land disturbance

16. Earthworks are important for land development, which enables many urban and rural activities but can result in erosion and sediment-laden stormwater discharges. The EARTH chapter manages earthworks, land disturbance associated with the use of land for drilling, the construction, use, and decommissioning of bores, and site investigations. The EARTH chapter has one objective, which is assessed in Table 7.

Table 7: Assessment of EARTH objectives

Objective	Assessment
EARTH-O1 – Earthworks and bores	<p>Relevance</p> <p>This objective addresses the resource management issues of degraded soil health and stability as well as degraded water quality from sediment laden discharges from earthworks. It also seeks to ensure that the drilling of land does not adversely impact on water quality and water quantity</p> <p>When earthworks are undertaken in urban and rural areas, sub-soils and/or introduced soils (i.e., fill) are exposed, which can result in erosion and sediment-laden discharges. The effects of sediment-laden water discharges on water quality and the health of downstream receiving environments and ecosystems can be significant. For example, excess sediment in waterbodies can affect water depths, water coverage, the type of sediment found on the bed, and the clarity and turbidity of the water. Such environmental changes can affect ecosystems, including changes to vegetation, be detrimental to fish habitats, degrade spawning areas, and deplete invertebrate populations. The drilling of land can impact on water quality by allowing contaminants to enter the aquifer. The activity can also impact on the hydrology of aquifers or connected water bodies by allowing groundwater leakage or groundwater entering the surface</p> <p>Section 5 of the RMA sets out the purpose of the Act, being to promote the sustainable management of natural and physical resources. Broadly, this means managing natural and physical resources to provide for ongoing human needs within the envelope of a healthy, functioning environment.</p> <p>The objective in the EARTH chapter of the pLWRP is relevant as it assists the council to carry out its functions relating to the control of land use under Section 30(c) of the RMA, particularly in relation to soil conservation and water quality⁸.</p> <p>This objective is also relevant in light of the direction set in the NPSFM and pORPS, which both require that fresh water is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments (including water).</p>
	<p>Feasibility</p> <p>The Otago region is characterised by large areas of undulating and hilly topography. Earthworks undertaken on such topography in a manner that does not adequately address land stability can lead to increased erosion or sediment-laden runoff. The erosion and loss of soil can also adversely affect soil conservation and so potentially reduce the on-site productive capability of land.</p>

⁸ RMA, S30(c)((i) and (ii).

	<p>EARTH-O1 recognises these environmental concerns by requiring that earthworks are managed in a way that maintains or enhances land stability soil health and water quality. The level of uncertainty and risk of this objective is acceptable and it is considered that the objective is realistically able to be achieved within council's powers, skills and resources.</p> <p>The objective is capable of practical achievement 'on the ground', through the pLWRP's reliance on tailored permitted activity rules for earthworks that:</p> <ul style="list-style-type: none"> • take into consideration Otago's topographical characteristics and the scale of the proposed works; • require implementation of best practice erosion and sediment control measures (for earthworks above a certain scale) and ; • require adherence to a range of conditions that seek to manage the risks to water quality and soil health, and prevent the creation or exacerbation of natural hazards or public health and safety hazards. <p>The provisions in the pLWRP for managing bores and undertaking drilling activities will also contribute to achieving the objective through permitted and controlled activity rules that include conditions to protect aquifer health (both in terms of water quality and quantity).</p> <p>Where the conditions on the permitted or controlled activity rules cannot be met the planning framework allows for activities to be considered on a case-by-case basis through the consent application process. This pathway will enable the setting of site-specific consent conditions that contribute to the achievement of the objective.</p>
	<p>Acceptability</p> <p>There may be additional costs for land users associated with managing earthwork activities in accordance with these objectives. However, given the potential adverse effects on water quality from poorly managed earthworks, the objectives are consistent with identified iwi and community outcomes. It is anticipated that the objectives will not result in costs that are unjustifiably high costs and they will help avoid imposing other costs on local communities and mana whenua. Such costs relate to damage from the effects and their remediation.</p> <p>Feedback was received from iwi parties in the clause 3 consultation to amend the objective to the following: <i>Earthworks are managed to maintain or enhance land stability and to maintain water quality and water body form and function.</i> The additional feedback and reasoning for this change was to ensure the objective included avoiding silting up of the beds of lakes or rivers or change in channel shape. This amendment was not made as suggested, as the policies and rules had been drafted primarily to achieve water quality aspirations, as well as land stability and soil health.</p> <p>In clause 4A, there was no specific feedback received on EARTH-O1.</p>
	<p>Comparison with status quo</p> <p>There are no objectives in the Water Plan that explicitly relate to the effects of earthworks on water quality or soil health. This circumstance contributes to the Water Plan not giving full effect to the requirements of the RMA and demonstrate the need for the objective.</p>

17. The provisions in the EARTH chapter of the pLWRP implement EARTH-O1 are assessed in Chapter 12 of this report.

4.4. EFL – Environmental flows, levels and allocation

18. The EFL chapter in the pLWRP establishes the environmental flows, levels and associated take limits (i.e., the allocation of water) for Otago’s rivers, lakes and groundwater, and manages the take and use of water to achieve these flows, levels and limits. The EFL chapter has a single objective EFL-O1 Efficiency.”

Table 8: Assessment of EFL objectives

Objective	Assessment
EFL-O1 Efficiency	<p>Relevance</p> <p>EFL-O1 is relevant to achieving the purpose of the RMA as it relates to the efficient use and development of natural and physical resources⁹.</p> <p>The objective in the EFL chapter of the pLWRP is also relevant as it assists the council to carry out its functions relating to the control of the taking and use of water under Section 30(e) of the RMA.</p> <p>This objective responds to the specific direction in the NPSFM and pORPS 2021 that requires the efficient take and use of water. Policy 11 of the NPSFM requires fresh water to be allocated and used efficiently.¹⁰ Further to this, the pORPS 2021 also contains provisions dealing with the efficient take and use of water. LF-FW-P7 requires that freshwater is allocated within environmental limits and used efficiently.</p>
	<p>Feasibility</p> <p>This objective is considered achievable as it sets a clear outcome for water allocation and can be feasibly achieved by ORC performing its functions under section 30, including the function to manage the quantity of water in water bodies.¹¹ Further to this, the assessment of the provisions that are relevant to achieving this objective (which is included in Chapter 13 of this report), demonstrates that the objective can be realistically achieved. To some degree the pLWRP provisions that seek to address efficiency and achieve this objective will embed current consenting practice within the pLWRP (e.g. efficient application of water for irrigation), while also providing stronger and additional guidance on efficiency on other aspects of water use (e.g. conveyance).</p>
	<p>Acceptability</p> <p>EFL-O1 is considered acceptable to wider community and Iwi as it sets a desired outcome for water use that ensures that the quantity of water that is taken and used from water bodies is reasonable and efficient for the needs of the intended use. This objective is consistent with the aspiration of the community and Iwi and takes a system-wide approach that applies to all resource users and activities, including both urban and rural water take and use. It also looks to meet the reasonably foreseeable needs for water of future generations in Otago.</p> <p>Considerable feedback was received by the community and key stakeholder during community engagement in developing this objective. This feedback expressed both recognition of the importance of efficient water use but also concern about what this would mean in practice.</p> <p>While there was some feedback on the specific wording of this proposed objective from some clause 3 parties, there was general acceptance of the intent and aim of</p>

⁹ RMA, S 7(b)

¹⁰ Further to this, Clause 3.28 requires the pLWRP to include criteria for deciding how to improve and maximise the efficient allocation of water (which includes economic, technical, and dynamic efficiency) and this objective is part of the proposed criteria.

¹¹ RMA, s30(e)

	<p>this objective from clause 3 parties. In response, some amendments were made to clarify the wording of EFL-O1.</p> <p>During pre-notification consultation under clauses 3 and 4A, no specific feedback received from iwi authorities on EFL-O1 and so no changes were made. However, it was noted that without referenced to strategic objectives that the single objective makes the focus of EFL appear to be on water use rather than on the health and wellbeing of the water bodies and ecosystems, which is foundational to a system approach.</p> <p>The benefits of this objective long-term outweigh its potential costs to individuals and community where improvements in water use may be required. The window of opportunity for change may be limited given the increasing effects of a more variable climate.</p> <p>EFL-O1 is considered achievable as the pIWRP contains provisions that determine the different circumstances that water that is taken is reasonable for its intended use and is used efficiently.</p>
	<p>Comparison with status quo</p> <p>Chapter 6 of the Water Plan manages water quantity and the objectives in this chapter do not explicitly refer to or focus on efficiency of water use. However, the following objectives seek an outcome for certain uses of water:</p> <ul style="list-style-type: none"> • 6.3.2: To provide for the water needs of Otago’s primary and secondary industries, and community domestic water supplies; • To maximise the opportunity for diverse consumptive uses of water which is available for taking. <p>The objectives in the Water Plan do not give effect to policy direction from higher order planning documents, in particular policy 11 of the NPSFM.</p>

19. The provisions that implement this objective are contained in the EFL chapter. They are evaluated in Chapter 13 of this report.
20. EFL-O1 gives effect to Te Mana o te Wai by prioritising the health and wellbeing of the water bodies and freshwater, which includes recognising the value to the region of retaining water in a waterbody. This approach focuses on the efficiency of the take (i.e., the intake infrastructure) and the use (i.e., the application of the water). There are likely to be costs associated with infrastructure improvements and some activities that may not be considered as an efficient use (e.g., some amenity and recreation activities). However, EFL-O1 seeks to improve certainty in supply by ensuring that there is less wastage of water resources (e.g., less water lost via leakage and evaporation) and provide the benefit of greater ‘future-proofing’ as more efficient systems do more with less water. EFL-O1 is appropriate to achieve the purpose of the RMA, and is relevant and acceptable as it is consistent with the requirements of the NPSFM and pORPS 2021.

4.5. FLOOD – Flood protection and drainage

21. The FLOOD chapter manages flood protection and drainage works undertaken by or on behalf of ORC exercising its powers, functions and duties under the Soil Conservation and Rivers Control Act 1941, the Land Drainage Act 1908, or the Local Government Act 1974, in relation to flood control and drainage. The chapter contains one objective. The appropriateness of this objective is assessed in Table 9.

Table 9: Assessment of FLOOD objective

Objective	Assessment
FLOOD-O1 – River function in relation to natural hazards	<p>Relevance</p> <p>This objective is relevant to achieving the purpose of the RMA as it seeks to provide for the health and safety of communities. The objective does this by acknowledging that flood protection and drainage works help manage risks associated with natural hazards on communities and property.</p> <p>The objective acknowledges that some risks and effects of natural hazards may be arising from, or exacerbated by climate change, which is included in s7 of the RMA as a matter that particular regard must be given to.</p> <p>The objective in the FLOOD chapter of the pLWRP is also relevant as it assists the council to carry out its functions relating to:</p> <ul style="list-style-type: none"> the control of the use of land for the purpose of the avoidance or mitigation of natural hazards¹², and the control of the taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body.¹³ <p>This objective will assist the Council in carrying out its statutory functions and duties under the Soil Conservation and Rivers Control Act 1941, the Land Drainage Act 1908, or the Local Government Act 1974, in relation to flood control and drainage.</p>
	<p>Feasibility</p> <p>This objective is considered to be realistic and achievable.</p> <p>Flood protection and drainage works in response to natural hazard risks or effects are primarily undertaken in ways consistent with the objectives of the Soil Conservation and Rivers Control Act 1941, which include the prevention of damage by floods. While not specified, this flood damage is considered to include both physical damage to the rivers and their banks, but also the damage caused by floods when flood waters are not contained within the beds of rivers.</p> <p>The assessment of provisions shows that the outcome sought by this objective is realistically able to be achieved within the council's powers, skills and resources, including through use of permitted activity rules and resource consent processes provided in the FLOOD and BED chapters.</p>
	<p>Acceptability</p> <p>This objective is considered to be acceptable to the wider community and mana whenua as it is consistent with the purpose for which flood protection and drainage works are undertaken by ORC.</p> <p>This objective was included after clause 3 consultation, noting that it was a previous iteration that applied to the BED provisions that was included in the clause 3 version of the plan for consultation. That iteration of the objective stated:</p> <p><i>The ability of rivers, lakes, modified watercourses and artificial water courses to reduce the risk of, and effects on communities and property from, natural hazards (including those arising from or exacerbated by climate change) is protected.</i></p>

¹² RMA, s30(c)(iv)¹³ RMA, s30(e)

Objective	Assessment
	<p>Several clause 3 parties provided feedback on the BED objective, noting that 1) there should be additional policies relating to other matters relevant to activities in the BED other than natural hazards, 2) the river function in protecting communities from the risks of natural hazards should be restored where it is degraded, and 3) natural and modified watercourses should not be conflated, with some alternative working proposed. Different language applied to natural and modified/artificial water bodies.</p> <p>As this objective has been recast to apply specifically to flood protection and drainage works, and those works have a clear purpose, no changes to the overall intent of the objective have been made since Clause 3 (outside of narrowing its application to the FLOOD chapter). Other matters of relevance to FLOOD works (and works in the bed more generally) are captured by the IM chapter.</p> <p>The assessments of costs and benefits associated with the preferred option to implement FLOOD-O1 shows that the benefit for communities in Otago outweigh the costs.</p> <p>Comparison with status quo</p> <p>Objective 8.3.1 in the Water Plan requires that the flood and sediment carrying capacity of any lake or river is maintained, while Objective 8.3.3 in the Water Plan requires that the integrity of existing defences against water is maintained. These objectives are relevant to flood protection and management works but they also extend to works not specifically managed by ORC.</p> <p>As described in relation to IO-O5, there are no objectives in the Water Plan or the Waste Plan that explicitly relate to the management of land and water in relation to climate change. This contributes to the Water Plan and Waste Plan not giving full effect to the requirements of the RMA, particularly those related to the Climate Change Response Act, and the pORPS.</p>

22. The provisions in the FLOOD chapter of the pLWRP implement FLOOD-O1 and are assessed in Chapter 15 of this report. FLOOD-O1 provides for the health and safety of communities by recognising the value of flood protection and drainage works and it has an overall net benefit. Therefore, it is considered to be the most appropriate way to achieve the purpose of the RMA.

4.6. WASTE – Waste and landfills

23. The WASTE chapter manages the disposal of certain types of solid waste to land in circumstances where waste or the related discharges may enter or contaminate water. The chapter contains two objectives that implement direction from the pORPS 2021 and NPSFM. WASTE-O1 provides the outcome expected of waste sites in relation to natural hazards and climate change. The objectives are assessed below in Table 10.

Table 10: Assessment of WASTE objectives

Objective	Assessment
<p>WASTE-O1: Location of waste deposition and processing sites</p>	<p>Relevance</p> <p>Section 6(h) of the RMA requires the Council, in exercising its RMA functions, to recognise and provide for the management of significant risks from natural hazards. Section 7(i) provides direction for the Council to protect natural resources from the effects of climate change.</p> <p>The objective in the WASTE chapter of the pLWRP is also relevant as it assists the council to carry out its functions relating to</p> <ul style="list-style-type: none"> the control of land use, particularly in relation to <ul style="list-style-type: none"> soil conservation¹⁴, the maintenance and enhancement of the quality of water in water bodies and coastal water¹⁵, the maintenance and enhancement of ecosystems in water bodies and coastal water; and¹⁶ the avoidance or mitigation of natural hazards; and¹⁷ the control of discharges of contaminants into or onto land, air, or water and discharges of water into water.¹⁸ <p>The HAZ-NH section of the pORPS 2021 requires ORC to manage land subject to natural hazard risk, including by managing activities to avoid or reduce these risks, and to take into account the effects of climate change.</p> <p>As discussed above for WASTE-O1, waste disposal can have adverse environmental effects. These effects may be exacerbated by natural hazard events. Natural hazards risks in the Otago region range from coastal erosion and flooding in the lowland coastal areas of the region, to alluvial fan deposition, fires, landslip, rock fall, and river breaches in the alpine areas of the region. The region will also be subject to a changing environment through climate change. Likely outcomes may include rising sea levels (and groundwater), and an increased frequency of natural hazard events (e.g., flooding from high rainfall events and storm surges), although there is some uncertainty around the rate and scale of change.</p> <p>WASTE-O1 implements the direction in the pORPS and seeks to reduce the environmental effects as a result of waste disposal activities locating in areas where risks from natural hazards could result in unintended environmental effects.</p> <p>Feasibility</p> <p>The implementation of this objective is feasible based on our current knowledge and understanding of natural hazards across Otago. However, given the unpredictable and changing nature of climate and tectonic related hazards it may prove difficult to avoid all risks all of the time in some instances.</p> <p>The Council and external agencies have a vast wealth of knowledge and expertise that is continuously advancing in this area, and it is expected that locating such sites will become easier.</p>

¹⁴ RMA s30(c)(i)¹⁵ RMA s30(c)(ii)¹⁶ RMA s30(c)(iii)¹⁷ RMA s30(c)(iv)¹⁸ RMA s30(f)

Objective	Assessment
	<p>Acceptability</p> <p>This objective is not likely to impose any excessive costs to the community or industry and it is likely to lead to cost savings by avoiding future contamination or some disruption from natural hazard events. WASTE-O1 is consistent with mana whenua and community values and prioritises safeguarding natural resources whilst allowing for an essential service to take place within safe environmental limits.</p>
	<p>Comparison with status quo</p> <p>There is no objective that is directly relevant to WASTE-O1 in the current Waste Plan framework (with a focus on climate change and natural hazards). WASTE-O1 is a step change approach as it recognises the risks associated with natural hazards and the effects of climate change in relation to siting of activities. This is a clear objective that is carried throughout the chapter to signal the change to decision makers and resource users. WASTE-O1 is a direct response to the issues raised with the current policy framework, as well as Iwi and community concerns around the management of waste and landfill sites.</p>

24. Accordingly, the two waste objectives are the most appropriate way to achieve the purpose of the RMA and in addition, give effect to the direction in the pORPS, to the extent relevant when managing solid waste. There will be reduced ability for the development or redevelopment of waste disposal sites, based on the natural hazard risk. However, a precautionary approach is required where there is scientific uncertainty.¹⁹ It is prudent that the effects of climate change are planned for now, so that its impacts can be reduced. Once these land use activities are established it is often challenging and costly to remove or move them and/or remediate the land if it is even possible to do so. In this way, WASTE-O1 seeks to ensure that such activities are established in appropriate locations from the start.
25. The provisions in the WASTE chapter of the pLWRP implement WASTE-O1 are assessed in Chapter 18 of this report.

4.7. WW – Wastewater

26. The WW – Wastewater chapter of the pLWRP manages discharges from the treatment of sewage, greywater, and industrial and trade waste. The WW chapter contains one objective, WW-O1 that implements direction in the NPSFM and pORPS 2021. WW-O1 is assessed in Table 11.

Table 11: Assessment of WW objectives

Objective	Assessment
WW-O1 – Discharges of wastewater Adverse impacts of wastewater	<p>Relevance</p> <p>This objective addresses the resource management issue of discharging contaminants into the environment. Discharges of wastewater to land or to water can have adverse effects on the receiving environment, including soil and freshwater bodies, and include contaminants that are a risk to human health and ecological health.</p>

¹⁹ HAZ-NH-P5, pORPS.

<p>discharges are managed to protect human health and sustain the health and quality of fresh water, soil, and Kāi Tahu values.</p>	<p>Therefore, this objective is directly relevant to Section 5 of the RMA, which defines sustainable management as requiring, in part, safeguarding the life-supporting capacity of water and soil.</p> <p>The objective in the WASTE chapter of the pLWRP is also relevant as it assists the council to carry out its functions relating to the control of discharges of contaminants into or onto land, air, or water and discharges of water into water under Section 30(f) of the RMA.</p> <p>This objective is also within scope of higher level documents. The pORPS 2021 requires implementing Te Mana o te Wai and prioritising the health and well-being of waterbodies, and then the health needs of people, before the ability to provide for social, economic and cultural well-being.</p> <p>WW-O1 implements this direction in the NPSFM and pORPS 2021 by managing the adverse impacts of wastewater discharges to protect human health and sustain the health and quality of fresh water, soil, and Kāi Tahu values.</p> <p>Feasibility</p> <p>The objective is considered to be achievable as it implements requirements of the pORPS and NPSFM, and is within the council's powers, skills and resources. The level of uncertainty and risk is considered acceptable.</p> <p>The objective is capable of practical achievement 'on the ground', through the consenting framework proposed and clear policy direction, which sets out expectations for management of wastewater discharges.</p> <p>Acceptability</p> <p>This objective is consistent with identified iwi and community outcomes.</p> <p>The effects of wastewater discharges on freshwater bodies is a significant issue for mana whenua. The discharge of wastewater to water is contrary to tikaka and kawa. It renders affected waterways inaccessible for customary practices, such as mahika kai or using water for cultural purposes. This objective requires Kai Tahu values to be sustained.</p> <p>At the same time, this objective recognises the inevitability of wastewater discharges and requires them to be managed to a degree that does not affect human health. This is a pragmatic approach that is expected to be acceptable to the community. The objective is unlikely to result in unjustifiably high costs to the community.</p> <p>Clause 3 feedback: Feedback from iwi on WW-O1 included:</p> <ul style="list-style-type: none"> • There is no reference to ecosystem health or to Kai Tahu values. <p>Suggested objective: <i>The impacts of wastewater and effluent treatment and disposal on the quality, mauri and mahika kai and ecosystem values of water bodies is recognised and reduced.</i></p> <p>As a result of this feedback, the objective was amended to include Kai Tahu values.</p> <p>Comparison with status quo</p> <p>There are no objectives in the Water Plan that explicitly relate to the effects of wastewater on water quality or soil health. Importantly, discharges of wastewater into the environment cannot be avoided – they are impossible to eliminate. Discharges of wastewater must be allowed to occur in a manner that is socially, culturally, and environmentally acceptable.</p>
---	--

27. The provisions in the WW chapter of the pLWRP implement WW-O1 and are assessed in Chapter 19 of this report.

28. WW-O1 implements the fundamental concept of Te Mana o te Wai and seeks to safeguard the life-supporting capacity of water and soil, along with protecting human health, in the management of wastewater discharges. While there will be economic costs for local communities with doing so, there are also social, cultural, and environmental benefits. Therefore, it is considered to be the most appropriate way to achieve the purpose of the RMA.

4.8. WET – Wetlands

29. Otago has a diverse range of wetlands of those that still remain. These wetlands provide essential habitat for flora and fauna, mahika kai, and are an integral part of the natural character of the region. Wetlands and their values are sensitive to loss from the adverse effects of a range of activities.
30. The WET chapter of the pLWRP has one objective, WET-O1, which is evaluated in Table 12: Assessment of WET objectives.

Table 12: Assessment of WET objectives

Objective	Assessment
WET-O1 – Protecting wetlands	<p>Relevance</p> <p>The resource management issues that this objective seeks to address are set out in RMIA – Resource Management Issues of Significance to Iwi Authorities in the region in the pORPS. In particular, wetlands are a type of water body so all of the significant issues for iwi in relation to water (as contained in the pORPS) are applicable. Wetlands are also extremely important for their biodiversity values, so issue RMIA-MKB-I1 is also relevant. Similarly, this objective also responds to issues raised by the community in relation to water, biodiversity, and threatened species (see SRMR-I5, SRMR-I6 and SRMR-I7).</p> <p>This objective is relevant to achieving the purpose of the RMA. As section 6(a) requires that the preservation of the natural character of wetlands is recognised and provided for, and protected from inappropriate subdivision, use, and development. It will also, in part, assist with recognising and providing for the protection of significant indigenous vegetation and significant habitats of indigenous fauna (s6(c), and having regard to the intrinsic values of ecosystems (s7(d)). The objective also assists with implementing Policy 6 of the NPSFM, which expands on this direction and requires that there is no further loss of the extent of natural inland wetlands, their values are protected, and their restoration is promoted. This objective applies to the broad category of ‘wetlands’, rather than only ‘natural inland wetlands’ in order to give effect to LF-FW-P10A of the pORPS.</p>
	<p>Feasibility</p> <p>ORC has the appropriate functions under section 30 of the RMA to ensure that this objective can be achieved within ORC’s powers, skills and resources. However, there is some uncertainty about whether this objective can be realistically achieved for all wetlands, given some of practicalities associated with identifying wetlands, which often requires expert knowledge and can be difficult. The provisions in the pLWRP respond to this uncertainty by applying a time-staged response to implementing this direction, which will provide additional time for mapping being carried out by ORC to be completed. The objective is consistent with the direction in the pORPS (noting that direction is currently under appeal).</p>
	<p>Acceptability</p>

Objective	Assessment
	<p>There were mixed views on this objective and the associated provisions in the WET chapter throughout the community consultation process and clause 3 feedback. Some parties supported the objective or sought additional protection while others opposed the stringency of the objective and sought that it only apply to certain types of wetlands. Ultimately, the pLWRP must respond to higher order direction, including the pORPS. The broader application to all wetlands has been retained in the pLWRP to ensure that the provisions in the pORPS are given effect to when the later becomes operative.</p> <p>Comparison with status quo</p> <p>There are two key objectives in the Water Plan for wetlands – Objective 10.3.1 is that Otago’s wetlands and their individual and collective values and uses will be maintained or enhanced for present and future generations, and Objective 10.3.2 is that Otago’s Regionally Significant Wetlands and their values and uses are recognised and sustained. These objectives relate to similar outcomes as those in WET-O1, but are far more general and do not contain the level of detail, direction and specificity that WET-O1 contains. In this way, WET-O1 responds to the issues outlined with the current regional planning framework that are set out in Chapter 3 of this Report.</p>

31. The provisions that implement this objective are contained in the WET chapter and are evaluated in Chapter 20 of this report.
32. Objective WET-O1 responds to specific direction in the NPSFM, NESF, and pORPS. There will be economic and social costs from implementing the provisions in the WET chapter. These costs are justified in light of the significant environmental, cultural, and economic benefits that will be achieved. ORC must implement the NPSFM and this objective has been prepared to do that, and given the direction in the pORPS 2021, it is considered to be the most appropriate way to achieve the purpose of the RMA.

4.9. FMU chapters – Environmental outcomes

33. The Otago region has diverse freshwater environments. To manage the environments at an appropriate spatial scale, the Council has divided the region into five Freshwater Management Units (FMU) in accordance with the requirements of the NPSFM²⁰, and as set out in the pORPS²¹. One of these five FMUs is the Clutha Mata-Au FMU. Due to its size and the differences in landscapes, land uses, climate and other environmental factors within it, the Clutha Mata-Au FMU has been further divided into five rohe, which means "area" in te reo. The FMU and rohe are:
 - FMU1 – Clutha Mata-Au FMU
 - CAT1 – Upper Lakes rohe
 - CAT2 – Dunstan rohe
 - CAT3 – Manuharekia rohe
 - CAT4 – Roxburgh rohe

²⁰ Clause 3.8 (1), NPSFM

²¹ Policy LF-VM-P5, pORPS

- CAT5 – Lower Clutha rohe
 - FMU2 – Taiari/Taieri FMU
 - FMU3 – North Otago FMU
 - FMU4 – Dunedin & Coast FMU
 - FMU5 – Catlins FMU
34. The NPSFM requires that for each value identified in an FMU, an environmental outcome be identified and included as an objective in the regional plan.²² In addition ORC must give effect to Te Mana o te Wai by applying the hierarchy of obligations, as set out in clause 1.3(5) of the NPSFM when implementing the NOF process.²³ Under clause 3.9(5) of the NPSFM environmental outcomes must:
- a. describe the environmental outcome sought for the value in a way that enables an assessment of the effectiveness of the regional policy statement and plans (including limits and methods) and action plans in achieving the environmental outcome; and
 - b. when achieved, fulfil the relevant long-term visions²⁴ developed under clause 3.3 and the objective of the NPSFM.
35. The FMU sections of the pLWRP set objectives for the environmental outcome for every value identified in each FMU during the NOF process. The values identified through this process apply across all FMU and rohe and the objectives are the same for each FMU and rohe.
36. The compulsory values are ecosystem health, human contact, threatened species, and mahika kai.
37. The additional values identified in each FMU and rohe are:
- a. Natural form and character
 - b. Drinking water supply
 - c. Animal drinking water
 - d. Wāhi tupuna
 - e. Taoka species
 - f. Fishing
 - g. Cultivation, and production of food, beverages and fibre
 - h. Commercial and industrial activities
 - i. Hydro-electricity generation

²² NPSFM, Clause 3.7(1)(a), and 3.9,

²³ NPSFM, Clause 3.2(2)

²⁴ pORPS, LF-FW – Freshwater

4.9.1. Ecosystem health

38. The environmental outcome for ecosystem health is set out in the following objective in the pLWRP:

- a. *“Freshwater bodies support healthy and resilient freshwater ecosystems and habitats for indigenous species, and their life stages.”*

39. Table 13 assesses whether this objective is the most appropriate way to achieve the purpose of the RMA.

Table 13: Assessment of FMU objectives: Ecosystem health

Objective	Assessment
FMU1-O1 FMU2-O1 FMU3-O1 FMU4-O1 FMU5-O1	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act, set out in Section 5, Part II of the Act, and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>This objective describes the desired outcome for ecosystem health and achieving this outcome is relevant to achieving the purpose of the Act. For example, the outcome sought will:</p> <ul style="list-style-type: none"> • safeguard the life supporting capacity of water and ecosystems;²⁵ • support the preservation of the natural character of “freshwater bodies” which include wetlands, lakes and rivers and their margins, and will protection them from inappropriate subdivision, use, and development; and²⁶ • support the maintenance and enhancement of amenity values, the intrinsic values of ecosystems, and the maintenance and enhancement of the quality of the environment.²⁷ <p>This objective assists the council to carry out its functions under Section 30 of the RMA, which include:</p> <ul style="list-style-type: none"> • the control of the use of land for the purpose of the maintenance and enhancement of the water quality, water quantity of water and ecosystems in water bodies and coastal water; and²⁸ • the control of the taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body; and²⁹ • the control of discharges of contaminants into or onto land, air, or water and discharges of water into water and;³⁰ • the establishment of rules in a regional plan to allocate the taking and use of water.³¹ <p>The pLWRP proposes to do this by setting an objective that can be assessed against the relevant target attribute states and alternative criteria for this the value</p>

²⁵ RMA, s 5(b)

²⁶ RMA, s 6(a) and (b)

²⁷ RMA, s 7(c), (d) and (e)

²⁸ RMA, s 30(c)(ii),(iii) and (iiia).

²⁹ RMA, s 30(e)

³⁰ RMA, s 30(f)

³¹ RMA, s 30(fa)(i)

Objective	Assessment
	<p>ecosystem health. This assessment will enable the council to assess the effectiveness of the pORPS, pLWRP and any Action plans prepared to achieve this outcome.</p> <p>This objective implements direction in the NPSFM, as it sets an environmental outcome for ‘Ecosystem Health’ which is a compulsory value set out in Appendix 1A of the NPSFM. The objective is drafted to create a succinct desired outcome statement that encapsulates all 5 biophysical components of ecosystem health set out in Appendix 1A. For example, a “healthy and resilient freshwater ecosystem” includes all of the components of water quality, water quantity, habitat, aquatic life and ecological processes.</p> <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-01 to LF-VM-06 of the pORPS³². For example, the outcome seeks to achieve healthy freshwater and estuarine ecosystems that support healthy populations of indigenous species.³³</p> <p>Feasibility</p> <p>The objective describes the desired outcome sought for ecosystem health and is considered achievable and consistent with achieving the relevant long-term visions developed under clause 3.3 for each FMU and rohe in the pORPS. This objective is framed in an aspirational way and is to be achieved within the time frames set for the long-term visions in the pORPS.³⁴ It is recognised that this objective will not necessarily be achieved in the lifetime of this version of the plan.</p> <p>The provisions of the pLWRP alone may not achieve this objective in areas of Otago where there is a significant gap between the current state of the environment (baseline state) and the desired end state (target state). In those instances, further plan changes and the implementation of other management tools such as freshwater farm plans and Action Plans may be required to achieve this objective within the time frames of the long-term visions for each FMU and rohe. This is considered to be an acceptable approach given that the NPSFM allows for a phased and adaptive approach to achieve environmental outcomes.³⁵ This may entail regional councils taking action to halt or reverse the degradation, by:</p> <ul style="list-style-type: none"> • making or changing regional plans, or preparing action plans; and³⁶ • where necessary take an adaptive management approach that can include both regulatory and non-regulatory measures.³⁷ <p>The objective describes the desired outcome sought for ecosystem health in a way that enables an assessment of the effectiveness of the pLWRP provisions at achieving the environmental outcome sought. This objective is directly measurable against mandatory attribute states for some of the biophysical components of ecosystem health as required by the NPSFM. There are also alternative criteria that can assess the achievement of this objective. These criteria do this by assessing the extent to which:</p> <ul style="list-style-type: none"> • river flows demonstrate natural variations in flow patterns, including floods and freshes;

³² pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

³³ LF-FW-01A(1)

³⁴ As required by cl 3.3(2)(b) of the NPSFM, the long-term vision must set goals that are ambitious but reasonable (that is, difficult to achieve but not impossible). Cl 3.3.(2)(c) also require long-term vision to identify a timeframe to achieve those goals that is both ambitious and reasonable. The time frames to achieve the long-term visions in the pORPS range from 2035, 2040, and 2050 for different FMU and rohe.

³⁵ NPSFM policy 11, cl 3.15(1)

³⁶ NPAFM, cl 3.20

³⁷ NPSFM cl 3.15(2)

Objective	Assessment
	<ul style="list-style-type: none"> lake levels demonstrate natural water level fluctuations and seasonal variability and maintain flows into connected water bodies; there is no decrease in mean annual groundwater; and there is an increase in the extent of vegetated riparian margins that support the integrity and functioning of the water body. <p>Acceptability</p> <p>This objective is considered likely to be acceptable to wider community and iwi.</p> <p>The general feedback received from iwi and the community on previous versions of this objective during stages 2 and 3 of community engagement (which was undertaken in accordance with the NOF process) suggests there is general support for the desired outcome sought.</p> <p>The community and iwi both recognise that there will be costs and benefits associated with the achievement of this objective, as well as costs in not achieving this outcome for ecosystem health. For example, there will be environmental benefits that support community wellbeing while also resulting in some costs to existing resource users and the community. However, the LWRP and long-term visions allow for the objective to be achieved over a transition period within which these costs of achieving this objective can be spread over time.</p> <p>In the feedback received on drafts of the objective some concerns were raised around the certainty of the language. Following this feedback, the draft objective has been amended to include more certain terminology and make the proposed objective more acceptable to region wide stakeholders and the wider community.</p> <p>A draft of the environmental outcome for ecosystem health was consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>No specific comments were received with respect to this particular environmental outcome, although the following comments were received on the broader suite of draft environmental outcomes.</p> <ul style="list-style-type: none"> Achieving the outcomes may be challenging in some parts of the region; The RMA provides for the balancing of environmental, social cultural and economic values. The environmental values should not trump all other values. Concerns about the language (i.e. not clear, use of the words “environmental outcome” in each outcome statement conflates the objective <p>A number of Clause 3 parties expressed their support for the general direction set in the environmental outcomes.</p> <p>In response to clause 3 feedback received, the following amendments were made, including:</p> <ul style="list-style-type: none"> The objective has been amended from earlier versions that stated “healthy and thriving” to “healthy and resilient” freshwater ecosystems and habitats and for indigenous species, and their life stages to reflect a more achievable end state. The words “environmental outcome” have been removed from the outcome statement. <p>No specific feedback from iwi authorities was received on draft of the environmental outcome for ecosystem health during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi authorities expressed a general concern around the need to identify more clearly the FMU environmental outcomes as part of the strategic direction and the need to provide stronger link</p>

Objective	Assessment
	<p>between the outcomes (as well as attribute targets and criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter</p> <p>Comparison with status quo</p> <p>The operative Water Plan includes a number of objectives throughout the Plan that address values associated with ecosystem health. Key objectives include:</p> <ul style="list-style-type: none"> • Objective 5.3.1 To maintain or enhance the natural and human use values, identified in Schedules 1A, 1B and 1C, that are supported by Otago's lakes and rivers. • Objective 6.3.1 To retain flows in rivers sufficient to maintain their life-supporting capacity for aquatic ecosystems, and their natural character. • Objective 7.A.1 To maintain water quality in Otago lakes, rivers, wetlands, and groundwater, but enhance water quality where it is degraded. <p>Key issues with these objectives are:</p> <ul style="list-style-type: none"> • They are mutually inconsistent and therefore prevent the integrated and holistic management of resources.³⁸ • Objective 5.3.1 is ambiguous as it is not clear as to whether this objective seeks to provide for natural beyond those Scheduled in the Water Plan.³⁹ • It is not clear whether these objectives take priority over objectives in the Water Plan that seek to provide for water uses within the second and third priority of the Objective of the NPSFM. <p>It is therefore considered that the objectives of the operative Water Plan do not give effect to the objective of the NPSFM, and that the environmental outcome for ecosystem health in the pLWRP better provides for the sustainable management of this value.</p>

40. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for ecosystem health in a way that enables assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in sections 5 and 6 of Chapter 4 of this report) on the development of the environmental outcomes and this objective has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

³⁸ Objective 7.A.1 seeks improvement of water quality where it is degraded, but Objective 5.3.1 is unclear in what circumstances values need to be maintained or improved. Objective 6.3.1 suggests that it does not seek improvement where river flows or water levels have been depleted.

³⁹ The findings of the operative Water Plan review suggest that Schedules 1A, 1B and 1C are incomplete and out of date.

4.9.2. Human contact

41. The environmental outcome for human contact is set out in the following objective in the pLWRP:
“Water bodies are clean and safe for human contact activities and support the health of people and their connections with water bodies.”
42. The table below assesses whether this objective is the most appropriate way to achieve the purpose of the RMA.
43. Table 14: Assessment of FMU objectives: Human contact

Table 14: Assessment of FMU objectives: Human contact

Objective	Assessment
FMU1-O2 FMU2-O2 FMU3-O2 FMU4-O2 FMU5-O2	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act and assists the council in carrying out its functions and implement the direction in the NPSFM, specifically Subpart 2 National Objectives Framework (the NOF process).</p> <p>This objective describes the desired outcome for human contact and achieving this outcome is relevant to achieving the purpose of the Act. For example, the outcome sought will:</p> <ul style="list-style-type: none"> • enable people and communities to provide for their social, economic, and cultural well-being through human contact activities now and in the future.⁴⁰ • achieve clean and safe water bodies for human contact activities that will help to maintain and enhance public access to lakes, and rivers,⁴¹ amenity values,⁴² and the quality of the environment. <p>This objective assists the council to carry out its functions under the RMA by setting an objective that can be assessed against the relevant target attribute states and alternative criteria for this the value ecosystem health This assessment will enable the council to assess the effectiveness of the pORPS, pLWRP and any Action plans prepared to achieve this outcome.</p> <p>This objective implements direction in the NPSFM, as it sets an environmental outcome for Human contact which is a compulsory value set out in Appendix 1A of the NPSFM.</p> <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-01 to LF-VM-06 of the pORPS⁴³. For example, by achieving a state where “the health of the water supports the health of people and their connections with water bodies.”⁴⁴</p> <p>Feasibility</p> <p>The objective describes the desired outcome sought for human contact and is considered achievable and consistent with achieving the relevant long-term visions developed under clause 3.3 of the NPSFM and included in the pORPS for each FMU and rohe in Otago. This objective is framed in an aspirational way and is to be</p>

⁴⁰ RMA, s 5(2)(a)

⁴¹ RMA, s 6(d),

⁴² RMA, s

⁴³ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

⁴⁴ LF-FW-01A(6)

	<p>achieved within the time frames set for the long-term visions in the pORPS.⁴⁵ It is recognised that this objective will not necessarily be achieved in the lifetime of this version of the plan.</p> <p>The provisions of the pLWRP alone may not achieve this objective in areas of Otago where there is a significant gap between the current state of the environment (baseline state) and the desired end state (target state). In those instances, further plan changes and the implementation of other management tools such as freshwater farm plans and Action Plans may be required to achieve this objective within the time frames of the long-term visions for each FMU and rohe.</p> <p>This is considered to be an acceptable approach given that the NPSFM allows for a phased and adaptive approach to achieve environmental outcomes.⁴⁶ This may entail regional councils taking action to halt or reverse the degradation, by:</p> <ul style="list-style-type: none"> • making or changing regional plans, or preparing action plans; and⁴⁷ • where necessary take an adaptive management approach that can include both regulatory and non-regulatory measures.⁴⁸ <p>Waterbodies that are “clean and safe for human contact activities” can be achieved by controls on <i>Escherichia coli</i> (<i>E. coli</i>) and Cyanobacteria entering water bodies. Achieving this objective is considered feasible as controls on discharges of contaminants (such as <i>E.coli</i>) into or onto land, or water are within the regional council’s function under s 30(f) of the RMA. Further to this, the pLWRP proposes controls through discharge rules to achieve this objective with the timeframes of the long-term visions for each FMU and rohe.</p> <p>The objective describes the desired outcome sought for human contact in a way that enables an assessment of the effectiveness of the pLWRP provisions at achieving the environmental outcome sought. For example, by assessing the attributes state of <i>E. coli</i> and cyanobacteria at primary contact sites and whether the target attributes states are being achieved.</p> <hr/> <p>Acceptability</p> <p>The general feedback received from iwi and the community on previous versions of this objective during stages 2 and 3 of community engagement (which was undertaken in accordance with the NOF process) suggests there is general support for the desired outcome sought.</p> <p>The community and iwi both recognise that there will be costs and benefits associated with the achievement of this objective, as well as costs in not achieving this outcome for Human contact. For example, there are costs anticipated as a result reducing contaminants in water bodies to achieve this objective, particularly for existing resource users and the community as a whole. However, the timeframes to achieve are considered to provide for a transition period and the overall benefits to people and the wider community of having water bodies that are clean and safe for human contact activities is considered to justify the costs.</p> <p>A draft of the environmental outcome for human contact was consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA. No specific comments were received with respect to this particular environmental outcome, although the following comments were received on the broader suite of draft environmental outcomes.</p> <ul style="list-style-type: none"> • Achieving the outcomes may be challenging in some parts of the region;
--	--

⁴⁵ As required by cl 3.3(2)(b) of the NPSFM, the long-term vision must set goals that are ambitious but reasonable (that is, difficult to achieve but not impossible). Cl 3.3.(2)(c) also require long-term vision to identify a timeframe to achieve those goals that is both ambitious and reasonable. The time frames to achieve the long-term visions in the pORPS range from 2035, 2040, and 2050 for different FMU and rohe.

⁴⁶ NPSFM policy 11, cl 3.15(1)

⁴⁷ NPAFM, cl 3.20

⁴⁸ NPSFM cl 3.15(2)

	<ul style="list-style-type: none"> Concerns about the language (i.e. not clear, use of the words “environmental outcome” in each outcome statement conflates the objective). <p>A number of Clause 3 parties expressed their support for the general direction set in the environmental outcomes.</p> <p>In response to clause 3 feedback received the words “environmental outcome” have been removed from the outcome statement.</p> <p>No specific feedback from iwi authorities was received on draft of the environmental outcome for ecosystem health during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi authorities expressed a general concern around the need to identify more clearly the FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p>
	<p>Comparison with status quo</p> <p>The operative Water plan includes various objectives that seek to provide for the health of freshwater bodies and/or associated ecosystems. However, the plan does not have an objective that specifically provides for the value human contact.</p> <p>Therefore, it is considered that the objectives of the operative Water Plan do not give effect to the requirements of the NPSFM, , and that the environmental outcome for human contact in the pLWRP better provides for the sustainable management of this value.</p>

44. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for human contact in a way that enables an assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in sections 5 and 6 of Chapter 4 of this report) on the development of the environmental outcomes and this objective has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA

4.9.3. Threatened species

45. The environmental outcomes for threatened species are set out in the following objectives in the pLWRP:
- Threatened species (habitat): “The *habitats of threatened species* are protected and restored, to the extent practicable, to support the recovery of *threatened species*.”
 - Threatened species (recovery): “*Threatened species* are recovering throughout their range to be resilient, viable, and functioning.”
46. The table below assesses whether these objectives are the most appropriate way to achieve the purpose of the RMA.

Table 15: Assessment of FMU objectives: Threatened species

Objectives	Assessment
(Habitat) & (recovery): FMU1-03/04 FMU2-03/04 FMU3-03/04 FMU4-03/04 FMU5-03/04	<p>Relevance</p> <p>These objectives are set to achieve the purpose of the Act and assist the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>The objectives describe the desired outcome for threatened species habitat and threatened species recovery, and achieving this outcome is relevant to achieving the purpose of the Act. For example, the outcome sought will:</p> <ul style="list-style-type: none"> • safeguarding the life-supporting capacity of water, and ecosystems,⁴⁹ • provide for the intrinsic values of ecosystems, and ⁵⁰ • and the maintenance and enhancement of the quality of the environment.⁵¹ <p>The objectives assist the council to carry out its functions under the RMA by setting objectives that can be assessed against specified alternative criteria and broader target attribute states (that apply to wider ecosystem health values). This assessment will enable the council to assess the effectiveness of the pORPS, pLWRP and any Action plans prepared to achieve this outcome.</p> <p>The objectives implement direction in the NPSFM, as they set environmental outcomes for Threatened species which is a compulsory value set out in Appendix 1A of the NPSFM.</p> <p>When achieved, these objectives will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-01 to LF-VM-06 of the pORPS⁵². For example, by achieving a state where healthy freshwater and estuarine ecosystems support healthy populations of indigenous species (which include threatened species).⁵³</p> <p>Feasibility</p> <p>The objectives describe the desired outcome sought for threatened species habitat and recovery. They are considered achievable and consistent with achieving the relevant long-term visions developed under clause 3.3 for each FMU and rohe in the pORPS. The objectives are framed in an aspirational way and are to be achieved within the time frames set for the long-term visions in the pORPS.⁵⁴ It is recognised that the objectives will not necessarily be achieved in the lifetime of this version of the plan.</p> <p>The provisions of the pLWRP alone may not achieve the objectives in areas of Otago where there is a significant gap between the current state of the environment (baseline state) and the desired end state (target state). In those instances, further plan changes and the implementation of other management tools such as freshwater farm plans and Action Plans may be required to achieve these objectives within the time frames of the long-term visions for each FMU and rohe.</p>

⁴⁹ RMA, s 5(⁵⁰ RMA, s 7(d)⁵¹ RMA, s 7(f)⁵² pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision⁵³ LF-FW-01A(1)⁵⁴ As required by cl 3.3(2)(b) of the NPSFM, the long-term vision must set goals that are ambitious but reasonable (that is, difficult to achieve but not impossible). Cl 3.3.(2)(c) also require long-term vision to identify a timeframe to achieve those goals that is both ambitious and reasonable. The time frames to achieve the long-term visions in the pORPS range from 2035, 2040, and 2050 for different FMU and rohe.

	<p>This is considered to be an acceptable approach given that the NPSFM allows for a phased and adaptive approach to achieve environmental outcomes.⁵⁵ This may entail regional councils taking action to halt or reverse the degradation, by:</p> <ul style="list-style-type: none"> • making or changing regional plans, or preparing action plans; and⁵⁶ • where necessary take an adaptive management approach that can include both regulatory and non-regulatory measures.⁵⁷ <p>The objectives can be achieved within council's functions for maintaining indigenous biodiversity⁵⁸ and the council's functions and powers set out in s30 of the RMA. To give effect to these functions the pLWRP includes provisions for managing activities that can affect threatened species. These provisions include controls on the:</p> <ul style="list-style-type: none"> • use of land for the purpose of maintaining and enhancing ecosystems in water bodies; and⁵⁹ • taking, use, damming, and diversion of water; and⁶⁰ • discharge of contaminants into or onto land, or water.^{61, 62} <p>The objectives are directly measurable against mandatory attribute states for some of the biophysical components of ecosystem health as required by the NPSFM. There is also an alternative criterion, set under clause 3.10(1)(b) of the NPSFM, that can assess the achievement of these objectives. This alternative criterion assesses whether the national and/or regional conservation category or status of indigenous species is improved.</p> <p>Further to this the mapping of the habitat of threatened species also enables an assessment of the effectiveness of the pLWRP in achieving the environmental outcome.</p> <p>Acceptability</p> <p>These objectives are considered acceptable as they generally reflect the desired outcome sought by the community and iwi for the management of threatened species. This became evident in the community's response to an early draft outcome statement for the management of threatened species presented during community engagement undertaken as part of the NOF process to inform the development of the pLWRP.</p> <p>A refined draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>No specific comments were received with respect to this particular environmental outcome, although the following comments were received on the broader suite of draft environmental outcomes.</p> <ul style="list-style-type: none"> • Achieving the outcomes may be challenging in some parts of the region; • Concerns about the language (i.e. not clear, use of the words "environmental outcome" in each outcome statement conflates the objective) <p>A number of Clause 3 parties expressed their support for the general direction set in the environmental outcomes.</p>
--	---

⁵⁵ NPSFM policy 11, cl 3.15(1)

⁵⁶ NPAFM, cl 3.20

⁵⁷ NPSFM cl 3.15(2)

⁵⁸ RMA s 30(1)(ga))

⁵⁹ RMAs30(c)(iiia)

⁶⁰ RMAs30(e)

⁶¹ (RMAs30(f)

⁶² For specific examples, see the assessment of provisions in Chapters 14, 16, 17 and 19 of this report.

	<p>In response to clause 3 feedback received the words “environmental outcome” have been removed from the outcome statement and the draft environmental outcome has been split up into two succinct outcome statements that each address one of two aspects of threatened species management: habitat protection and restoration and species recovery.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcomes for threatened species during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi authorities expressed a general concern around the need to identify more clearly the FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p> <p>Comparison with status quo</p> <p>The operative Water plan includes a number of objectives that seek to provide for the health of freshwater bodies and/or associated ecosystems. In addition, Objective 5.3.1 (<i>To maintain or enhance the natural and human use values, identified in Schedules 1A, 1B and 1C, that are supported by Otago’s lakes and rivers</i>), seeks to provide for the protection of a small number of threatened freshwater dependant species in a number of water bodies specified in Schedule 1A of the plan. However, the plan does not have an objective that specifically provides for the value threatened species and fails to provide for the management of this value in a holistic manner. In addition, a review of the Water Plan in 2020 found Schedule 1A to be incomplete and outdated.</p> <p>Therefore, it is considered that the objectives of the operative Water Plan do not give effect to the NPSFM, and that the environmental outcome for threatened species in the pLWRP better provides for the sustainable management of this value.</p>
--	---

47. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for threatened species in a way that enables as assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in sections 5 and 6 of Chapter 4 of this report) on the development of the environmental outcomes and the objectives for Threatened species have been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that these objectives are the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

4.9.4. Mahika kai

48. The environmental outcomes for Mahika kai are set out in the following objectives in the pLWRP:
- Mahika kai (condition): “Populations of valued mahika kai species are self-sustaining and plentiful enough to support cultural take.”

- b. Mahika kai (access, harvest, and use): “Mana whenua can safely access, harvest and use mahika kai resources now and in the future.”
49. The table below assesses whether these objectives are the most appropriate way to achieve the purpose of the RMA.

Table 16: Assessment of FMU objectives: Mahika kai

Objective	Assessment
FMU1-O5/O6 FMU2- O5/O6 FMU3- O5/O6 FMU4- O5/O6 FMU5- O5/O6	<p>Relevance</p> <p>These objectives set to achieve the purpose of the Act and assist the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>The objectives describe the desired outcome for mahika kai and achieving this outcome is relevant to achieving the purpose of the Act. For example, the outcome sought will:</p> <ul style="list-style-type: none"> • recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga,⁶³ • and the protection of protected customary rights; and⁶⁴ • support kaitiakitanga.⁶⁵ <p>The objectives assist the council to carry out its functions under the RMA by setting objectives that can be assessed against specified alternative criteria and broader target attribute states (that apply to wider ecosystem health values). This assessment will enable the council to assess the effectiveness of the pORPS, pLWRP and any Action plans prepared to achieve this outcome.</p> <p>The objectives implement direction in the NPSFM, as they set an environmental outcome for mahika kai which is a compulsory value set out in Appendix 1A of the NPSFM.</p> <p>When achieved, these objectives will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-O1 to LF-VM-O6 of the pORPS⁶⁶. For example, by achieving a state that enables the ongoing relationship of Kāi Tahu with Mahika kai, including access to and use of water bodies is sustained.⁶⁷</p> <p>Feasibility</p> <p>The objectives describe the desired outcome sought for mahika kai and is considered achievable and consistent with achieving the relevant long-term visions developed under clause 3.3 for each FMU and rohe in the pORPS. The objectives are framed in an aspirational way and are to be achieved within the time frames set for the long-term visions in the pORPS.⁶⁸ It is recognised that the objectives will not necessarily be achieved in the lifetime of this version of the plan.</p>

⁶³ RMA, s 6(e)

⁶⁴ RMA, s 6(g)

⁶⁵ RMA, s 7(a)

⁶⁶ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

⁶⁷ LF-FW-O1A(5).

⁶⁸ As required by cl 3.3(2)(b) of the NPSFM, the long-term vision must set goals that are ambitious but reasonable (that is, difficult to achieve but not impossible). Cl 3.3.(2)(c) also require long-term vision to identify a timeframe to achieve those goals that is both ambitious and reasonable. The time frames to achieve the long-term visions in the pORPS range from 2035, 2040, and 2050 for different FMU and rohe.

Objective	Assessment
	<p>The provisions of the pLWRP alone may not achieve the objectives in areas of Otago where there is a significant gap between the current state of the environment (baseline state) and the desired end state (target state). In those instances, further plan changes and the implementation of other management tools such as freshwater farm plans and Action Plans may be required to achieve these objectives within the time frames of the long-term visions for each FMU and rohe.</p> <p>This is considered to be a feasible and acceptable approach given that the NPSFM allows for a phased and adaptive approach to achieve environmental outcomes.⁶⁹ This may entail regional councils taking action to halt or reverse the degradation, by:</p> <ul style="list-style-type: none"> • making or changing regional plans, or preparing action plans; and⁷⁰ • where necessary take an adaptive management approach that can include both regulatory and non-regulatory measures.⁷¹ <p>The objectives can be achieved within council's functions powers, skills and resources as provisions proposed in the pLWRP manage activities that can affect mahika kai. These provisions include controls on the:</p> <ul style="list-style-type: none"> • use of land for the purpose of maintaining and enhancing ecosystems in water bodies; and⁷² • taking, use, damming, and diversion of water; and⁷³ • discharge of contaminants into or onto land, or water.^{74, 75} <p>The objectives are measurable against mandatory attribute states for some of the biophysical components of ecosystem health as required by the NPSFM. In addition, the effectiveness of the plan in achieving the objectives can be evaluated against a number of alternative criteria set under clause 3.10(1) (d) of the NPSFM. These alternative criteria include the following:</p> <ul style="list-style-type: none"> • The national and/or regional conservation category status of indigenous species is improved. • River flows demonstrate natural variations in flow patterns, including floods and freshes. • The extent to which structures in the bed allow for the passage of migratory indigenous species and natural flow connections to continue is improved. • Barriers to flow and upstream or downstream passage for indigenous fish are reduced. • There is an increase in the extent of vegetated riparian margins that support the integrity and functioning of the water body. • Structures in the bed do not impede access to and along water bodies for mahika kai practices, to exercise kaitiakitaka and to monitor the health of the wai. • Populations of mahika kai species are abundant enough to support cultural take.

⁶⁹ NPSFM policy 11, cl 3.15(1)

⁷⁰ NPAFM, cl 3.20

⁷¹ NPSFM cl 3.15(2)

⁷² RMAs30(c)(iiia)

⁷³ RMAs30(e)

⁷⁴ (RMAs30(f))

⁷⁵ For specific examples, see the assessment of provisions in Chapters 14, 16, 17 and 19 of this report.

Objective	Assessment
	<p>Acceptability</p> <p>The objectives are considered acceptable as they generally reflect the desired outcome sought by the community and iwi for the management of mahika kai. This became evident in the community's response to an early draft outcome statement for the management of mahika kai presented during community engagement undertaken as part of the NOF process to inform the development of the pLWRP.</p> <p>A refined draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>While various Clause 3 parties expressed their support for the general direction set in the environmental outcomes, the following comments were received on the broader suite of draft environmental outcomes.</p> <ul style="list-style-type: none"> • Achieving the outcomes may be challenging in some parts of the region; • Concerns about the language (i.e. not clear, use of the words "environmental outcome" in each outcome statement conflates the objective) <p>Specific comments on the environmental outcomes for mahika kai that were received during the clause 3 pre-notification consultation include:</p> <ul style="list-style-type: none"> • It is not appropriate to require landholders to provide public access on private property. • Mahika kai should be framed as a people-centric concept, not mana whenua centric concept. <p>In response to clause 3 feedback received the words "environmental outcome" have been removed from the outcome statements.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcomes for mahika kai during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi authorities expressed a general concern around the need to identify more clearly the FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p> <p>Comparison with status quo</p> <p>Objective 5.3.2 (To maintain or enhance the spiritual and cultural beliefs, values and uses of significance to Kai Tahu, identified in Schedule 1D, as these relate to Otago's lakes and rivers.), seeks to provide for the maintenance or enhancement of mahika kai values in a number of water bodies specified in Schedule 1D of the plan.</p> <p>However, a review of the Water Plan in 2020 found Schedule 1D to be incomplete and outdated. In addition, Objective 5.3.2 lacks the specificity and clarity in direction for the management of mahika kai that is provided for by the environmental outcomes in the pLWRP.</p> <p>Therefore, it is considered that the objectives of the operative Water Plan do not give effect to the NPSFM, and that the environmental outcomes for mahika kai in the pLWRP better provide for the sustainable management of this value.</p>

50. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and

include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for mahika kai in a way that enables an assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in sections 5 and 6 of Chapter 4 of this report) on the development of the environmental outcomes and the objectives for Mahika kai has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that these objectives are the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

51. During the implementation of the NOF process and the community engagement and development of the pLWRP, all of the values listed in Appendix 1B were considered and to determine whether they apply as required by clause 3.9(2) of the NPSFM. The non-compulsory values identified in each FMU are either values from appendix 1B or are additional values not listed in appendix 1B. This section will evaluate the objectives set in the pLWRP for these additional non-compulsory values.

4.9.5. Natural form and character

52. The objective set for the environmental outcome for natural form and character in each FMU section of the pLWRP is proposed as follows:
53. “Freshwater bodies and their riparian margins behave in a way that reflects their natural form and character to the extent reasonably practicable and supports the natural form and character of connected receiving environments.”
54. The table below assesses whether this objective is the most appropriate way to achieve the purpose of the RMA.

Table 17: Assessment of FMU objectives: Natural form and character

Objective	Assessment
FMU1-07	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>This objective describes the desired outcome for natural form and character and achieving this outcome is relevant to achieving the purpose of the Act. For example, the outcome sought is consistent with section 6(a) of the RMA which requires all persons exercising functions and powers under the Act to recognise and provide for the following matters of national importance the preservation of the natural character of wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development.</p> <p>Achieving this objective is within ORC’s functions under section 30 of the RMA, as the regional council has the function to control matters that can affect the natural form and character of water bodies and their riparian margins and receiving environments, including through the control of the use of land for the purposes of:</p> <ul style="list-style-type: none"> maintaining or enhancing the quality water in water bodies (RMA;⁷⁶
FMU2-07	
FMU3-07	
FMU4-07	
FMU5-07	

⁷⁶ s30(1)(c)(ii), RMA

Objective	Assessment
	<ul style="list-style-type: none"> maintaining or enhancing the quantity of water in water bodies;⁷⁷ maintaining or enhancing ecosystems; and⁷⁸ the avoidance and mitigation of natural hazards.⁷⁹ <p>This objective assists the council to carry out its functions under the RMA by setting an objective that can be assessed against target attributes states and specified criteria which enable the council to assess the effectiveness of the regional policy statement and pLWRP and any Action plans prepared to achieve this environmental outcome.</p> <p>This objective implements direction in the NPSFM, as it sets an objective for the environmental outcome for natural form and character as required by clause 3.9(5) of the NPSFM, and additionally gives effects to policies 1, 3, 6, 7, and 8 of the NPSFM.</p> <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-O1 to LF-VM-O6 of the pORPS⁸⁰. For example, achieving this objective will ensure the “form, function and character of water bodies reflects their natural characteristics and natural behaviours to the extent reasonably practicable.”⁸¹</p> <p>Feasibility</p> <p>The objective describes the desired outcome sought for natural form and character and is considered realistically achievable and consistent with achieving the relevant long-term visions developed under clause 3.3 for each FMU and rohe in the pORPS.⁸²</p> <p>It is recognised that this objective may not necessarily be achieved in the lifetime of this version of the plan. The wording of the objective, and more specifically the use of the words “reflects” and “to the extent reasonably practicable” further acknowledges that some water bodies are currently modified and that in some instances there may be practicable limitations to fully restoring their natural form and character. Examples of such water bodies include those that have been modified for the purpose of hazard and flood protection, or water bodies that support or contain nationally and regionally significant infrastructure such as hydro-electricity generation activities.</p> <p>This objective is achievable as the management of activities that can affect the natural form and character of water bodies, their riparian margins and receiving environments are within the s 30 functions of ORC. This includes provisions proposed in the pLWRP that control the:</p> <ul style="list-style-type: none"> use of land for the purpose of maintaining and enhancing water quality and ecosystems in water bodies as well as maintain water quantity in water bodies and avoiding or mitigating natural hazards; and⁸³ taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body; and⁸⁴ discharges of contaminants into or onto land, air, or water; and⁸⁵

⁷⁷ s30(1)(c)(iii), RMA

⁷⁸ s30(1)(c)(iiia), RMA

⁷⁹ s30(1)(c)(iv), RMA

⁸⁰ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

⁸¹ pORPS, LF-FW-O1A(4)

⁸² pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision .

⁸³ RMA, s30(c)(ii)(iii) and (iv)

⁸⁴ RMA, s30(e)

⁸⁵ RMA, s30(f)

Objective	Assessment
	<ul style="list-style-type: none"> the introduction or planting of any plant in, on, or under that land in relation to any bed of a water bod for the purpose of the maintenance and enhancement its water quality or maintain its water quantity, and the avoiding or mitigating natural hazards.⁸⁶ <p>Achieving this objective can be assessed through alternative criteria, set under clause 3.10(1)(b) of the NPSFM, that evaluate the extent to which:</p> <ul style="list-style-type: none"> River flows demonstrate natural variations in flow patterns, including floods and freshes. Lake levels demonstrate natural water level fluctuations and seasonal variability and maintain flows into connected water bodies. There is no decrease in mean annual groundwater; and The extent to which structures in the bed allow for natural flow connections to continue is improved. There is an increase in the extent of vegetated riparian margins that support the integrity and functioning of the water body. <p>Acceptability</p> <p>This objective is considered acceptable as it is consistent with the desired outcome for natural form and character sought by the community and iwi. This became evident in the community's response to an early draft outcome statement for the value natural form and character presented during community engagement undertaken as part of the NOF process to inform the development of the pLWRP.</p> <p>A refined draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>While various Clause 3 parties expressed their support for the general direction set in the environmental outcomes, the following comments were received on the broader suite of draft environmental outcomes.</p> <ul style="list-style-type: none"> Achieving the outcomes may be challenging in some parts of the region; Concerns about the language (i.e. not clear, use of the words "environmental outcome" in each outcome statement conflates the objective) <p>In response to clause 3 feedback received the words "environmental outcome" have been removed from the outcome statement.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcomes for Mahika kai during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi authorities expressed a general concern around the need to identify more clearly the FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p> <p>Comparison with status quo</p> <p>The operative Water Plan contains a number of objectives that seek to provide for natural character values associated with freshwater bodies.</p> <ul style="list-style-type: none"> Objective 6.3.1 of the operative Water Plan seek to retain flows in rivers sufficient to maintain their life-supporting capacity for aquatic ecosystems, and their natural character.

⁸⁶ RMA, s30(g)

Objective	Assessment
	<ul style="list-style-type: none"> Objective 5.3.3 of the operative Water Plan seeks to protect the natural character of Otago's lakes and rivers and their margins from inappropriate subdivision, use or development. <p>Objective 6.3.1 is limited in its scope and can only be considered with proposals that have an impact on river flows.</p> <p>Objective 5.3.3 contains clear direction for how the effects of new development proposals on the natural character of water bodies should be considered, it does not:</p> <ul style="list-style-type: none"> Allow for consideration of effects on connected receiving water bodies; Recognise that it may not always be possible to fully protect natural character of water bodies; Appear to provide clear policy guidance with respect to the consideration of effects of existing activities on natural character. <p>For these reasons it is considered that Objectives 6.3.1 and 5.3.3 of the Water Plan do not give effect to the requirements of the NPSFM, and particularly NPSFM Policy 7, and that the environmental outcome for drinking water supply in the pLWRP better provides for the sustainable management of this value.</p>

55. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcome as an objective in its regional plan. The objective must describe the environmental outcome for natural form and function in a way that enables assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in sections 5 and 6 of Chapter 4 of this report) on the development of the environmental outcome and the objective for Natural form and character has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

4.9.6. Drinking water supply

56. The objective set for the environmental outcome for drinking water supply (source water) in each FMU section of the pLWRP is proposed as follows:

“Source water from water bodies (after treatment) is safe and reliable for the drinking water supply needs of the community.”

57. The table below assesses whether this objective is the most appropriate way to achieve the purpose of the RMA.

Table 18: Assessment of FMU objectives: Drinking water supply

Objective	Assessment
FMU1-O8	Relevance
FMU2-O8	This objective is set to achieve the purpose of the Act and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.
FMU3-O8	
FMU4-O8	
FMU5-O8	
	This objective describes the desired outcome for drinking water supply and achieving this outcome is relevant to achieving the purpose of the Act. For example, the

Objective	Assessment
	<p>outcome sought will support the ability of people and communities to provide for their social, economic, and cultural well-being and for their health and safety while sustaining the potential of natural and physical resources that are source water bodies to meet the reasonably foreseeable needs of future generations; and safeguarding the life-supporting capacity of water.⁸⁷</p> <p>This objective implements direction in the NPSFM and achieves the purpose of the Act, as it:</p> <ul style="list-style-type: none"> • sets an objective for drinking water supply, a value identified in Appendix 1B of the NPSFM, as required by the NOF process⁸⁸; • applies the hierarchy of obligations and ensuring that natural and physical resources are managed in a way that prioritise the health and well-being of water bodies and freshwater ecosystems and secondly, the health needs of people (such as drinking water)⁸⁹; and • enables people and communities to provide for their health and safety.⁹⁰ <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-O1 to LF-VM-O6 of the pORPS⁹¹. For example, achieving this objective will ensure the “health of the water supports the health of people and their connections with water bodies.”⁹²</p> <p>Feasibility</p> <p>This objective is considered achievable as it describes the desired outcome for drinking water supply in a realistic way that is consistent with achieving the relevant long-term visions developed under clause 3.3 for each FMU and rohe in the pORPS. The objective focuses on ensuring that source water bodies can supply safe and reliable drinking water after treatment. The inclusion of term “after treatment” is critical as it makes it clear that the desired outcome is not that all source water bodies are safe for drinking water without treatment (which in some source water bodies is likely to be unachievable).</p> <p>Achieving this objective is within ORCs functions under the section 30 of RMA, as the regional council has the function to control matters that can affect the drinking water supply. Specifically, s30 of the RMA allows regional council to control the following:</p> <ul style="list-style-type: none"> • use of land for the purposes of maintaining or enhancing the water quality; and⁹³ • taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body; and⁹⁴ • discharges of contaminants into or onto land, or water.⁹⁵ <p>This objective is directly measurable against mandatory attribute states for some of the biophysical components of ecosystem health and human contact. Achieving this objective can also be assessed through an alternative criteria, set under clause</p>

⁸⁷ RMA, s 5.

⁸⁸ NPSFM, Clause 3.9 (3)

⁸⁹ NPSFM, Clause 2.1.

⁹⁰ S5(2), RMA

⁹¹ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

⁹² LF-FW-O1A(6)

⁹³ RMA, s30(c)(ii)

⁹⁴ RMA, s30(e)

⁹⁵ RMA, s30(f)

Objective	Assessment
	<p>3.10(1)(b) of the NPSFM, that evaluates the extent to which community drinking water suppliers are meeting drinking water standards.</p> <p>Acceptability</p> <p>This objective is considered acceptable with the desired outcome sought by the community and iwi for drinking water supply.</p> <p>During engagement undertaken as part of the NOF process to inform the development of the pLWRP there was general agreement among participants that people and communities want safe and reliable drinking water and support for this environmental outcome. The strong community support received for maintaining and improving the ability of source waterbodies to provide safe and reliable for the drinking water supply needs justifies the costs that are associated with implementing provision to ensure this objective is achieved.</p> <p>A refined draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>Some parties during Clause 3 consultation considered the objective should be strengthened and not limited to “after treatment”. However, this is not considered feasible (see discussion above).</p> <p>In response to Clause 3 feedback received the words “environmental outcome” have also been removed from the outcome statement.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcomes for Mahika kai during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi authorities expressed a general concern around the need to identify more clearly the FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p> <p>Comparison with status quo</p> <p>The operative Water Plan contains a number of objectives that, directly or indirectly seek to provide for drinking water supplies. Key objectives include:</p> <ul style="list-style-type: none"> • Objective 6.3.2 <i>To provide for the water needs of Otago’s primary and secondary industries, and community domestic water supplies.</i> • Objective 9.3.1 <i>To sustain the recognised uses of Otago’s groundwater.</i> <p>The objectives do not provide for a holistic and integrated management of source water used for the drinking water purposes and do much clarity or guidance in circumstances where the outcome for this drinking water supplies conflicts with other uses of water.</p> <p>For these reasons it is considered that Objectives 6.3.2 and 9.3.1 do not give effect to the requirements of the NPSFM, and that the environmental outcome for drinking water supply in the pLWRP better provides for the sustainable management of this value.</p>

58. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for drinking water supply in a way that enables as assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the

environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in sections 5 and 6 of Chapter 4 of this report) on the development of the environmental outcomes and this objective has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

4.9.7. Animal drinking water

59. The objective set for the environmental outcome for animal drinking water each FMU section of the pLWRP is proposed as follows:

“Water sourced from water bodies is safe for the reasonable drinking water needs of stock and domestic animals.”

Table 19: Assessment of FMU objectives: Animal drinking water

Objective	Assessment
FMU1-O9 FMU2-O9 FMU3-O9 FMU4-O9 FMU5-O9	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>This objective describes the desired outcome for animal drinking water in a way that is consistent with achieving the purpose of the Act. The purpose of the Act, which is stated in section 5, is to enable people and communities to provide for their social, economic, and cultural well-being and for their health and safety, while sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generation and supporting the health and well-being of water bodies and freshwater ecosystems and human health needs. This objective is also consistent with other sections of the RMA, such as section 14(3)(b).</p> <p>This objective also implements direction in the NPSFM, as it:</p> <ul style="list-style-type: none"> • sets an objective for animal drinking water, a value identified in Appendix 1B of the NPSFM, as required by the NOF process, • gives effect to policy 15 of the NPSFM by ensuring communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with the NPSFM. <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-O1 to LF-VM-O6 of the pORPS⁹⁶. For example, achieving this objective align with achieving sustainable land and water management practices that support food and fibre production and the continued social, economic, and cultural wellbeing of Otago’s people and communities.⁹⁷</p> <p>Feasibility</p> <p>This objective is considered achievable as it describes the desired outcome for animal drinking water supply which is to ensure that where water bodies are used to supply animal drinking water the water is safe for this purpose.</p> <p>The objective is considered achievable as managing water quality and water quantity is within the functions of ORC under the section 30 of RMA. Under this section, the</p>

⁹⁶ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

⁹⁷ For example, LF-FW-O1A(7)

Objective	Assessment
	<p>regional council has the function to control matters that can affect the drinking water supply such as the control of the:</p> <ul style="list-style-type: none"> • use of land for the purposes of maintaining or enhancing the water quality; and⁹⁸ • taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body; and⁹⁹ • discharges of contaminants into or onto land, or water.¹⁰⁰ <p>The pLWRP contains provisions that enable the taking of water for animal drinking water supply and which manage the effect of this activity on water bodies in order to achieve state where water sourced from water bodies is safe for the reasonable drinking water needs of stock and domestic animals water bodies. Therefore, it is considered that achieving this objective is feasible.</p> <p>This objective is directly measurable against mandatory attribute states for some of the biophysical components of ecosystem health and human contact.</p> <p>The objective as drafted also enables an assessment of the effectiveness of the regional plan in achieving this environmental outcome by means of an alternative criterion set under clause 3.10(1)(b) of the NPSFM. This alternative criterion allows for evaluating the extent to which water quality and quantity is suitable to meets the drinking water needs of stock and domestic animals, including whether this water is palatable and safe for consumption by animals.</p> <p>Acceptability</p> <p>This objective is considered acceptable with the desired outcome sought by the community and iwi for animal drinking water supply during community engagement as part of the NOF process that was undertaken by ORC to inform the development of the pLWRP.</p> <p>During engagement there was general agreement that animal drinking water supply be enabled while ensuring the health and wellbeing of water bodies and freshwater ecosystems and human health needs are provided for, although there were differences of opinion expressed as to how important this value is compared to Te Mana o te Wai. There was some concern raised with respect to restrictions on the methods for stock access this water and what the term “reasonable” means in this context. “Reasonable” in the context of this objectives must be read as directly related to the “drinking water needs of stock and animals”. What is reasonable will therefore depend on the stock or animal types.</p> <p>A refined draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>In response to Clause 3 feedback received the words “environmental outcome” have been removed from the outcome statement.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcomes for Mahika kai during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi authorities expressed a general concern around the need to identify more clearly the FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and criteria) and the provisions of the topic chapters.</p>

⁹⁸ RMA, s30(c)(ii)

⁹⁹ RMA, s30(e)

¹⁰⁰ RMA, s30(f)

Objective	Assessment
	This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.
	<p>Comparison with status quo</p> <p>While the operative Water Plan contains a number of objectives that appear to provide for a variety of uses, including animal drinking water, the operative Water Plan does not have an objective that specifically provides for this value.¹⁰¹ As such, the operative Water Plan does not provide clear guidance on how the value animal drinking water should be managed.</p> <p>Therefore, it is considered that the objectives of the operative Water Plan do not give effect to the requirements of the NPSFM, and that the environmental outcome for animal drinking water in the pLWRP better provides for the sustainable management of this value.</p>

60. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for animal drinking water supply in a way that enables as assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in sections 5 and 6 of Chapter 4 of this report) on the development of the environmental outcomes and this objective has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA

4.9.8. Wāhi tupuna

61. The objective set for the environmental outcome for wāhi tūpuna in each FMU section of the pLWRP is proposed as follows:

“ Cultural associations with wāhi tūpuna are maintained, visible, and whānau are able to access, use and relate to wāhi tūpuna now and in the future.”

62. The table below assesses whether this objective is the most appropriate way to achieve the purpose of the RMA.

Table 20: Assessment of FMU objectives: Wāhi tupuna

Objective	Assessment
FMU1-O10 FMU2-O10 FMU3-O10	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p>

¹⁰¹ Objectives in the operative Water Plan that provide for a wide range of uses including animal drinking water include Objective 6.3.2 *To provide for the water needs of Otago’s primary and secondary industries, and community domestic water supplies* and Objective 9.3.1 *To sustain the recognised uses of Otago’s groundwater*.

Objective	Assessment
FMU4-O10 FMU5-O10	<p>This objective describes the desired outcome for wāhi tūpuna and achieving this outcome is relevant to achieving the purpose of the Act. For example, the outcome sought will:</p> <ul style="list-style-type: none"> recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga,¹⁰² the protection of protected customary rights,¹⁰³ support kaitiakitanga.¹⁰⁴ <p>This objective assists the council to carry out its functions under the RMA by setting an objective that can be assessed against specified criteria set under clause 3.10(1)(d) of the NPSFM (see below). This enables the council to assess the effectiveness of the pORPS and pLWRP and any Action plans prepared to achieve this environmental outcome.</p> <p>This objective also implements direction in the NPSFM, as it:</p> <ul style="list-style-type: none"> sets an objective for wāhi tūpuna, a value identified in Appendix 1B of the NPSFM, as required by the NOF process, gives effect to policy 15 of the NPSFM by ensuring communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with the NPSFM. <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-01 to LF-VM-06 of the pORPS¹⁰⁵. For example, by achieving a state that enables the ongoing relationship of Kāi Tahu with wāhi tūpuna, including access to and use of water bodies is sustained.¹⁰⁶</p> <p>Feasibility</p> <p>This objective is considered achievable as it describes the desired outcome for wāhi tūpuna which is to ensure that cultural associations with wāhi tupuna are maintained, visible and whanau are able to access, use and relate to wāhi tupuna now and in the future.</p> <p>The objective is considered realistically achievable as managing water quality and water quantity is within the functions of ORC under the section 30 of RMA. Under this section, the regional council has the function to control matters that can affect the drinking water supply such as the control of the:</p> <ul style="list-style-type: none"> use of land for the purposes of maintaining or enhancing the water quality; and¹⁰⁷ taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body; and¹⁰⁸ discharges of contaminants into or onto land, or water.¹⁰⁹

¹⁰² RMA, s 6(e)

¹⁰³ RMA, s 6(g)

¹⁰⁴ RMA, s7(a)

¹⁰⁵ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

¹⁰⁶ LF-FW-O1A(5).

¹⁰⁷ RMA, s30(c)(ii)

¹⁰⁸ RMA, s30(e)

¹⁰⁹ RMA, s30(f)

Objective	Assessment
	<p>The pLWRP contains provisions that seek to protect wāhi tūpuna from the impacts of activities managed under the pLWRP. Therefore, it is considered that achieving this objective is feasible.</p> <p>The objective as drafted enables an assessment of the effectiveness of the regional plan in achieving this environmental outcome by means of alternative criteria set under clause 3.10(1)(b) of the NPSFM. These alternative criteria include the following:</p> <ul style="list-style-type: none"> • Riverflows demonstrate natural variations in flow patterns, including floods and freshes. • Lake levels demonstrate natural water level fluctuations and seasonal variability, and maintain flows into connected water bodies. • No decrease in mean annual groundwater levels. • The extent to which structures in the bed allow for the passage of migratory indigenous species and natural flow connections to continue is improved. • There is no new cross mixing of water, and the scale and extent of existing occurrences is reduced. • Barriers to flow and upstream or downstream passage for indigenous fish are reduced. • There is an increase in the extent of vegetated riparian margins that support the integrity and functioning of the water body. • Structures in the bed do not impede access to and along water bodies for mahika kai practices, to exercise kaitiakitaka and to monitor the health of the wai. • Populations of mahika kai species are abundant enough to support cultural take. <p>Acceptability</p> <p>The objective is considered acceptable as it generally reflects the desired outcome sought by iwi and communities for the management of wāhi tūpuna. This became evident in the feedback received to an early draft outcome statement for the management of wāhi tūpuna presented during community engagement undertaken as part of the NOF process to inform the development of the pLWRP.</p> <p>A refined draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>While various Clause 3 parties expressed their support for the general direction set in the environmental outcomes, the following comments were received on the broader suite of draft environmental outcomes.</p> <ul style="list-style-type: none"> • Achieving the outcomes may be challenging in some parts of the region; • Concerns about the language (i.e. not clear, use of the words “environmental outcome” in each outcome statement conflates the objective) <p>Some of the feedback received during the clause 3 pre-notification consultation suggested that it is not appropriate to require landholders to provide public access on private property. This feedback is relevant to the environmental outcome for wāhi tūpuna as access to wāhi tūpuna is a key aspect of the outcome statement.</p> <p>In response to clause 3 feedback received the words “environmental outcome” have been removed from the outcome statements.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcome for wāhi tūpuna during pre-notification consultation under Clause 3 and</p>

Objective	Assessment
	<p>4A of Part I of the First Schedule of the RMA. However, Iwi authorities expressed a general concern around the need to identify more clearly the FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p>
	<p>Comparison with status quo</p> <p>Objective 5.3.2 (To maintain or enhance the spiritual and cultural beliefs, values and uses of significance to Kai Tahu, identified in Schedule 1D, as these relate to Otago's lakes and rivers.), seeks to provide for the maintenance or enhancement of wāhi tapu and/or waiwhakaheke values in a number of water bodies specified in Schedule 1D of the plan. However, the operative Water Plan does not have an objective that specifically provides for wāhi tūpuna as this concept differs from the concept of wāhi tapu.¹¹⁰ In addition, a review of the Water Plan in 2020 found Schedule 1D to be incomplete and outdated.</p> <p>As such the operative Water Plan lacks the specificity and clarity in direction for the management of wāhi tūpuna that is provided for by the environmental outcome for wāhi tūpuna in the pLWRP.</p> <p>Therefore, it is considered that the objectives of the operative Water Plan do not give effect to the NPSFM, and that the environmental outcome for wāhi tūpuna in the pLWRP better provides for the management of this value.</p>

63. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for wāhi tūpuna in a way that enables an assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in sections 5 and 6 of Chapter 4 of this report) on the development of the environmental outcomes and this objective has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

4.9.9. Taoka species

64. The objective set for the environmental outcome for taoka species in each FMU section of the pLWRP is proposed as follows:

“Habitats for indigenous species are restored and sustained so that they are thriving and connected, and their mauri is intact.”

¹¹⁰ Wāhi tapu are defined in the Heritage New Zealand Pouhere Taonga Act (2014) as a place sacred to Māori in the traditional, spiritual, religious, ritual or mythological space, and wāhi tapu area means land that contains one or more wāhi tapu. A wāhi tūpuna means a place important to Māori for its ancestral significance and associated cultural and traditional values.

65. The table below assesses whether this objective is the most appropriate way to achieve the purpose of the RMA.

Table 21: Assessment of FMU objectives: Taoka Species

Objective	Assessment
FMU1-O11 FMU2-O11 FMU3-O11 FMU4-O11 FMU5-O11	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>This objective describes the desired outcome for taoka species and achieving this outcome is relevant to achieving the purpose of the Act. For example, the outcome sought will:</p> <ul style="list-style-type: none"> the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna;¹¹¹ recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga;¹¹² the protection of protected customary rights;¹¹³ support kaitiakitanga.¹¹⁴ <p>This objective assists the council to carry out its functions under the RMA by setting an objective that can be assessed against specified criteria set under clause 3.10(1)(d) of the NPSFM (see below). This enables the council to assess the effectiveness of the pORPS and pLWRP and any Action plans prepared to achieve this environmental outcome.</p> <p>This objective also implements direction in the NPSFM, as it gives effect to policy 9 of the NPSFM by ensuring the habitats of indigenous freshwater species are protected.</p> <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-O1 to LF-VM-O6 of the pORPS¹¹⁵. For example, by achieving a state that enables the ongoing relationship of Kāi Tahu with taoka species.¹¹⁶</p> <p>Feasibility</p> <p>This objective is considered achievable as it describes the desired outcome for taoka species which is to ensure habitats for indigenous species are restored and sustained so that they are thriving and connected, and their mauri is intact.</p> <p>The objective is considered realistically achievable as managing water quality and water quantity is within the functions of ORC under the section 30 of RMA. Under this section, the regional council has the function to control matters that can affect the drinking water supply such as the control of the:</p> <ul style="list-style-type: none"> use of land for the purposes of maintaining or enhancing the water quality; and¹¹⁷

¹¹¹ RMA, s 6(c)

¹¹² RMA, s 6(e)

¹¹³ RMA, s 6(g)

¹¹⁴ RMA, s7(a)

¹¹⁵ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

¹¹⁶ LF-FW-O1A(5).

¹¹⁷ RMA, s30(c)(ii)

Objective	Assessment
	<ul style="list-style-type: none"> • taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body; and¹¹⁸ • discharges of contaminants into or onto land, or water.¹¹⁹ <p>The pLWRP contains provisions that seek to protect the habitat of taoka species from the impacts of activities managed under the pLWRP. Therefore, it is considered that achieving this objective is feasible.</p> <p>The objective for the value taoka species can be measured against mandatory attribute states for the biophysical components of ecosystem health as required by the NPSFM. In addition, the effectiveness of the plan in achieving the objective can be evaluated against a number of alternative criteria set under clause 3.10(1) (d) of the NPSFM. These alternative criteria include the following:</p> <ul style="list-style-type: none"> • The national and/or regional conservation category status of indigenous species is improved. • The extent to which structures in the bed allow for the passage of migratory indigenous species and natural flow connections to continue is improved. • Barriers to flow and upstream or downstream passage for indigenous fish are reduced. • There is an increase in the extent of vegetated riparian margins that support the integrity and functioning of the water body. <p>Acceptability</p> <p>The objective is considered acceptable as it generally reflects the desired outcome sought by iwi and communities for the management of taoka species. This became evident in the feedback received on an early draft outcome statement for the management of this value presented during community engagement undertaken as part of the NOF process to inform the development of the pLWRP.</p> <p>A refined draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>While various Clause 3 parties expressed their support for the general direction set in the environmental outcomes, the following comments were received on the broader suite of draft environmental outcomes.</p> <ul style="list-style-type: none"> • Achieving the outcomes may be challenging in some parts of the region; • Concerns about the language (i.e. not clear, use of the words “environmental outcome” in each outcome statement conflates the objective) <p>In response to clause 3 feedback received the words “environmental outcome” have been removed from the outcome statements.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcome for taoka species during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi authorities expressed a general concern around the need to identify more clearly the FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p>

¹¹⁸ RMA, s30(e)

¹¹⁹ RMA, s30(f)

Objective	Assessment
	<p>Comparison with status quo</p> <p>The operative Water Plan contains a number of objectives that to indirectly and to varying degrees provide for the value taoka species.</p> <p>Objective 5.3.2 seeks to maintain or enhance the spiritual and cultural beliefs, values and uses of significance to Kai Tahu, identified in Schedule 1D, as these relate to Otago's lakes and rivers.). While this objective seeks to provide for the maintenance or enhancement of waahi taoka values in a number of water bodies specified in Schedule 1D of the plan, a review of the Water Plan in 2020 found Schedule 1D to be incomplete and outdated.</p> <p>Objective 6.3.1 seeks to retain flows in rivers sufficient to maintain their life-supporting capacity for aquatic ecosystems, and their natural character. However, this objective is limited in its scope and can only be considered with proposals that have an impact on river flows. It is also unclear whether the direction in this objective provides is sufficiently strongly worded to achieve the restoration of the habitat of taoka species where it has been degraded.</p> <p>Overall, the relevant objectives in the operative Water Plan lack the specificity and clarity in direction for the management of taoka species that is provided for by the environmental outcome for this value in the pLWRP.</p> <p>Therefore, it is considered that the objectives of the operative Water Plan do not give effect to the NPSFM, and that the environmental outcome for taoka species in the pLWRP better provides for the management of this value.</p>

66. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for taoka species in a way that enables an assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in sections 5 and 6 of Chapter 4 of this report) on the development of the environmental outcomes and this objective has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

4.9.10. Fishing

67. The objective set for the environmental outcome for fishing in each FMU section of the pLWRP is proposed as follows:
- “Fish are safe to eat and, insofar as it is consistent with the protection of indigenous species, the spawning and juvenile rearing waters for trout and salmon are provided for.”
68. The table below assesses whether this objective is the most appropriate way to achieve the purpose of the RMA.

Table 22: Assessment of FMU objectives: Fishing

Objective	Assessment
FMU1-O12 FMU2-O12 FMU3-O12 FMU4-O12 FMU5-O12	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>This objective describes the desired outcome for fishing and achieving this outcome is relevant to achieving the purpose of the Act. For example, the outcome sought will achieve a state where fish are safe to eat enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety¹²⁰ and this objective clarifies the interaction and hierarchy of desired outcomes sought for indigenous species and sports fish such as trout and salmon which is consistent with providing for matters under sections 6 and 7 of the RMA.¹²¹</p> <p>This objective assists the council to carry out its functions under the RMA by setting an objective that can be assessed against target attributes and specified criteria which enable the council to assess the effectiveness of the pORPS and pLWRP and any Action plans prepared to achieve this environmental outcome.</p> <p>This objective implements direction in the NPSFM, as it:</p> <ul style="list-style-type: none"> • sets an objective for fishing, a value included in Appendix 1B of the NPSFM, as required by the NOF process,¹²² • gives effect to policy 10 of the NPSFM by ensuring the habitat of trout and salmon is protected, insofar as this is consistent with NPSFM Policy 9. <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-O1 to LF-VM-O6 of the pORPS¹²³. For example, achieving this objective will ensure the “health of the water supports the health of people and their connections with water bodies.”¹²⁴</p> <p>Feasibility</p> <p>The objective describes the desired outcome sought for fishing and is considered achievable and consistent with achieving the relevant long-term visions developed under clause 3.3 for each FMU and rohe in the pORPS. The objective is framed in an aspirational way and is to be achieved within the time frames set for the long-term visions in the pORPS.¹²⁵ It is recognised that the objectives will not necessarily be achieved in the lifetime of this version of the plan.</p> <p>The provisions of the pLWRP alone may not achieve the objectives in areas of Otago where there is a significant gap between the current state of the environment (baseline state) and the desired end state (target state). In those instances, further plan changes and the implementation of other management tools such as freshwater farm plans and Action Plans may be required to achieve these objectives within the time frames of the long-term visions for each FMU and rohe.</p>

¹²⁰ RMA, s 5¹²¹ For example, s 6(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, s 7(f) maintenance and enhancement of the quality of the environment, 7(h) the protection of the habitat of trout and salmon¹²² NPSFM, cl 3.9(5)¹²³ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision¹²⁴ LF-FW-O1A(6)¹²⁵ As required by cl 3.3(2)(b) of the NPSFM, the long-term vision must set goals that are ambitious but reasonable (that is, difficult to achieve but not impossible). Cl 3.3.(2)(c) also require long-term vision to identify a timeframe to achieve those goals that is both ambitious and reasonable. The time frames to achieve the long-term visions in the pORPS range from 2035, 2040, and 2050 for different FMU and rohe.

Objective	Assessment
	<p>This is considered to be a feasible and acceptable approach given that the NPSFM allows for a phased and adaptive approach to achieve environmental outcomes.¹²⁶ This may entail regional councils taking action to halt or reverse the degradation, by:</p> <ul style="list-style-type: none"> • making or changing regional plans, or preparing action plans; and¹²⁷ • where necessary take an adaptive management approach that can include both regulatory and non-regulatory measures.¹²⁸ <p>The objective for fishing can be achieved within council's functions powers, skills and resources as provisions proposed in the pLWRP manage activities that can affect fishing. These provisions include controls on the:</p> <ul style="list-style-type: none"> • use of land for the purposes of maintaining or enhancing the water quality; and¹²⁹ • taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body; and¹³⁰ • discharges of contaminants into or onto land, or water.¹³¹ <p>For example, fish that are "safe to eat" relates to water quality of water bodies being sufficient to provide for safe consumption of fish and provisions proposed in the pLWRP are targeted to maintain and improve where water quality is degraded.</p> <p>The objective for fishing is measurable against some of the mandatory attribute states for some of the biophysical components of ecosystem health as required by the NPSFM. In addition, the effectiveness of the plan in achieving the objective can be evaluated against an alternative criterion for fishing set under clause 3.10(1) (d) of the NPSFM. This alternative criterion is the following:</p> <ul style="list-style-type: none"> • Barriers to flow and upstream or downstream passage for indigenous fish are reduced.
	<p>Acceptability</p> <p>The objective is considered acceptable as it generally reflects the desired outcome sought by iwi and communities for the value fishing. During community engagement undertaken as part of the NOF process to inform the development of the pLWRP participants generally accepted the outcome that fish should be safe to eat. However, divergent views were expressed by community members, iwi and stakeholders during the consultation stages for the development of the pLWRP, particularly in relation to interaction and priority between indigenous species and introduced sport fish species, such as trout and salmon.</p> <p>This objective is considered to clarify the hierarchy of outcomes sought as it relates to fishing as it makes it clear that the spawning and juvenile rearing waters for trout and salmon are provided for insofar as it is consistent with the protection of indigenous species.</p> <p>A draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>While various Clause 3 parties expressed their support for the general direction set in the environmental outcomes, the following comment was received with respect to the draft outcome statement for fishing:</p>

¹²⁶ NPSFM policy 11, cl 3.15(1)

¹²⁷ NPAFM, cl 3.20

¹²⁸ NPSFM cl 3.15(2)

¹²⁹ RMA, s30(c)(ii)

¹³⁰ RMA, s30(e)

¹³¹ RMA, s30(f)

Objective	Assessment
	<ul style="list-style-type: none"> The environmental outcome statement for fishing should cover all fish species, including native species. <p>More generally, the feedback comments with respect to the outcomes pointed towards a concern that the use of the words “environmental outcome” in an outcome statement conflates the objective.</p> <p>In response to clause 3 feedback received the words “environmental outcome” have been removed from the outcome statements.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcome for fishing during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi expressed a general concern around the need to more clearly identify FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and alternative criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p> <p>Comparison with status quo</p> <p>The operative Water Plan does not have an objective that specifically provides for the value fishing, although there are some objectives in the plan that either refer to a broader category of values that may include the value fishing or that indirectly provide for this value. Examples include:</p> <ul style="list-style-type: none"> Objective 5.3.1 <i>To provide for the protection of some freshwater species in a number of water bodies specified in Schedule 1A of the plan</i> Objective 5.3.4 <i>To maintain or enhance the amenity values associated with Otago’s lakes and rivers and their margins</i> Objective 6.3.1 <i>To retain flows in rivers sufficient to maintain their life-supporting capacity for aquatic ecosystems</i> <p>However, due to the lack of a specific objective for this value that adequately gives effect to the NPSFM and addresses relevant environmental issues, including issues around the need to better manage species interaction, the operative Water Plan does not provide clear guidance on how the value fishing should be managed, particularly where there is a potential for conflict with other values.</p> <p>Therefore, it is considered that the objectives of the operative Water Plan do not give effect to the requirements of the NPSFM, and that the environmental outcome for fishing in the pLWRP better provides for the management of this value.</p>

69. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for fishing in a way that enables an assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in section 4.5 above) on the development of the environmental outcomes and this objective has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

4.9.11. Cultivation, and production of food, beverages and fibre

70. The objective set for the environmental outcome for the cultivation, and production of food, beverages and fibre in each FMU section of the pLWRP is proposed as follows:

“The cultivation and production of food, beverages and fibre is enabled, while supporting the health and wellbeing of water bodies and freshwater ecosystems and human health needs.”

71. The table below assesses whether this objective is the most appropriate way to achieve the purpose of the RMA.

Table 23: Assessment of FMU objectives: Cultivation, and production of food, beverages and fibre.

Objective	Assessment
FMU1-O13 FMU2-O13 FMU3-O13 FMU4-O13 FMU5-O13	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>This objective describes the desired outcome for the cultivation, and production of food, beverages and fibre and achieving this outcome is relevant to achieving the purpose of the Act. The outcome sought supports people and communities to provide for their social, economic, and cultural well-being and for their health and safety while sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and safeguarding the life-supporting capacity of water and ecosystems.¹³²</p> <p>This objective assists the council to carry out its functions under the RMA by setting an objective that can be assessed against target attributes and specified criteria which enable the council to assess the effectiveness of the pORPS and pLWRP and any Action plans prepared to achieve this environmental outcome.</p> <p>This objective implements direction in the NPSFM, as it:</p> <ul style="list-style-type: none"> • sets an objective for the cultivation, and production of food, beverages and fibre, a value listed in Appendix 1B of the NPSFM, as required by the NOF process, • gives effect to policy 15 of the NPSFM by enabling communities to provide for their social, economic and cultural well-being in a way that is consistent with the NPSFM. <p>The objective thus applies the hierarchy of obligations as required by the NPSFM¹³³ by expressing the outcome in way that enables communities to provide for their social, economic, and cultural wellbeing with reference to “while supporting the health and wellbeing of water.”</p> <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-01 to LF-VM-06 of the pORPS¹³⁴. For example, achieving this objective will ensure sustainable land and water management practices support food and fibre production and the continued social, economic, and cultural wellbeing of Otago’s people and communities.¹³⁵</p>

¹³² RMA, s 5

¹³³ NPSFM, cl 3.7(1)(b)

¹³⁴ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

¹³⁵ pORPS, LF-FW-01A(7)

Objective	Assessment
	<p>Feasibility</p> <p>The objective describes the desired outcome sought for the value cultivation, and production of food, beverages and fibre and is consistent with achieving the relevant long-term visions developed under clause 3.3 of the NPSFM for each FMU and rohe in the pORPS.</p> <p>This objective is considered achievable as provisions proposed in the pLWRP provide for activities associated with the cultivation and production of food, beverages and fibre through a range of policies and rules.¹³⁶ The pLWRP manages the effects of these activities and ensures they occur within the limits set for water quality and quantity in the plan.</p> <p>The objective for cultivation, and production of food, beverages and fibre can be achieved within council's functions under s 30 of the RMA. The pLWRP contains provisions for managing activities that are associated with cultivation, and production of food, beverages and fibre. These provisions include controls on the:</p> <ul style="list-style-type: none"> • use of land for the purposes of maintaining or enhancing the water quality; and¹³⁷ • taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body; and¹³⁸ • discharges of contaminants into or onto land, or water.¹³⁹ <p>The objective for cultivation, and production of food, beverages and fibre is measurable against two of the mandatory attribute states for biophysical components of ecosystem health as required by the NPSFM, namely periphyton and suspended fine sediment. In addition, the effectiveness of the plan in achieving the objective can be evaluated against an alternative criterion set under clause 3.10(1) (d) of the NPSFM. This alternative criterion for the value cultivation, and production of food, beverages and fibre is the following:</p> <ul style="list-style-type: none"> • Water quantity and quality is suitable for the cultivation, and production of food, beverages and fibre.
	<p>Acceptability</p> <p>This objective is considered acceptable and aligns with the desired outcome sought by the community and iwi for the cultivation and production of food, beverages and fibre during community engagement as part of the NOF process that was undertaken to inform the development of the pLWRP.</p> <p>During engagement there was general agreement that the cultivation and production of food, beverages and fibre should be enabled while ensuring the health and wellbeing of water bodies and freshwater ecosystems and human health needs are provided for, although there were differences of opinion expressed as to how important this value is compared to Te Mana o te Wai.</p> <p>A draft of this environmental outcome statement based on the description of value 8 in Appendix 1B <i>Irrigation, cultivation, and production of food and beverages</i> of the NPSFM was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA.</p> <p>While various Clause 3 parties expressed their support for the general direction this environmental outcome, some clause 3 parties considered that the draft outcome statement should be amended to recognise that the production of</p>

¹³⁶ For specific assessment of provisions to achieve this objectives see Chapters 8 to 21 of this report

¹³⁷ RMA, s30(c)(ii)

¹³⁸ RMA, s30(e)

¹³⁹ RMA, s30(f)

Objective	Assessment
	<p>produce for domestic food supply provides for a human health need. Other parties considered that the outcome statement should be amended to better recognise that the hierarchy of obligations, which requires that the health of freshwater comes first, does not preclude the necessity to provide for other values such as the production of food in an integrated manner.</p> <p>More generally, the feedback comments with respect to the outcomes pointed towards a concern that the use of the words “environmental outcome” in an outcome statement conflates the objective.</p> <p>In response to clause 3 feedback minor wording changes were made to the objective, including the removal of the words “environmental outcome” from the outcome statement.</p> <p>Specific feedback from iwi authorities was received on the draft environmental outcome for this value during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA. This feedback suggested that it was considered not appropriate to set an outcome for irrigation without clarity on the purpose of this end use. In response to this feedback the description of the value and its associated environmental outcome was intentionally made narrower than value 8 described in Appendix 1B of the NPSFM, which includes irrigation for a range of amenity and recreation activities.</p> <p>In their feedback provided during pre-notification consultation under Clause 4a of Part I of the First Schedule of the RMA, Iwi expressed a general concern around the need to more clearly identify FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and alternative criteria) and the provisions of the topic chapters. This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p>
	<p>Comparison with status quo</p> <p>The operative Water Plan contains a number of objectives that, directly or indirectly seek to provide for the cultivation, and production of food, beverages and fibre. Key objectives include:</p> <ul style="list-style-type: none"> • Objective 5.3.6 <i>To provide for the sustainable use and development of Otago’s water bodies, and the beds and margins of Otago’s lakes and rivers.</i> • Objective 6.3.2 <i>To provide for the water needs of Otago’s primary and secondary industries, and community domestic water supplies.</i> • Objective 6.3.4 <i>To maximise the opportunity for diverse consumptive uses of water which is available for taking.</i> • Objective 9.3.1 <i>To sustain the recognised uses of Otago’s groundwater.</i> <p>The objectives of the operative Water Plan lack specificity and do not provide adequate guidance on how these competing values and uses of water need to be provided for in light of the hierarchy of obligations required under the MPSFM.</p> <p>For these reasons it is considered that the objectives of the operative Water Plan do not give effect to the requirements of the NPSFM, and that the environmental outcome for cultivation, and production of food, beverages and fibre in the pLWRP better provides for the sustainable management of this value.</p>

72. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for the cultivation, and production of food, beverages

and fibre in a way that enables as assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in section 4.5 above) on the development of the environmental outcomes and this objective has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

4.9.12. Commercial and industrial activities

73. The objective set for the environmental outcome for commercial and industrial activities in each FMU section of the pLWRP is proposed as follows:

“Commercial and industrial activities are enabled while supporting the health and well-being of water bodies and freshwater ecosystems and human health needs.”

Table 24: Assessment of FMU objectives: Cultivation, and production of food, beverages and fibre.

Objective	Assessment
FMU1-O14 FMU2-O14 FMU3-O14 FMU4-O14 FMU5-O14	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>This objective describes the desired outcome for commercial and industrial activities in a way that is consistent with achieving the purpose of the Act. The outcome sought enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety, while sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and safeguarding the life-supporting capacity of water and ecosystems.¹⁴⁰</p> <p>This objective also implements relevant direction in the NPSFM, as it:</p> <ul style="list-style-type: none"> • Sets an objective for commercial and industrial activities, a value listed in Appendix 1B of the NPSFM, as required by the NOF process; • Applies the hierarchy of obligations required by the NPSFM¹⁴¹ by expressing the outcome in way that enables commercial and industrial activities without preventing the achievement of the health and wellbeing of water bodies and freshwater ecosystems and human health needs; and • Gives effect to policy 15 of the NPSFM by ensuring communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with the NPSFM. <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-01 to LF-VM-06 of the pORPS¹⁴². For example, achieving this objective align with achieving sustainable land and water management practices.¹⁴³</p> <p>Initially this value was only identified in FMU or rohe with a significant level of existing commercial and industrial activities occurring such as Dunedin and Coast</p>

¹⁴⁰ RMA, s 5

¹⁴¹ NPSFM, cl 3.7(1)(b)

¹⁴² pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

¹⁴³ pORPS, LF-FW-O1A(7)

Objective	Assessment
	<p>FMU). However, given the direction in pORPS and feedback received during consultation undertaken to inform the development of the pLWRP provisions (see below) it considered that this value is relevant to all FMU and rohe in Otago.</p> <p>Feasibility</p> <p>The objective describes the desired outcome sought for the value commercial and industrial activities and is consistent with achieving the relevant long-term visions developed under clause 3.3 of the NPSFM for each FMU and rohe in the pORPS.</p> <p>The objective for commercial and industrial activities can be achieved within council's functions under s 30 of the RMA.</p> <p>The pLWRP contains provisions for managing the effects of commercial and industrial activities and ensuring these activities are enabled within the limits set for water quality and quantity in the plan.¹⁴⁴ These provisions include controls on the:</p> <ul style="list-style-type: none"> • use of land for the purposes of maintaining or enhancing the water quality; and¹⁴⁵ • taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body; and¹⁴⁶ • discharges of contaminants into or onto land, or water.¹⁴⁷ <p>Therefore, it is considered that achieving this objective is feasible.</p> <p>The objective for commercial and industrial activities is measurable against an alternative criterion set under clause 3.10(1) (d) of the NPSFM. This alternative criterion for the value commercial and industrial activities allows for the objective to be assessed against the extent to which water quantity and quality is suitable for enabling commercial and industrial activities within these. Additionally, the operation and effects of commercial and industrial uses can be assessed against how well they support the health and wellbeing of water bodies and freshwater ecosystems and human health needs.</p> <p>Acceptability</p> <p>This objective is considered acceptable and aligned with the desired outcome sought by the community and iwi for commercial and industrial activities during community engagement as part of the NOF process that was undertaken to inform the development of the pLWRP.</p> <p>During engagement there was general agreement that commercial and industrial activities should be enabled while ensuring the health and wellbeing of water bodies and freshwater ecosystems and human health needs are provided for, although there were differences of opinion expressed as to how important this value is compared to Te Mana o te Wai.</p> <p>A draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA. In the initial Clause 3 pre-notification consultation draft this draft environmental outcome was only considered relevant to the Dunedin & Coast FMU, Roxburgh rohe and Lower Clutha rohe.</p> <p>While various Clause 3 parties expressed their support for the general direction this environmental outcome, some clause 3 parties considered that the draft outcome statement should be applied to other FMUs and rohe than the Dunedin & Coast FMU, Roxburgh rohe, Lower Clutha rohe.</p>

¹⁴⁴ For specific assessment of provisions to achieve this objective see Chapters 12, 13, 14, 16, 18, 19 and 21 of this report

¹⁴⁵ RMA, s30(c)(ii)

¹⁴⁶ RMA, s30(e)

¹⁴⁷ RMA, s30(f)

Objective	Assessment
	<p>More generally, the feedback comments with respect to the outcome statements pointed towards a concern that the use of the words “environmental outcome” in an outcome statement conflates the objective.</p> <p>In response to clause 3 feedback the pLWRP was amended to ensure the outcome now applies to all FMUs and rohe in Otago. In addition, minor wording changes were made to the objective, including the removal of the words “environmental outcome” from the outcome statement.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcome for commercial and industrial activities during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, Iwi expressed a general concern around the need to more clearly identify FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and alternative criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p> <p>Comparison with status quo</p> <p>The operative Water Plan contains a number of objectives that, directly or indirectly seek to provide for commercial and industrial activities. Key objectives include:</p> <ul style="list-style-type: none"> • Objective 5.3.6 <i>To provide for the sustainable use and development of Otago’s water bodies, and the beds and margins of Otago’s lakes and rivers.</i> • Objective 6.3.2 <i>To provide for the water needs of Otago’s primary and secondary industries, and community domestic water supplies.</i> • Objective 6.3.4 <i>To maximise the opportunity for diverse consumptive uses of water which is available for taking.</i> • Objective 9.3.1 <i>To sustain the recognised uses of Otago’s groundwater.</i> <p>The objectives of the operative Water Plan lack specificity and do not provide adequate guidance on how these competing values and uses of water need to be provided for in light of the hierarchy of obligations required under the NPSFM.</p> <p>For these reasons it is considered that the objectives of the operative Water Plan do not give effect to the requirements of the NPSFM, and that the environmental outcome for drinking water supply in the pLWRP better provides for the sustainable management of this value.</p>

74. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for commercial and industrial activities in a way that enables an assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in section 4.5 above) on the development of the environmental outcomes and this objective has been developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

4.9.13. Hydro-electricity generation

75. The objective set for the environmental outcome for hydro-electricity generation in each FMU section of the pLWRP is proposed as follows:

“Hydro-electricity generation contributes to achieving the national target for renewable electricity while supporting the health and well-being of water bodies and freshwater ecosystems and human health needs.”

76. The table below assesses whether this objective is the most appropriate way to achieve the purpose of the RMA.

Table 25: Assessment of FMU objectives: Hydro-electricity generation

Objective	Assessment
FMU1-O15	<p>Relevance</p> <p>This objective is set to achieve the purpose of the Act and assists the council to carry out its functions and implement the direction in the NPSFM, specifically the NOF process under subpart 2.</p> <p>This objective describes the desired outcome for hydro-electricity generation in a way that is consistent with achieving the purpose of the Act. The outcome sought enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while</p> <ul style="list-style-type: none"> • sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; a • safeguarding the life-supporting capacity of water and ecosystems; and • avoiding, remedying, or mitigating any adverse effects of activities on the environment.¹⁴⁸ <p>This objective explicitly recognises the benefits to be derived from the use and development of renewable energy.¹⁴⁹ However, it also recognises and provides for the preservation of the natural character of wetlands, and lakes and rivers and their margins, and protects them from inappropriate use, and development.¹⁵⁰ The objective does this by ensuring hydro-electricity is provided for where it supports the health and well-being of water bodies and freshwater ecosystems and human health needs.</p> <p>This objective also implements direction in the NPSFM, as it:</p> <ul style="list-style-type: none"> • Sets an objective for the environmental outcome for the commercial and industrial activities, a value listed in Appendix 1B of the NPSFM, as required by the NOF process; • Applies the hierarchy of obligations required by the NPSFM¹⁵¹ by expressing the outcome in way that enables hydro-electricity generation without preventing the achievement of the health and wellbeing of water bodies and freshwater ecosystems and human health needs; and • Gives effect to policy 15 of the NPSFM by ensuring communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with the NPSFM.
FMU2-O15	
FMU3-O15	
FMU4-O15	
FMU5-O15	

¹⁴⁸ RMA, s 5

¹⁴⁹ RMA s 7(j)

¹⁵⁰ RMA s(6)(a)

¹⁵¹ NPSFM, cl 3.7(1)(b)

Objective	Assessment
	<p>This objective also implements direction in the NPSREG as the outcome sought recognises the national significance of renewable electricity generation activities.¹⁵² In doing so this objective contributes to achieving the national target for renewable electricity.</p> <p>When achieved, this objective will fulfil the relevant long-term visions for each FMU and rohe in Otago developed under clause 3.3 of the NPSFM and set out in objectives LF-VM-O1 to LF-VM-O6 of the pORPS¹⁵³. For example, achieving this objective will ensure freshwater is managed as part of New Zealand's integrated response to climate change and renewable electricity generation activities are provided for.¹⁵⁴</p> <p>Initially this value was only identified in FMU or rohe with existing hydro-electricity generation.¹⁵⁵ However, following community and stakeholder feedback and given the direction in the pORPS and NPSREG hydro-electricity generation has now been identified as a value that is relevant to all FMU and rohe in Otago.</p> <p>Feasibility</p> <p>The objective describes the desired outcome sought for the value hydro-electricity generation and is consistent with achieving the relevant long-term visions developed under clause 3.3 of the NPSFM for each FMU and rohe in the pORPS.</p> <p>The objective for hydro-electricity generation can be achieved within council's functions under s 30 of the RMA, which include:</p> <ul style="list-style-type: none"> the control of the taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body, including <ul style="list-style-type: none"> the setting of any maximum or minimum levels or flows of water: the control of the range, or rate of change, of levels or flows of water:¹⁵⁶ the control of discharges of contaminants into or onto water and discharges of water into water.¹⁵⁷ if appropriate, the establishment of rules in a regional plan to allocate the taking or use of heat or energy from water.¹⁵⁸ <p>The pLWRP contains provisions for managing the effects of hydro-electricity generation. These provisions provide for the development, operation, maintenance and upgrading of new and existing hydro-electricity generation activities in all FMU and rohe within the limits set for water quality and quantity in the plan. Therefore, it is considered that achieving this objective is feasible.</p> <p>The objective for hydro-electricity generation is measurable against an alternative criterion set under clause 3.10(1) (d) of the NPSFM. This alternative criterion for hydro-electricity generation allows for the objective to be assessed against the extent to which the hydro-electricity generation output increases.</p> <p>Acceptability</p> <p>The objective for hydro-electricity generation is considered acceptable to the community and iwi as it aligns with the desired outcome sought by the community</p>

¹⁵² NPSREG, Objective

¹⁵³ pORPS, LF-FW – Freshwater: Visions set for each FMU and rohe, Clutha Mata-au FMU vision, North Otago FMU vision, Taiari FMU vision, Dunedin & Coast FMU vision, Catlins FMU vision

¹⁵⁴ pORPS, LF-FW-O1A(9)

¹⁵⁵ These FMUs are the Clutha Mata-au FMU and Taiari FMU.

¹⁵⁶ RMA, s30(1)(e)

¹⁵⁷ RMA, s30(1)(f)

¹⁵⁸ RMA, s30(1)(fa)

Objective	Assessment
	<p>and iwi for hydro-electricity generation during community engagement as part of the NOF process that was undertaken to inform the development of the pLWRP.</p> <p>Most people that participated in the community engagement agreed that hydro-electricity generation is a necessity, particularly as New Zealand endeavours to reduce its reliance on fossil fuels. However, there were concerns expressed over the impacts of dams on rivers and fish species living in them.</p> <p>During engagement there was general agreement that this activity should be enabled while ensuring the health and wellbeing of water bodies and freshwater ecosystems and human health needs are provided for.</p> <p>The intent of the outcome is to provide for “low impact” hydro-electricity generation that can occur while supporting the health and wellbeing of water bodies and freshwater ecosystems and human health needs as this aligns with what is considered generally acceptable by the community and iwi through the NOF engagement process.</p> <p>A draft of this environmental outcome statement was consequently consulted on during pre-notification consultation under Clause 3 of Part I of the First Schedule of the RMA. In the initial Clause 3 pre-notification consultation draft this draft environmental outcome was only considered relevant to the Clutha Mata-au and Taiari FMUs. Some clause 3 parties considered that the draft outcome statement is relevant to all FMUs and rohe in Otago.</p> <p>Other parties considered that greater recognition and provision must be made to both existing and future renewable electricity generation.</p> <p>In response to clause 3 feedback the pLWRP was amended to ensure the outcome now applies to all FMUs and rohe in Otago and to both existing and new hydro-electricity generation. In addition, further wording changes were made to the objective, including the removal of the words “environmental outcome” from the outcome statement.</p> <p>No specific feedback from iwi authorities was received on the draft environmental outcome for hydro-electricity generation during pre-notification consultation under Clause 3 and 4A of Part I of the First Schedule of the RMA. However, iwi expressed a general concern around the need to more clearly identify FMU environmental outcomes as part of the strategic direction and the need to provide stronger link between the outcomes (as well as attribute targets and alternative criteria) and the provisions of the topic chapters.</p> <p>This concern has been addressed through amendments to other parts of the pLWRP, including Part I of the Plan and the IM chapter.</p> <p>Comparison with status quo</p> <p>The operative Water Plan does not have an objective that specifically provides for hydro-electricity generation, although there are some objectives in the plan that either refer to a broader category of uses of water that indirectly provide for this value. Examples include:</p> <ul style="list-style-type: none"> • Objective 5.3.6 <i>To provide for the sustainable use and development of Otago’s water bodies, and the beds and margins of Otago’s lakes and rivers.</i> • Objective 6.3.2 <i>To provide for the water needs of Otago’s primary and secondary industries, and community domestic water supplies.</i> <p>However, due to the lack of a specific objective for this value that adequately gives effect to the NPSFM and the NPSREG, the operative Water Plan does not provide clear guidance on how the hydro-electricity generation should be managed, particularly where there is a potential for conflict with other values.</p> <p>Therefore, it is considered that the objectives of the operative Water Plan do not give effect to the requirements of the NPSFM and NPSREG, and that the environmental</p>

Objective	Assessment
	outcome for hydro-electricity generation in the pLWRP better provides for the management of this value.

77. As part of implementing the NOF process, clause 3.9 of the NPSFM requires ORC to identify an environmental outcome for every value that applies to an FMU or part of an FMU and include the environmental outcomes as an objective in its regional plan. The objective must describe the environmental outcome for hydro-electricity generation in a way that enables as assessment of the effectiveness of the pORPS and pLWRP and Action plans in achieving the environmental outcome and when achieved, fulfil the relevant long-term visions in the pORPS. The Council engaged with communities and iwi (as set out in section 4.5 above) on the development of the environmental outcomes and these objectives have developed to meet the requirements of clause 3.9 of the NPSFM. For the reasons set out above it is considered that this objective is the most appropriate way to implement the relevant requirements of the NPSFM and achieve the purpose of the RMA.

5. Summary of how the Objectives address the freshwater issues in Otago

78. Table 26 sets out the summary of freshwater issues in Otago (refer to Chapter 2 of this Report) and lists the Objectives in the pLWRP that will help to address each of these issues.

Table 26: Summary of freshwater issues in Otago

Fresh water issue	Objective
Some catchments are water short and/or water quantity is overallocated. Many catchments in Otago have a medium to high ecological risk due to water abstraction.	<ul style="list-style-type: none"> IO-O1 – Te Mana o te Wai IO-O3 – Long-term visions¹⁵⁹ and environmental outcomes IO-O4 – Ki uta ki tai/integrated management EFL-O1: Efficiency
River and lake state results show that water quality across Otago is spatially variable, water quality is best at lakes, river and stream reaches located at high or mountainous elevations under predominantly native cover. When considering the major four contaminants (nitrogen, phosphorus, <i>E.coli</i> and sediment), <i>E.coli</i> is most often the attribute for which sites and segments fail to comply with the national bottom line.	<ul style="list-style-type: none"> IO-O1 - Te Mana o te Wai IO-O3 – Long-term visions¹⁶⁰ and environmental outcomes IO-O4 – Ki uta ki tai/integrated management IO-O8 – Land and soil resources EARTH-O1 – Earthworks and bores WW-O1 – Discharges of wastewater
There has been a significant loss of wetlands through the region and only 6% of those remaining have a form of legal protection. These ecosystems are highly	<ul style="list-style-type: none"> IO-O4 – Ki uta ki tai/integrated management IO-O8 – Land and soil resources WET-O1 – Protecting wetlands

¹⁵⁹ pORPS, LF-FW – Freshwater

¹⁶⁰ pORPS, LF-FW – Freshwater

Fresh water issue	Objective
vulnerable to the effects of exotic invasions, open-cast mining, and pastoral intensification.	
Excessive nutrient input (eutrophication) threatens many Otago estuaries causing ecological problems, such as algal blooms and poor physical and chemical conditions for estuarine life.	<ul style="list-style-type: none"> • IO-01 - Te Mana o te Wai • IO-03 – Long-term visions¹⁶¹ and environmental outcomes • IO-04 – Ki uta ki tai/integrated management • EARTH-01 – Earthworks and bores • WW-01 – Discharges of wastewater
Indigenous freshwater species are subject to pressure from predation and competition with introduced species as well as loss of habitat due to modification of water ways, water abstraction, water quality deterioration, barriers to fish passage, and predation by native taxa that are outside of their normal range.	<ul style="list-style-type: none"> • IO-06 – Fish passage • IO-07 – Freshwater species
There is a range of issues affecting the coverage and continuity of flow recording in Otago. These issues included a lack of monitoring in some catchments, few or no measurements for smaller tributaries, diversions in/out of catchments, abstractions for out-of-stream use, and manipulation of flows due to storage.	<ul style="list-style-type: none"> • IO-04 – Ki uta ki tai/integrated management

¹⁶¹ pORPS, LF-FW – Freshwater