

Draft Otago Land and Water Regional Plan

Final draft for Council meeting

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Otago
Regional
Council

Proposed Land and Water Regional Plan

2024



PART 1 – INTRODUCTION AND GENERAL PROVISIONS

Chair’s Foreword

Water is the lifeblood of Otago, sustaining not only our natural ecosystems but also the diverse ways we live, work, and enjoy our unique region. From the alps to the ocean, Otago’s waterways define our landscapes, our communities, and our livelihoods. This proposed Land and Water Regional Plan embodies the principle of ki uta ki tai — mountains to the sea — reflecting the interconnection of our catchments from source to sea.

Otago is celebrated for its remarkable natural environment, a source of shared pride among all who live and work here. Equally recognised is the vital role that our primary producers, industries, tourism and urban businesses play in supporting the regional economy while investing in the protection of these resources. The sustainable use of freshwater is crucial to maintaining this balance. Through this plan, we aim to provide certainty for all users, from primary producers to recreational communities, ensuring that our precious resources are carefully managed to sustain Otago for future generations.

This proposed plan represents a significant milestone, consolidating outdated provisions from both the Regional Plans: Waste and Water, while aligning with updated national directives. The new framework ensures that Otago remains at the forefront of sustainable resource management, providing a pathway for navigating future legislative changes. We all recognise that Plans evolve over time and this Plan is designed to do this too.

The Otago Regional Council has worked extensively with stakeholders across the spectrum, and this plan reflects the collective input and aspirations of our communities. By acting now, we can safeguard both our environment and the operational certainty of those who depend on it.

This plan not only meets the evolving expectations of freshwater management but also honours our commitments to iwi partners. It provides a balanced approach, ensuring that economic productivity can continue to thrive alongside environmental stewardship, in line with national priorities.

Together, we are taking the necessary steps to ensure that Otago’s land and water resources are managed sustainably, protecting what makes this region so special for all who call it home.

Purpose

The diversity of Otago's natural *environment* is what makes the region such a beautiful place to live, as well as a complex area to manage. Both entrenched legacy issues, like *biodiversity* loss, and significant emerging issues, like the impacts of *climate change*, require reflective and innovative solutions in order to promote positive sustainable change. It is important that we enable the Otago community to flourish and enjoy all that the region has to offer, both now and in the future.

Te Mana o te Wai is the fundamental concept underpinning the Otago Land and Water Regional Plan (LWRP) as it embodies the understanding that a thriving natural *environment* enables a thriving society.

The LWRP forms part of a suite of planning instruments that are used to manage Otago's natural and physical resources. This suite includes the Proposed Otago Regional Policy Statement 2021 (PORPS 2021), which identifies significant regional values and resource management issues relating to Otago's *environment*, economy, recreational opportunities and communities. The PORPS 2021 contains specific directions for regional plans in Otago. The LWRP implements these directions and sets out objectives, policies and methods, including rules, to provide for the protection, restoration, enhancement, use, and development of *land* and *water* resources in Otago. It is a regulatory tool for a variety of issues relating to these resources, with particular emphasis on the management of activities that may adversely affect the quantity and quality of Otago's *freshwater*.

The statutory purpose of the LWRP is to assist ORC to carry out its functions to achieve the purpose of the Resource Management Act 1991 (RMA), being to promote the sustainable management of natural and physical resources. The LWRP implements the statutory requirements of the RMA and gives effect to a range of national direction instruments and the PORPS 2021.

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Description of the Region

Otago is the third largest region in New Zealand and has a geographically and ecologically diverse landscape. This diversity provides Otago's people and communities with many social, economic, and cultural opportunities, while also presenting significant environmental risks and challenges.

The region is made up of five territorial authorities: Dunedin City Council, Queenstown Lakes District Council, Waitaki District Council (in part, with the remainder of the district in the Canterbury region), Central Otago District Council and Clutha District Council. Dunedin City has the largest population of the territorial authorities with approximately 53 percent of the region's population. Growth is not evenly distributed across the region, with Queenstown Lakes having the fastest growing population.

Freshwater

Water is the foundation and source of all life, and the health and well-being of *freshwater* is vital for the health of the *environment* (including people) and the economy. *Freshwater* is a precious resource in Otago, in all its forms, including *lakes, rivers, groundwater, and wetlands*. Some of the *freshwater* in Otago is considered to have some of the highest *water* quality in the country, contributing significantly to *amenity, recreational, and biodiversity values*, as well as a thriving tourism industry.

Despite the large *water* volumes in the region, parts of Otago are amongst the driest areas in New Zealand. Several catchments are characterised as 'water-short', including the Lindis, Manuharekia, Taiari, Shag and Kākaunui rivers and their tributaries.

There are also numerous hydroelectricity generation facilities in Otago, which collectively produce a significant proportion of New Zealand's hydroelectric generation.

The people of Otago depend on these *freshwater* resources for their social, cultural, and economic well-being and their health and safety. However, the pressures on *freshwater* in the region have evolved and, alongside statutory requirements, there is a need to look after the unique and treasured ecological, cultural and community *values* that are supported by our region's *water bodies*.

Climate

The Otago region experiences two distinct climates due to the geographic variety between the temperate coastal areas, and the almost continental inland areas. Temperatures across Otago are lower than the rest of the country, on average, as the region experiences frosts and snowfalls relatively frequently. However, in summer daily maximum temperatures are frequently above 30°C, particularly across inland areas.¹ Climatic conditions in Otago are characterised by high rainfall in the Southern Alps and occasional very low rainfall in the semi-arid central Otago valleys. Coastal settlements of Otago tend to receive less sunshine than most other parts of the country and experience a cyclic weather pattern that alternates frequently between warmer and drier periods, and a cooler, damper period.

¹ NIWA. (2015). The Climate and Weather of Otago. Retrieved from: <https://docs.niwa.co.nz/library/public/NIWAsts67.pdf>

Biodiversity

Otago is home to important *indigenous biodiversity* for New Zealand, some of which is specific to Otago. Otago is one of the most ecologically diverse regions in the country, due to its vast and varied landscapes. Some of the region's ecosystem types are common and widespread. Other types of ecosystems are now reduced in extent or are naturally rare and were limited in extent before the arrival of humans.

Nationally significant *indigenous biodiversity* features include inland saline *habitats*, nationally rare *lake* and *river* systems, ephemeral *wetlands*, *endemic* and threatened inland galaxiid fish and lizard populations, western forest *habitats*, and coastal fauna.

Otago's ecosystems are also known to contain unique assemblages of fauna and flora. The unique wildlife of Otago is internationally renowned and includes albatross, penguins and seals on the Otago Peninsula, lizards and geckos in Central Otago, and alpine parrots in the western parts of Otago.²

Otago's *freshwater environment* is renowned for its diverse *indigenous freshwater* fauna, including fish. Many of New Zealand's *indigenous* fish (e.g., whitebait, tuna/eel, kanakana/lamprey, redfin bully) migrate to and from the sea as part of their life cycle. Maintaining connections between *freshwater habitats* and migration routes is essential.

Some fish *species* do not undertake migrations to and from the sea and complete their entire life cycle in the *freshwater environment*. These *freshwater-limited species* include the non-diadromous galaxias, whose biogeographical and evolutionary history is centred in the Otago region. Small, fragmented populations of these non-migratory fish with restricted ranges are under threat and continue to decline. Otago *rivers*, particularly those of the Clutha Mata-au and Taiari *Freshwater Management Units* (FMUs), are strongholds for threatened *endemic galaxias species*.

While the region has rich and varied *biodiversity*, some of this has been lost or degraded due to adverse *effects* from *pest species* and predators, human activities, and ongoing resource use and development. To protect this *biodiversity*, we need to effectively provide for the management these threats, particularly as *climate change* impacts are likely to exacerbate some of these issues and concerns.³

Climate change and natural hazards

Our climate is changing. Long-term trends in climate and sea level changes have already been observed in Otago. Weather events that may have occurred once a decade are now becoming more common, and the impact of these changes will result in new risks and challenges. *Natural hazards* in the Otago region include those that are relatively frequent, such as flooding, coastal erosion, and storm surges, and those that are rare, such as large earthquakes and tsunamis.⁴

Natural hazards may be exacerbated by the *effects* of *climate change*. Therefore, the region must continue to mitigate *climate change*, and also plan to adapt to the *effects* of *climate change* and an increase in *natural hazards* and extreme weather that could mean any, or all, of the following:⁵

- Warmer temperatures (more hot days, fewer frosts)

² ORC. (n.d.). Biodiversity. Retrieved from <https://www.orc.govt.nz/managing-our-environment/biodiversity>

³ ORC. (n.d.). Pest Hub. Retrieved from <https://www.orc.govt.nz/managing-our-environment/pest-hub>

⁴ ORC. (n.d.). Natural Hazards. Retrieved from <https://www.orc.govt.nz/managing-our-environment/natural-hazards>

⁵ ORC. (n.d.). Climate Change. Retrieved from <https://www.orc.govt.nz/managing-our-environment/climate-change>

- More wet conditions (winter and spring)
- Significant decreases in snow
- More severe extreme rainfall events
- More windy days
- An increase in storm intensity
- Local wind extremes
- More thunderstorms
- Sea level rise

Hazards associated with climate change are likely to include increased flooding and landslides, drought, coastal inundation and erosion, and increased instances of wildfire.⁶

Otago's *land* and *water* resources, and its *indigenous biodiversity* will be adversely affected by *climate change* and *natural hazards*, resulting in a range of social, economic, cultural, and environmental *effects*.

Challenges and opportunities will be widespread, influencing our natural and urban *environments*, our economy, and our communities.⁷

Land

The Otago region is approximately 12 percent of New Zealand's *land* area and consists of distinctive landscapes, such as the Southern Alps and alpine *lakes*; large high- country stations; dry central areas, with tussock grassland and tors; and dramatic coastlines around the Otago Peninsula and the Catlins. Kāi Tahu trails and resource gathering areas are spread across this *land*, as described in oral histories, through traditional place names, and whakapapa linkages.

Otago has a rich and long history of varied forms of land-based primary production on a wide range of soil types and in variable climatic conditions. Otago's highest quality soils (in terms of suitability for land-based primary production) are mainly on the Taiari Plain, North Otago downlands, South Otago lowlands, parts of Central Otago and the Strath Taieri, and along some *river* margins. Soil health is vital to wider ecological health, human health, and economic resilience. The use and development of *land* and *fresh water* can impact soil values. Soil erosion is problematic for, and has adverse impacts on, both soil and *water* health.

Land cover has been changing across the region, with areas of exotic forest and cropland increasing across the region, likely due to a growing forestry industry and growth in horticultural industries like viticulture.⁸

Urban area has also been increasing, which aligns with significant population growth in the areas around Wānaka and Queenstown.⁹ Urban growth can be driven by proximity and access to highly valued natural features, including *water bodies*, and can in turn adversely affect the natural features of these *water bodies*. In some parts of Otago, *land* and soil resources are particularly valuable for food production. However, natural resources used for urban development are permanently

⁶ Tonkin+Taylor, 2021, Otago Climate Change Risk Assessment (Commissioned by the Otago Regional Council). Retrieved from <https://www.orc.govt.nz/media/9653/tt-otago-climate-change-risk-assessment-2021.pdf>

⁷ Ibid.

⁸ LAWA. (n.d.). Land cover – Otago region. Retrieved from <https://www.lawa.org.nz/explore-data/land-cover/>

⁹ LAWA. (n.d.). Land cover – Otago region. Retrieved from <https://www.lawa.org.nz/explore-data/land-cover/>

transformed, with the opportunity cost of removing urban activity being too high for *land* to revert to productive uses.

How the plan works

Statutory context

Resource Management Act 1991

The Resource Management Act (RMA) is the primary resource management statute in New Zealand and sets out the related responsibilities and powers of national, regional, and city/district government. The purpose of the RMA is to promote the sustainable management of natural and physical resources.

Section 30 of the RMA gives regional councils specific functions relating to the control of the use of any *land* (including the *beds of lakes and rivers*) for the purposes of soil conservation, *water* quality, *water* quantity, the maintenance and enhancement of ecosystems in *water bodies*, and the avoidance or mitigation of *natural hazards*. Regional councils also have functions relating to controlling the planting of plants in the *beds of lakes and rivers*, the maintenance of *indigenous biological diversity* and the strategic integration of *infrastructure and land* use.

Additionally, under sections 13, 14 and 15 of the RMA, many activities involving the *beds of lakes and rivers, water or water bodies*, and the *discharge of contaminants into water or onto or into land* can only occur if they are expressly allowed by a rule in a regional plan, or by a resource consent.

The purpose of the LWRP, as set out in section 63 of the RMA, is to assist Otago Regional Council (ORC) to carry out its functions to achieve the purpose of the RMA. The LWRP must be prepared in accordance with, and contain the matters set out in, sections 30, 63, 65, 66 and 67 of the RMA. Any rules must comply with the matters in sections 68, 69 and 70 of the RMA.

The LWRP must be prepared in accordance with and/or give effect to higher order national direction instruments, including any regulations, national policy statements (NPS), the New Zealand Coastal Policy Statement (NZCPS) and the National Planning Standards. Further, ORC must observe and enforce observance of any National Environmental Standards (NES) to the extent to which their powers enable them to do so. The LWRP must give effect to an operative regional policy statement, have regard to a proposed regional policy statement, and must not be inconsistent with any water conservation order or any other regional plan for the region. More information about the relevant national direction instruments can be found in the 'national direction instruments' section of this Plan.

The RMA and the LWRP also interact with various other statutory instruments, including the Biosecurity Act 1993, Conservation Act 1987, Soil Conservation and Rivers Control Act 1941, Land Drainage Act 1908, Freshwater Fisheries Regulations 1983, Hazardous Substances and New Organisms Act 1996, Heritage New Zealand Pouhere Taonga Act 2014, Local Government Act 2002, and Wildlife Act 1953.

Partnership, Te Tiriti o Waitangi and Kāi Tahu

The LWRP has been developed in partnership with Kāi Tahu, the iwi and *takata whenua* of Otago. The partnership between the ORC and Kāi Tahu is an important and valuable relationship, evident

throughout the LWRP and woven into its provisions. The RMA requires regional and local councils to address matters of national importance, including matters associated with Te Tiriti o Waitangi (The Treaty of Waitangi) and key issues and concerns of iwi.

ORC has also considered the Kāi Tahu ki Otago 2005 Resource Management Plan and Te Tangi a Taurira: Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008.

The key issues identified by Kāi Tahu include:

- recognising the rights and interests of Kāi Tahu in natural and resource management processes;
- recognising the important role of mātauraka in natural resource management;
- recognising the integral relationship of Kāi Tahu with *natural and physical resources*, including the coast, waterways, rivers, lakes, wetlands and indigenous flora and fauna, protecting these resources from degradation, improving them where they have been *degraded*, and sustaining them for future generations;
- protecting and restoring the abundance of *mahika kai* and restoring access to *mahika kai* areas;
- protecting the values of *wāhi tūpuna* and the ability for Kāi Tahu to maintain their relationship with these areas;
- enabling development of *land* and resources within native reserves and *Māori land*, including *papakāika*; and
- the need for integrated management that recognises the interconnections between resources and across different parts of the *environment*.

General approach

The provisions in the IM – Integrated management chapter and the *environmental outcomes* included as objectives in the FMU chapters (FMU1 to FMU5) provide the strategic direction for the Plan. These provisions apply to all activities managed in the plan, in addition to any topic-specific and/or area-specific provisions. They guided the development of the other chapters in the Plan, and must be used in implementation and interpretation of those chapters. The IM chapter contains integrated objectives (IO) and integrated policies (IP).

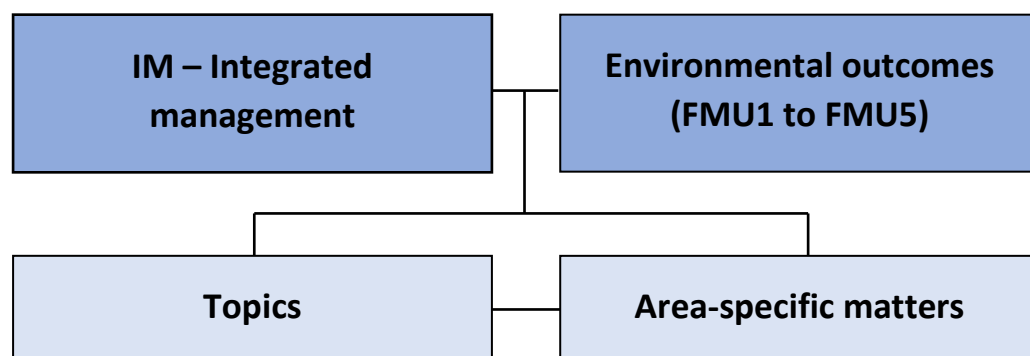


Figure 1 – Relationship between parts of the plan

The topic chapters contain objectives, policies and methods, including rules, that apply to the whole region. These rules determine when an activity is permitted and when a resource consent is required.

Activities may be subject to the provisions of one or more of the chapters in the topics section and an activity must comply with all relevant rules in the Plan unless the rule itself states otherwise.

The area-specific matters chapters contain provisions that apply to different *FMUs* (FMU1 to FMU5). The provisions in the topic chapters continue to apply unless expressly provided for otherwise in the *FMU* chapters. The FMU1 – Clutha Mata-au chapter includes five rohe (CAT1 to CAT5). Unless expressly stated otherwise, the provisions in FMU1 prevail over those provisions in CAT1 to CAT5.

Cross-boundary matters

Ecosystems and human activities cross jurisdictional boundaries. When different jurisdictions manage similar activities or resources in different ways, there is potential for inefficient and ineffective management which can then lead to inconsistent outcomes. Section 67 of the RMA states that a regional plan may state the processes for dealing with issues that either: cross local authority boundaries, arise between territorial authorities, or arise between regions.

ORC is responsible for managing a wide range of resources and activities within the Otago region that actually extend beyond the physical borders of a region. *Drinking water, water for livestock, water for traditional uses, food supply, recreational activities, irrigation, hydroelectric power generation, and many other activities, all rely on access to freshwater* and problems can arise when there are not enough resources or when they are not being used in a sustainable way. Therefore, it is important for the council to carefully manage and protect *water* resources for the benefit of everyone.

Regional plans are required to give effect to an operative regional policy statement and have regard to a proposed regional policy statement. The PORPS 2021 clearly describes the processes that will be used to address cross-boundary matters. These include:

- Cooperation and partnerships with stakeholders
- Cooperation and partnerships with other local authorities
- Triennial agreement
- Cooperation at a national level
- Transferring and delegating functions, powers, and duties to other authorities
- Helping to build capacity for, and improve, *takata whenua* involvement.

While this Plan refers to Kai Tāhu ki Otago as the iwi of the region, it is also acknowledged that there are Papatipu Rūnaka and related whanau groups who have interests in particular areas that may cross jurisdictional or regional boundaries. It is important to recognise these shared interests, particularly for the inland *lakes* and mountains of the region. Working together to encourage durable working relationships with the iwi and Papatipu Rūnaka is an important and long-term commitment.

Relationships between spatial layers

As discussed under the General approach heading, the rules in the Topic chapters and in FMU1 to FMU5 determine when an activity is permitted and when a resource consent is required. Activities may be subject to the provisions of one or more of the chapters in the Plan and an activity must comply with all relevant rules in the Plan unless the rule itself states otherwise.

Interpretation

Definitions

Terms defined within this plan are shown in *italics*.

Term	Definition
7-day mean annual low flow (7DMALF)	means the average, for a minimum of five years of the lowest average flow over seven consecutive days in each year. The lowest average flow over seven consecutive days in each year is determined by calculating the average flow over seven consecutive days for every seven consecutive day period in the year and choosing the lowest.
Action plan	means a document prepared in accordance with clause 3.15 of the NPSFM.
Afforestation	has the same meaning as in regulation 3 of the Resource Management (National Environmental Standards for Commercial Forestry) Regulations 2017 (as set out in the box below) <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>(a) means planting and growing commercial forestry trees on land where there is no commercial forestry and where commercial forestry harvesting has not occurred within the last 5 years; but</p> <p>(b) does not include vegetation clearance from the land before planting.</p> </div>
Agrichemical	means any substance whether inorganic or organic, man-made or naturally occurring, modified or in its original state, that is used to eradicate, modify, or control flora and fauna. For the purpose of this Plan, it includes agricultural compounds, but excludes <i>water</i> , oral nutrition compounds, vertebrate toxic agents, and <i>fertilisers</i> .
Agricultural solid waste	means organic plant material left from the producing and harvesting of crops and trees, it does not include animal effluent.
Amenity values	has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below) <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>means those natural or physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.</p> </div>
Ancillary activity	has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below) <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>means an activity that supports and is subsidiary to a primary activity.</p> </div>
Animal effluent storage facility	means a pond, tank, or <i>structure</i> primarily used for the containment or storage of animal effluent, but excludes any ancillary <i>structures</i> for the collection, conveyance or treatment of liquid or <i>solid animal effluent</i> , such as sumps, stone traps, weeping walls and stock truck effluent disposal tanks.
Animal effluent system	means the collection, storage, or treatment, of <i>liquid animal effluent</i> or <i>solid animal effluent</i> .

Term	Definition
Aquatic compensation	<p>has the same meaning as in clause 3.21(1) of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a conservation outcome resulting from actions that are intended to compensate for any more than minor residual adverse effects on a wetland or river after all appropriate avoidance, minimisation, remediation, and aquatic offset measures have been sequentially applied.</p> </div>
Aquatic offset	<p>has the same meaning as in clause 3.21(1) of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a measurable conservation outcome resulting from actions that are intended to:</p> <ul style="list-style-type: none"> (a) redress any more than minor residual adverse effects on a wetland or river after all appropriate avoidance, minimisation, and remediation, measures have been sequentially applied; and (b) achieve no net loss, and preferably a net gain, in the extent and values of the wetland or river, where: <ul style="list-style-type: none"> (i) no net loss means that the measurable positive effects of actions match any loss of extent or values over space and time, taking into account the type and location of the wetland or river, and (ii) net gain means that the measurable positive effects of actions exceed the point of no net loss. </div>
Aquifer	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a permeable geological formation, group of formations, or part of a formation, beneath the ground, capable of receiving, storing, transmitting and yielding water.</p> </div>
Artificial watercourse	<p>means a watercourse that is deliberately created by human action (including an <i>irrigation</i> canal, <i>water</i> supply race, canal for the supply of <i>water</i> for electricity power generation, farm drainage canal, <i>drain</i>, or duck pond) provided that it is not part of a <i>water body</i> or a <i>modified watercourse</i>.</p>
Attribute	<p>has the same meaning as in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a measurable characteristic (numeric, narrative, or both) that can be used to assess the extent to which a particular value is provided for.</p> </div>
Available reticulated wastewater system	<p>means a <i>reticulated wastewater system</i> which:</p> <ul style="list-style-type: none"> (a) passes within 30 m of the property boundary; or, (b) passes within 60 m of the closest <i>building</i> on a property; and (c) has existed in that location for more than 12 months; and (d) has the capacity and practical ability to accept a new <i>discharge</i>.

Term	Definition
Available stormwater network	<p>means a <i>stormwater network</i> where:</p> <ul style="list-style-type: none"> (a) a <i>structure</i> or device used to convey <i>stormwater</i> which forms part of the <i>stormwater network</i> passes within 30 m of the property boundary; and (b) <i>stormwater</i> is able to be conveyed into the <i>stormwater network</i> under gravity; and (c) the network operator will accept <i>stormwater</i> from the property.
Baseline state	<p>has the same meaning as in the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>in relation to an attribute, means the best state out of the following:</p> <ul style="list-style-type: none"> (a) the state on the date it is first identified by a regional council (b) the state on the date on which a regional council set a freshwater objective for the attribute under the National Policy Statement for Freshwater Management 2014 (as amended in 2017) (c) the state on 7 September 2017. </div>
Bed	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>means,—</p> <ul style="list-style-type: none"> (a) in relation to any river— <ul style="list-style-type: none"> (i) for the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the river cover at its annual fullest flow without overtopping its banks: (ii) in all other cases, the space of land which the waters of the river cover at its fullest flow without overtopping its banks; and (b) in relation to any lake, except a lake controlled by artificial means,— <ul style="list-style-type: none"> (i) for the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the lake cover at its annual highest level without exceeding its margin: (ii) in all other cases, the space of land which the waters of the lake cover at its highest level without exceeding its margin; and (c) in relation to any lake controlled by artificial means, the space of land which the waters of the lake cover at its maximum permitted operating level; and (d) in relation to the sea, the submarine areas covered by the internal waters and the territorial sea. </div>
Bed substrate	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>means the material that makes up the bed of any river or connected area (for example, sand, silt, gravel, cobbles, boulders, or bedrock).</p> </div>
Biodiversity	<p>see <i>biological diversity</i></p>

Term	Definition
Biological diversity	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the variability among living organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.</p> </div>
Biosecurity	<p>has the same meaning as in clause 3.21(1) of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means activities to eliminate or manage pests and unwanted organisms (as those terms are defined in the Biosecurity Act 1993).</p> </div>
Biosolids	<p>means <i>sludge</i> derived from a <i>wastewater</i> treatment plant that has been treated and/or stabilised to the extent that it is able to be safely and beneficially applied to <i>land</i>.</p>
Bore	<p>has the same meaning as in the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means any hole drilled or constructed in the ground that is used to:</p> <ul style="list-style-type: none"> (a) investigate or monitor conditions below the ground surface; or (b) abstract gaseous or liquid substances from the ground; or (c) discharge gaseous or liquid substances into the ground; but it excludes test pits, trenches, soak holes and soakage pits. </div>
Building	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a temporary or permanent movable or immovable physical construction that is:</p> <ul style="list-style-type: none"> (a) partially or fully roofed; and (b) fixed or located on or in land; <p>but excludes any motorised vehicle or other mode of transport that could be moved under its own power.</p> </div>

Term	Definition
Classifiable dam	<p>means a <i>dam</i> that has a <i>height</i> of 4 or more metres and stores 20,000 or more cubic metres volume of <i>water</i>.</p> <p>For the purpose of this definition:</p> <p>(a) the height of the <i>dam</i> is the vertical distance from the crest of the <i>dam</i> and must be measured:</p> <ul style="list-style-type: none"> (i) in the case of a <i>dam</i> across a <i>water body</i>, from the natural <i>bed</i> of the <i>water body</i> at the lowest downstream outside <i>limit</i> of the <i>dam</i>; and (ii) in the case of a <i>dam</i> not across a <i>water body</i>, from the lowest elevation at the outside <i>limit</i> of the <i>dam</i>; and (iii) in the case of a canal, from the invert of the canal; and <p>(b) in measuring a <i>dam</i>'s stored volume, the stored volume of <i>water</i> does not include:</p> <ul style="list-style-type: none"> (i) in the case of a <i>dam</i> across a <i>water body</i>, <i>water</i> that is lower than the natural ground level at the lowest downstream outside <i>limit</i> of the <i>dam</i>; and (ii) in the case of a <i>dam</i> not across a <i>water body</i>, <i>water</i> that is lower than the natural ground level at the lowest elevation at the outside <i>limit</i> of the <i>dam</i>; and (iii) in the case of a canal where the canal invert (the lowest point of the inside of the canal <i>structure</i> that stores <i>water</i>) is below the natural ground level, <i>water</i> that is lower than the natural ground level at the lowest elevation at the outside <i>limit</i> of the canal <i>structure</i>.
Cleanfill area	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>means an area used exclusively for the disposal of cleanfill <i>material</i>.</p> </div>
Cleanfill material	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>means virgin excavated natural materials including clay, gravel, sand, soil and rock that are free of:</p> <ul style="list-style-type: none"> (a) combustible, putrescible, degradable or leachable components; (b) hazardous substances and materials; (c) products and materials derived from hazardous waste treatment, stabilisation or disposal practices; (d) medical and veterinary wastes, asbestos, and radioactive substances; (e) contaminated soil and other contaminated materials; and (f) liquid wastes. </div>
Climate change	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>means a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods.</p> </div>

Term	Definition
Closed landfill	means any <i>landfill</i> that no longer accepts solid <i>waste</i> for disposal.
Clutha hydro-electric generation scheme	means the hydro-electric generation scheme on the Clutha River/Mata-au between Hāwea and Roxburgh, including the Hāwea Dam, Gladstone Gap Stop Bank, Clyde Dam, and Roxburgh Dam.
Coastal marine area	has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)
	<div style="border: 1px solid black; padding: 5px;"> <p>means the foreshore, seabed, and coastal water, and the air space above the water—</p> <p>(a) of which the seaward boundary is the outer limits of the territorial sea:</p> <p>(b) of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary at that point shall be whichever is the lesser of—</p> <p>(i) 1 kilometre upstream from the mouth of the river; or</p> <p>(ii) the point upstream that is calculated by multiplying the width of the river mouth by 5.</p> </div>
Coastal water	has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)
	<div style="border: 1px solid black; padding: 5px;"> <p>means seawater within the outer limits of the territorial sea and includes—</p> <p>(a) seawater with a substantial fresh water component; and</p> <p>(b) seawater in estuaries, fiords, inlets, harbours, or embayments.</p> </div>
Code of practice for drain maintenance	means a document prepared by ORC under the Local Government Act 2002 in accordance with APP1 – Code of practice for drain maintenance.
Code of practice for gravel extraction	means a document prepared by ORC under the Local Government Act 2002 in accordance with APP2 – Code of practice for gravel extraction.
Commercial activity	has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)
	<div style="border: 1px solid black; padding: 5px;"> <p>means any activity trading in goods, equipment or services. It includes any ancillary activity to the commercial activity (for example administrative or head offices).</p> </div>
Commercial forest or commercial forestry	has the same meaning as in regulation 3 of the Resource Management (National Environmental Standards for Commercial Forestry) Regulations 2017 (as set out in the box below)
	<div style="border: 1px solid black; padding: 5px;"> <p>means exotic continuous-cover forestry or plantation forestry.</p> </div>
Community water supply	<p>means <i>water</i> taken and used primarily to supply water for <i>drinking water</i> and domestic use via a reticulated system and can include water also supplied for other purposes such as institutional, industrial and <i>commercial</i> processing, cultivation, and production of food and beverages and fibre, animal drinking water purposes, amenity <i>irrigation</i> use and fire-fighting activities.</p> <p>The supply of <i>water</i> for drinking and domestic use must constitute at least 50 percent of the <i>water</i> supplied.</p>

Term	Definition
Composting toilet	means a toilet system that uses a predominantly aerobic processing system that treats human excreta, typically with no <i>water</i> , via composting or managed aerobic decomposition.
Contaminant	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>includes any substance (including gases, odorous compounds, liquids, solids, and micro-organisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy, or heat—</p> <p>(a) when discharged into water, changes or is likely to change the physical, chemical, or biological condition of water; or</p> <p>(b) when discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged.</p> </div>
Contaminated land	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means land that has a hazardous substance in or on it that—</p> <p>(a) has significant adverse effects on the environment; or</p> <p>(b) is reasonably likely to have significant adverse effects on the environment.</p> </div>
Controlled lake	means a <i>lake</i> where the outflow of the <i>lake</i> is controlled by artificial means.
Critical source area	<p>means a <i>landscape</i> feature such as a gully, swale, or depression that –</p> <p>(a) accumulates runoff from adjacent land; and</p> <p>(b) delivers, or has the potential to deliver, 1 or more <i>contaminants</i> to 1 or more <i>rivers, lakes, wetlands, or artificial watercourses</i>, or their <i>beds</i> (regardless of whether there is any <i>water</i> in them at the time); and</p> <p>(c) includes <i>natural wetlands</i>.</p>
Cross mixing	means the <i>discharge</i> of <i>water</i> from one <i>water body</i> into another <i>water body</i> , where there is no natural connection between those <i>water bodies</i> .
Culvert	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a pipe, box structure, or covered or arched channel that has an inlet and outlet that is in, and that connects the water or bed of, the same river or connected area.</p> </div>
Cultivation	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the alteration or disturbance of land (or any matter constituting the land including soil, clay, sand and rock) for the purpose of sowing, growing or harvesting of pasture or crops.</p> </div>

Term	Definition
Dairy cattle	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>(a) means cattle farmed for producing milk; and</p> <p>(b) includes:</p> <ul style="list-style-type: none"> (i) any bull on the farm whose purpose is mating with those cattle; and (ii) unweaned calves of those cattle; but <p>(c) does not include dairy support cattle.</p> </div>
Dairy Effluent Storage Calculator	<p>means the Dairy Effluent Storage Calculator available from http://www.dairynzdesc.co.nz</p>
Dairy farm land	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means land on a farm that is used for grazing dairy cattle.</p> </div>
Dairy support cattle	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means cattle that:</p> <ul style="list-style-type: none"> (a) are farmed for producing milk, but are not being milked (for example, because they are heifers or have been dried off); and (b) are grazed on land that is not grazed by dairy cattle. </div>
Dairy support land	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means land on a farm that is used for grazing dairy support cattle.</p> </div>
Dam	<ul style="list-style-type: none"> (a) means a <i>structure</i> used or to be used for the primary purpose of impounding <i>water</i> (and any substances dissolved in, suspended in, or otherwise combined with the <i>water</i>); and (b) does not include: <ul style="list-style-type: none"> (i) a stop bank designed to control <i>floodwaters</i>; or (ii) a <i>weir</i>.
Damming	<ul style="list-style-type: none"> (a) means the activity of impounding <i>water</i> (and any substances dissolved in, suspended in or otherwise combined with the <i>water</i>); and (b) does not include <i>floodwaters</i> controlled by a stop bank.
Deep soakage	<p>means an excavated hole constructed for the purpose of disposing effluent using permeable subsoil layers or weathered rock at depth under poorly draining soils. These holes may be backfilled with free draining material.</p>

Term	Definition
Degraded (in relation to freshwater)	<p>has the same meaning as in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px;"> <p>in relation to an FMU or part of an FMU, means that as a result of something other than a naturally occurring process:</p> <p>(a) a site or sites in the FMU or part of the FMU to which a target attribute state applies:</p> <ul style="list-style-type: none"> (i) is below a national bottom line; or (ii) is not achieving or is not likely to achieve a target attribute state; or <p>(b) the FMU or part of the FMU is not achieving or is not likely to achieve an environmental flow and level set for it; or</p> <p>(c) the FMU or part of the FMU is less able (when compared to 7 September 2017) to provide for any value described in Appendix 1A or any other value identified for it under the NOF.</p> </div>
Degrading	<p>has the same meaning as in the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px;"> <p>in relation to an FMU or part of an FMU, means that any site or sites to which a target attribute state applies is experiencing, or is likely to experience, as a result of something other than a naturally occurring process, a deteriorating trend (as assessed under clause 3.19).</p> </div>
Desired fish species (in relation to fish passage)	<p>means a <i>freshwater fish species</i> that is:</p> <ul style="list-style-type: none"> (a) listed in APP3 – Desired fish species in all rivers and receiving environments in <i>rivers</i> and <i>receiving environments</i> where they are expected to occur naturally (including those in APP4 – Rivers and receiving environments where desired fish species have been identified); or (b) <i>endemic</i> to Otago; or (c) <i>endemic</i> to New Zealand or <i>indigenous</i> to New Zealand, and Otago is within the <i>natural range</i> of the <i>species</i>; or (d) <i>endemic</i> to New Zealand or <i>indigenous</i> to New Zealand and Otago is within the <i>expected range</i> of the <i>species</i>; or (e) a <i>sports fish</i> in <i>rivers</i> and <i>receiving environments</i> where identified as a <i>desired fish species</i> in particular <i>rivers</i> and <i>receiving environments</i> in APP7 – Sports fish as desired fish species or undesirable fish species.

Term	Definition
Detailed site investigation	<p>has the same meaning as in section 3 of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means an investigation that—</p> <ul style="list-style-type: none"> (a) is done by a suitably qualified and experienced practitioner; and (b) is done in accordance with the current edition of Contaminated Land Management Guidelines No. 5—Site Investigation and Analysis of Soils, Wellington, Ministry for the Environment; and (c) is reported on in accordance with the current edition of Contaminated Land Management Guidelines No. 1—Reporting on Contaminated Sites in New Zealand, Wellington, Ministry for the Environment; and (d) results in a report that is certified by the practitioner. </div>
Dewatering	<p>means the taking of <i>groundwater</i>:</p> <ul style="list-style-type: none"> (a) for the period of time required to enable excavation, construction, maintenance or geotechnical work to proceed in the dewatered area; or (b) to sustain a lower localised <i>water</i> table.
Discharge	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>includes emit, deposit, and allow to escape.</p> </div>
Diversion	<p>means the redirecting of <i>water</i> flow from its natural or existing direction of flow. For the purposes of this Plan, taking <i>water</i> from the <i>bed</i> of any <i>water body</i> is considered a take or a take and <i>discharge</i>.</p>
Drain	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means any artificial watercourse designed, constructed, or used for the drainage of the surface or subsurface water, but excludes artificial watercourses used for the conveyance of water for electricity generation, irrigation, or water supply purposes.</p> </div>
Drilling	<p>means a method of boring a hole into the ground predominantly by rotating, percussive or washing action. Excludes excavation of pits by digging, blasting or other forms of excavation, driven posts or driven solid pile.</p>
Drinking water	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means water intended to be used for human consumption; and includes water intended to be used for food preparation, utensil washing, and oral or other personal hygiene.</p> </div>

Term	Definition
Drinking water protection zone	<p>means either:</p> <p>(a) any area within the following distances from a <i>drinking water supply</i> listed in APP14 – Drinking water supplies:</p> <p>(i) for surface <i>water</i> takes from <i>rivers</i> and their <i>beds</i>, or a directly or highly connected <i>groundwater</i> take:</p> <p>(1) 1,000m upstream (including a 5m width landward);</p> <p>(2) 100m downstream (including a 5m width landward); or</p> <p>(ii) for surface <i>water</i> takes from <i>lakes</i> or a directly or highly connected <i>groundwater</i> take:</p> <p>(1) 500m radius; or</p> <p>(iii) for any <i>bore</i>:</p> <p>(1) 20 m radius; or</p> <p>(b) an area identified as a <i>drinking water protection zone</i> in a resource consent to take <i>drinking water</i>.</p>
Drinking water supply	means a supply listed in APP14 – Drinking water supplies.
Earthworks	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the alteration or disturbance of land, including by moving, removing, placing, blading, cutting, contouring, filling or excavation of earth (or any matter constituting the land including soil, clay, sand and rock); but excludes gardening, cultivation, and disturbance of land for the installation of fence posts.</p> </div>
Earthworks (in relation to commercial forestry)	<p>has the same meaning as in regulation 3 of the Resource Management (National Environmental Standards for Commercial Forestry) Regulations 2017 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>(a) means disturbance of the surface of the land by the movement, deposition, or removal of earth (or any other matter constituting the land, such as soil, clay, sand, or rock) in relation to commercial forestry; and</p> <p>(b) includes the construction of forestry roads, forestry tracks, landings and river crossing approaches, cut and fill operations, maintenance and upgrade of existing earthworks, and forestry road widening and realignment; but</p> <p>(c) does not include soil disturbance by machinery passes, forestry quarrying, or mechanical land preparation.</p> </div>

Term	Definition
Ecological integrity	<p>has the same meaning as in the National Policy Statement for Indigenous Biodiversity 2023 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the extent to which an ecosystem is able to support and maintain its:</p> <ul style="list-style-type: none"> (a) composition (being its natural diversity of indigenous species, habitats, and communities); and (b) structure (being its biotic and abiotic physical features); and (c) functions (being its ecological and physical processes). </div>
Ecosystem services	<p>has the same meaning as in the National Policy Statement for Indigenous Biodiversity 2023 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>are the benefits obtained from ecosystems such as:</p> <ul style="list-style-type: none"> (a) supporting services, (e.g., nutrient cycling, soil formation, habitat creation); (b) provisioning services, (e.g., food, freshwater, wood, fibre, fuel); (c) regulating services, (e.g., water purification, climate regulation, flood regulation, disease regulation); and (d) cultural services, (e.g., aesthetic, spiritual, educational, recreational) </div>
Effect	<p>has the same meaning as in section 3 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>In this Act, unless the context otherwise requires, the term effect includes—</p> <ul style="list-style-type: none"> (a) any positive or adverse effect; and (b) any temporary or permanent effect; and (c) any past, present, or future effect; and (d) any cumulative effect which arises over time or in combination with other effects— <p>regardless of the scale, intensity, duration, or frequency of the effect, and also includes—</p> <ul style="list-style-type: none"> (e) any potential effect of high probability; and (f) any potential effect of low probability which has a high potential impact. </div>
Effects management hierarchy	<p>in relation to <i>wetlands, rivers, and natural lakes</i>, means an approach to managing the adverse <i>effects</i> of an activity on the extent or values of a <i>wetland, river or natural lake</i> (including cumulative <i>effects</i> and loss of potential value) that requires that:</p> <ul style="list-style-type: none"> (a) adverse <i>effects</i> are avoided where practicable; then (b) where adverse <i>effects</i> cannot be avoided, they are minimised where practicable; then (c) where adverse <i>effects</i> cannot be minimised, they are remedied where practicable; then (d) where more than minor residual adverse <i>effects</i> cannot be avoided, minimised, or remedied, <i>aquatic offsetting</i> is provided where possible; then (e) if <i>aquatic offsetting</i> of more than minor residual adverse <i>effects</i> is not possible, <i>aquatic compensation</i> is provided; then (f) if <i>aquatic compensation</i> is not appropriate, the activity itself is avoided.

Term	Definition
Emissions reduction plan	means a plan prepared in accordance with section 5ZI of the Climate Change Response Act 2002.
Endemic	means <i>indigenous</i> and restricted to a certain place or area.
Environment	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>includes—</p> <ul style="list-style-type: none"> (a) ecosystems and their constituent parts, including people and communities; and (b) all natural and physical resources; and (c) <i>amenity values</i>; and (d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters. </div>
Environmental flows and levels	means any <i>minimum flows</i> , site specific <i>river flows</i> , <i>management flows</i> , environmental levels, <i>minimum levels</i> and maximum levels identified in this Plan that apply to a <i>water body</i> .
Environmental outcome	<p>has the same meaning as in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means, in relation to a value that applies to an FMU or part of an FMU, a desired outcome that a regional council identifies and then includes as an objective in its regional plan</p> </div>
Exotic continuous-cover forest or exotic continuous-cover forestry	<p>has the same meaning as in the National Environmental Standards for Commercial Forestry 2017 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> (a) means a forest that is deliberately established for commercial purposes, being at least 1 ha of continuous forest cover of exotic forest species that has been planted and— <ul style="list-style-type: none"> (i) will not be harvested or replanted; or (ii) is intended to be used for low-intensity harvesting or replanted; and (b) includes all associated forestry infrastructure; but (c) does not include— <ul style="list-style-type: none"> (i) a shelter belt of forest species, where the tree crown cover has, or is likely to have, an average width of less than 30m; or (ii) forest species in urban areas; or (iii) nurseries and seed orchards; or (iv) trees grown for fruit or nuts; or (v) long-term ecological restoration planting of indigenous forest species; or or (vi) willows and poplars space planted for soil conservation purposes </div>
Expected range	means range expected due to range shifts including from conservation translocation and dispersal in response to <i>climate change</i>

Term	Definition
Feedlot	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a stockholding area where cattle—</p> <p>(a) are kept for at least 80 days in any 6-month period; and</p> <p>(b) are fed exclusively by hand or machine.</p> </div>
Fertiliser	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 and the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a substance or biological compound or mix of substances or biological compounds in solid or liquid form, that is described as, or held out to be suitable for, sustaining or increasing the growth, productivity or quality of soils, plants or, indirectly, animals through the application to plants or soil of any of the following:</p> <p>(a) nitrogen, phosphorus, potassium, sulphur, magnesium, calcium, chlorine, and sodium as major nutrients; or</p> <p>(b) manganese, iron, zinc, copper, boron, cobalt, molybdenum, iodine, and selenium as minor nutrients; or</p> <p>(c) fertiliser additives to facilitate the uptake and use of nutrients; or</p> <p>(d) non-nutrient attributes of the materials used in fertiliser.</p> <p>It does not include livestock effluent, human effluent, substances containing pathogens, or substances that are plant growth regulators that modify the physiological functions of plants.</p> </div>
Flap gate	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a hinged gate that controls fluctuations in tidal or flood water, such as a tide gate or flood gate.</p> </div>
Flood protection and drainage asset	<p>means any <i>structure</i>, vegetation or equipment owned or managed 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.</p>
Flood protection and drainage works	<p>means any activities 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.</p>
Floodwaters	<p>means surface <i>water</i> that has inundated a property as a result of the breaching or overtopping of the banks of a <i>lake</i> or <i>river</i>.</p>

Term	Definition
Ford	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a structure that –</p> <ul style="list-style-type: none"> (a) is artificial, shallow, and designed for crossing any river or connected area; and (b) is in contact with most of the width of the bed of the river or connected area. </div>
Fragmentation	<p>has the same meaning as in the National Policy Statement for Indigenous Biodiversity 2023 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>In relation to indigenous biodiversity, refers to the fragmentation of habitat that results in a loss of connectivity and an altered spatial configuration of habitat for a given amount of habitat loss.</p> </div>
Freshwater or fresh water	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means all water except coastal water and geothermal water.</p> </div>
Freshwater farm plan	<p>means a farm management plan that meets the requirements of APP26 – Freshwater farm plans.</p>
Freshwater fish	<p>has the same meaning as in the Conservation Act 1987 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> (a) all species of <i>Anguillidae Anguilla</i>, <i>Cyprinidae</i>, <i>Eleotridae Gobiomorphus</i>, <i>Ictaluridae</i>, <i>Percidae</i>, <i>Poeciliidae</i>, <i>Retropinnidae</i>, and <i>Salmonidae</i> (b) all species of <i>Echydella</i> (c) all species of <i>Paranephrops</i> (d) <i>Cheimarrichthyidae Cheimarrichthys fosteri</i> (e) <i>Geotridae Geotria australis</i> (f) <i>Gobiidae Acentrogobius pflaumii</i> (g) <i>Microdesmidae Parioglossus marginalis</i> </div>
Freshwater management unit or FMU	<p>has the same meaning as in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means all or any part of a water body or water bodies, and their related catchments, that a regional council determines under clause 3.8 is an appropriate unit for freshwater management and accounting purposes; and part of an FMU means any part of an FMU including, but not limited to, a specific site, river reach, water body, or part of a water body.</p> </div>
Functional need	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the need for a proposal or activity to traverse, locate or operate in a particular <i>environment</i> because the activity can only occur in that environment.</p> </div>

Term	Definition
Green infrastructure	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a natural or semi-natural area, feature, or process, including engineered systems that mimic natural processes, which are planned or managed to:</p> <p>(a) provide for aspects of ecosystem health or resilience, such as maintaining or improving the quality of water, air or soil, and habitats to promote biodiversity; and</p> <p>(b) provide services to people and communities, such as stormwater or flood management or climate change adaptation.</p> </div>
Green waste	<p>means organic plant material from gardening or arboriculture activities including lawn clippings, weeds, plants, branches, and other soft vegetable matter. It does not include food waste.</p>
Greywater	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means liquid waste from domestic sources including sinks, basins, baths, showers and similar fixtures, but does not include sewage, or industrial and trade waste.</p> </div>
Groundwater	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means water occupying openings, cavities, or spaces in soils or rocks beneath the surface of the ground.</p> </div>
Habitat (in relation to indigenous biodiversity)	<p>has the same meaning as in the National Policy Statement for <i>Indigenous</i> Biodiversity 2023 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the area or environment where an organism or ecological community lives or occurs naturally for some or all of its life cycle, or as part of its seasonal feeding or breeding pattern; but does not include built structures or an area or environment where an organism is present only fleetingly.</p> </div>
Hard protection structure	<p>within the coastal <i>environment</i>, has the same meaning as in the Glossary of the New Zealand Coastal Policy Statement 2010 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>includes a seawall, rock revetment, groyne, breakwater, stop bank, retaining wall or comparable structure or modification to the seabed, foreshore or coastal land that has the primary purpose or effect of protecting an activity from a coastal hazard, including erosion.</p> </div> <p>And outside the coastal <i>environment</i>, means any kind of <i>structure</i> which is specifically established for the purpose of <i>natural hazard</i> risk mitigation, including <i>dams, weirs, stop banks, carriageways, groynes, reservoirs and rip rap.</i></p>

Term	Definition
Harvesting	<p>has the same meaning as in regulation 3 of the Resource Management (National Environmental Standards for Commercial Forestry) Regulations 2017 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>(a) means felling trees, extracting trees, thinning tree stems and extraction for sale or use (production thinning), processing trees into logs, or loading logs onto trucks for delivery to processing plants; but</p> <p>(b) does not include—</p> <ul style="list-style-type: none"> (i) milling activities or processing of timber; or (ii) clearance of vegetation that is not commercial forest trees </div>
Hazardous substance	<p>has the same meaning as in section 2 of the RMA (as set out in the box below):</p> <div style="border: 1px solid black; padding: 5px;"> <p>includes, but is not limited to, any substance defined in section 2 of the Hazardous Substances and New Organisms Act 1996 as a hazardous substance. The Hazardous Substances and New Organisms Act 1996 defines hazardous substances as meaning, unless expressly provided otherwise by regulations or an EPA notice, any substance—</p> <p>(a) with 1 or more of the following intrinsic properties:</p> <ul style="list-style-type: none"> (i) explosiveness: (ii) flammability: (iii) a capacity to oxidise: (iv) corrosiveness: (v) toxicity (including chronic toxicity): (vi) ecotoxicity, with or without bioaccumulation; or <p>(b) which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased) generates a substance with any 1 or more of the properties specified in paragraph (a).</p> </div>
Height	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the vertical distance between a specified reference point and the highest part of any feature, structure or building above that point.</p> </div>
In-stream dam	<p>means any <i>dam</i> which is located in part or in whole in, on, under or over the <i>bed</i> of a <i>lake</i> or <i>river</i>.</p>
Indigenous	<p>means native to New Zealand.</p>
Indigenous vegetation	<p>means vascular and non-vascular plants that, in relation to a particular area, are native to the ecological district¹⁰ or <i>freshwater</i> or marine bioregion in which that area is located.</p>

¹⁰ McEwen, W Medium (ed), 1987. Ecological regions and districts of New Zealand. Wellington: Department of Conservation

Term	Definition
Industrial activity	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means an activity that manufactures, fabricates, processes, packages, distributes, repairs, stores, or disposes of materials (including raw, processed, or partly processed materials) or goods. It includes any ancillary activity to the industrial activity.</p> </div>
Industrial and trade waste	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means liquid waste, with or without matter in suspension, from the receipt, manufacture or processing of materials as part of a commercial, industrial or trade process, but excludes sewage and greywater.</p> </div>
Industrial or trade premises	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means—</p> <ul style="list-style-type: none"> (a) any premises used for any industrial or trade purposes; or (b) any premises used for the storage, transfer, treatment, or disposal of waste materials or for other waste-management purposes, or used for composting organic materials; or (c) any other premises from which a contaminant is discharged in connection with any industrial or trade process;— <p>but does not include any production land.</p> </div>
Industrial or trade process	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>includes every part of a process from the receipt of raw material to the dispatch or use in another process or disposal of any product or waste material, and any intervening storage of the raw material, partly processed matter, or product.</p> </div>

Term	Definition
Infrastructure	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px;"> <p>means—</p> <ul style="list-style-type: none"> (a) pipelines that distribute or transmit natural or manufactured gas, petroleum, biofuel, or geothermal energy: (b) a network for the purpose of telecommunication as defined in section 5 of the Telecommunications Act 2001: (c) a network for the purpose of radiocommunication as defined in section 2(1) of the Radiocommunications Act 1989: (d) facilities for the generation of electricity, lines used or intended to be used to convey electricity, and support structures for lines used or intended to be used to convey electricity, excluding facilities, lines, and support structures if a person— <ul style="list-style-type: none"> (i) uses them in connection with the generation of electricity for the person’s use; and (ii) does not use them to generate any electricity for supply to any other person: (e) a water supply distribution system, including a system for irrigation: (f) a drainage or sewerage system: (g) structures for transport on land by cycleways, rail, roads, walkways, or any other means: (h) facilities for the loading or unloading of cargo or passengers transported on land by any means: (i) an airport as defined in section 2 of the Airport Authorities Act 1966: (j) a navigation installation as defined in section 2 of the Civil Aviation Act 1990: (k) facilities for the loading or unloading of cargo or passengers carried by sea, including a port related commercial undertaking as defined in section 2(1) of the Port Companies Act 1988: (l) anything described as a network utility operation in regulations made for the purposes of the definition of network utility operator in section 166. </div>
Intensive winter grazing	<p>means the grazing of <i>livestock</i> on an annual forage crop at any time in the period that begins on 1 May and ends with the close of 30 September of the same year; and includes activities on a farm that support intensive winter grazing and may occur year-round, such as the preparation and sowing of <i>land</i> for grazing and the <i>cultivation</i> of annual forage crops.</p>
Irrigation	<p>has the same meaning as in the National Environmental Standards for Freshwater, 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px;"> <p>means the activity of applying water to land by means of a constructed system for the purpose of assisting production of vegetation or stock on that land.</p> </div>

Term	Definition
Irrigation scheme	means a trust, company, incorporated society or other legal entity that holds a resource consent to take and supply <i>water</i> to more than one property, which is to be used predominantly for <i>irrigation</i> .
Kaitiakitanga or kaitiakitaka	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; and includes the ethic of stewardship.</p> </div>
Lake	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a body of fresh water which is entirely or nearly surrounded by land.</p> </div>
Land application system	means the system used to apply <i>wastewater</i> or <i>sewage</i> from an <i>on-site wastewater treatment system</i> into or onto the soil for further in-soil treatment and absorption or evaporation.
Land	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>(a) includes land covered by water and the airspace above land; and</p> <p>(b) in a national environmental standard dealing with a regional council function under section 30 or a regional rule, does not include the bed of a lake or river; and</p> <p>(c) in a national environmental standard dealing with a territorial authority function under section 31 or a district rule, includes the surface of water in a lake or river</p> </div>
Land disturbance	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the alteration or disturbance of land (or any matter constituting the land including soil, clay, sand and rock) that does not permanently alter the profile, contour or height of the land.</p> </div>
Landfill	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means an area used for, or previously used for, the disposal of solid waste. It excludes cleanfill areas.</p> </div>
Landholding	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means 1 or more parcels of <i>land</i> (whether or not they are contiguous) that are managed as a single operation.</p> </div>

Term	Definition
Lawfully established	means established in accordance with and compliant with the Resource Management Act 1991 or any former legislation at the time of establishment.
Lawfully established permitted take	<p>means a take of <i>water</i> that:</p> <ul style="list-style-type: none"> (a) existed as at 31 October 2024; and (b) was permitted under the Regional Plan: Water for Otago; and (c) where consent is sought for the take, it can be demonstrated as having been exercised between 1 July 2022 and 30 June 2024 at the rate and volume sought to be authorised via the consent.
Lifeline utility	means utilities provided by an entity named or described in Part A of Schedule 1, or that carries on a business described in Part B of Schedule 1 of the Civil Defence Emergency Management Act 2002.
Limit	<p>has the same meaning as in clause 1.4(1) of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>means either a limit on resource use or a take limit.</p> </div>
Line	a wire or conductor (including a fibre optic cable) used or intended to be used for telecommunications or the transmission of electricity.
Liquid animal effluent	means faeces and urine from land-based animals, including associated process <i>water</i> , wash-down <i>water</i> , <i>contaminants</i> and <i>sludge</i> but excluding <i>solid animal effluent</i> . For the purposes of this definition, it does not include incidental animal effluent present in <i>livestock processing waste streams</i> .
Livestock	means any farmed animal.
Long term vision	means the long-term visions for <i>fresh water</i> developed under clause 3.3 of the NPSFM and included in the PORPS 2021.
Loss of value	<p>has the same meaning as in clause 3.21(1) of the National Policy Statement for Freshwater Management 2020 (as set out in the box below) and in this plan also refers to all <i>wetlands</i> and <i>natural lakes</i></p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>in relation to a wetland or river, means the wetland or river is less able to provide for the following existing or potential values:</p> <ul style="list-style-type: none"> (a) any value identified for it under the NOF process; or (b) any of the following, whether or not they are identified under the NOF process: <ul style="list-style-type: none"> (i) ecosystem health (ii) indigenous biodiversity (iii) hydrological functioning (iv) Māori freshwater values (v) amenity values. </div>

Term	Definition
<p>Low slope land</p>	<p>has the same meaning as in the Resource Management (Stock Exclusion) Regulations 2020 (set out in the box below) or, if no national mapping framework for <i>low slope land</i> for stock exclusion exists, means <i>land</i> where the slope of the <i>land</i> is less than 5 degrees, measured over any 20-metre distance of the land, but excludes any land:</p> <ul style="list-style-type: none"> (a) that is subject to 1 or more of the following arrangements (or a renewal of that arrangement), if that arrangement or those arrangements limit the number of stock that can be used for grazing that land: <ul style="list-style-type: none"> (i) a concession granted under Part 3B of the Conservation Act 1987: (ii) a pastoral lease, occupation licence, or special lease as defined in section 2 of the Crown Pastoral Land Act 1998: (iii) a discretionary pastoral activity as defined in section 2 of the Crown Pastoral Land Act 1998: (iv) an exemption granted or varied by the Commissioner under the Crown Pastoral Land Act 1998 from any stock limitation. (b) where the stocking rate of the controlled stock-type, in the paddock within which the waterbody exists, is no greater than 6 stock units per hectare. (c) where the altitude is greater than 500m above mean sea level. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>low slope land means the land identified as low slope land in https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/stock-exclusion, but does not include any land—</p> <ul style="list-style-type: none"> (a) where the slope of the land exceeds 10 degrees measured over any 20-metre distance of the land; or (b) that is subject to 1 or more of the following arrangements (or a renewal of that arrangement), if that arrangement or those arrangements limit the number of stock that can be used for grazing that land: <ul style="list-style-type: none"> (i) a concession granted under Part 3B of the Conservation Act 1987: (ii) a pastoral lease, occupation licence, or special lease as defined in section 2 of the Crown Pastoral Land Act 1998: (iii) a discretionary pastoral activity as defined in section 2 of the Crown Pastoral Land Act 1998: (iv) an exemption granted or varied by the Commissioner under the Crown Pastoral Land Act 1998 from any stock limitation. </div>
<p>Mahika kai</p>	<p>has the same meaning as in the PORPS 2021 (as set out in the box below):</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>means gathering of food and natural materials by Kāi Tahu whānui in accordance with tikaka, the places where those resources are gathered, and the work, methods and cultural activities involved in obtaining them.</p> </div>
<p>Mahinga kai (in relation to FMU3-P3 – Waitaki River allocation to activities)</p>	<p>has the same meaning as in the Waitaki Catchment Water Allocation Regional Plan (2005) (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>means food and other resources, the gathering of those resources and the areas that they are sourced from.</p> </div>

Term	Definition
Main stem	means, in relation to <i>rivers</i> , the <i>rivers</i> identified in SCHED4 – Rivers: B Block environmental flows, levels and take limits of this Plan and applies from the source of that course to the sea or confluence with another main stem but excludes any tributary.
Maintenance (in relation to structures in the bed of a river or lake)	means repairing and keeping a <i>structure</i> in good and safe condition and includes upgrades and minor alterations as long as any upgrades or minor alterations do not materially increase the operation, footprint, <i>height</i> , or external envelope of the <i>structure</i> .
Major hazard facility	<p>has the same meaning as in clause 4 of the Health and Safety at Work (<i>Major Hazard Facilities</i>) Regulations 2016 (as set out in the box below):</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a facility that WorkSafe has designated as a lower tier major hazard facility or an upper tier major hazard facility under regulation 19 or 20.</p> </div>
Management flow	means the flow, when measured at the relevant flow monitoring site, at which the taking of <i>water</i> from a <i>water body</i> is subject to reductions.
Mana whenua	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below) and in this plan also refers to the people who hold customary authority</p> <div style="border: 1px solid black; padding: 5px;"> <p>means customary authority exercised by an iwi or hapu in an identified area.</p> </div>
Māori freshwater values	in this plan, means the values of <i>mahika kai</i> , taoka species, and wāhi tūpuna.
Mātaitai	<p>means an area identified as a traditional fishing ground established under section 186 of the Fisheries Act and includes:</p> <ul style="list-style-type: none"> (a) Moeraki Mātaitai Reserve; and (b) Waikōuaiti Mātaitai Reserve; and (c) Ōtākou Mātaitai Reserve; and (d) Puna-wai-Tōriki (Hays Gap) Mātaitai Reserve; and (e) any other area approved under regulation 22 of the Fisheries (South Island Customary Fishing) Regulations 1999.
Mean Annual Recharge	means the average volume of <i>aquifer</i> recharge per year, in cubic metres per annum.
Mechanical land preparation	<p>has the same meaning as in regulation 3 of the Resource Management (National Environmental Standards for Commercial Forestry) Regulations 2017 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> (a) means using machinery to prepare land for replanting trees, including root-raking, discing, ripping, roller crushing, clearing slash, and mounding the soil into raised areas; but (b) does not include— <ul style="list-style-type: none"> (i) the creation of alternating drains and planting mounds using a V shaped blade attached to the front of a bulldozer; or </div>

Term	Definition
Mineral	<p>has the same meaning as in section 2(1) of the Crown Minerals Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a naturally occurring inorganic substance beneath or at the surface of the earth, whether or not under <i>water</i>; and includes all metallic minerals, non-metallic minerals, fuel minerals, precious stones, industrial rocks and building stones, and a prescribed substance within the meaning of the Atomic Energy Act 1945.</p> </div>
Minimum flow	<p>means the flow, when measured at the relevant flow monitoring site, at which the taking of <i>water</i> from a <i>water body</i> must cease.</p>
Minimum level	<p>means the <i>water</i> level, when measured at the relevant <i>water</i> level monitoring site, at which the taking of <i>water</i> from a <i>water body</i> must cease.</p>
Modified watercourse	<p>means a <i>river</i> that has been modified, channelled, or straightened for <i>land drainage</i> or other purposes.</p>
National adaptation plan	<p>means a plan prepared in accordance with section 5Z5 of the Climate Change Response (Zero Carbon) Amendment Act 2019.</p>
Nationally significant infrastructure	<p>to the extent applicable to the Otago region, has the same meaning as in clause 1.4(1) of the National Policy Statement for Urban Development 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means all of the following:</p> <ul style="list-style-type: none"> (a) State highways (b) the national grid electricity transmission network (c) renewable electricity generation facilities that connect with the national grid (d) the high-pressure gas transmission pipeline network operating in the North Island (e) the refinery pipeline between Marsden Point and Wiri (f) the New Zealand rail network (including light rail) (g) rapid transit services (as defined in this clause) (h) any airport (but not its ancillary commercial activities) used for regular air transport services by aeroplanes capable of carrying more than 30 passengers (j) the port facilities (but not the facilities of any ancillary commercial activities) of each port company referred to in item 6 of Part A of Schedule 1 of the Civil Defence Emergency Management Act 2002 </div>
Natural hazard	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.</p> </div>

Term	Definition
Natural hazard works	<p>has the same meaning as in regulation 51(1) of the National Environmental Standard for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means works for the purpose of removing material, such as trees, debris, and sediment, that—</p> <p>(a) is deposited as the result of a natural hazard, and</p> <p>(b) is causing, or is likely to cause, an immediate hazard to people or property.</p> </div>
Natural inland wetland	<p>has the same meaning as in the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a wetland (as defined in the Act) that is not:</p> <p>(a) in the coastal marine area; or</p> <p>(b) a deliberately constructed wetland, other than a wetland constructed to offset impacts on, or to restore, an existing or former natural inland wetland; or</p> <p>(c) a wetland that has developed in or around a deliberately constructed water body, since the construction of the water body; or</p> <p>(d) a geothermal wetland; or</p> <p>(e) a wetland that:</p> <p style="margin-left: 20px;">(i) is within an area of pasture used for grazing; and</p> <p style="margin-left: 20px;">(ii) has vegetation cover comprising more than 50 percent exotic pasture species (as identified in the National List of Exotic Pasture Species using the Pasture Exclusion Assessment Methodology (see clause 1.8)); unless</p> <p style="margin-left: 20px;">(iii) the wetland is a location of a habitat of a threatened species identified under clause 3.8 of this National Policy Statement, in which case the exclusion in (e) does not apply.</p> </div>
Natural lake	<p>means a <i>lake</i> that is not a <i>controlled lake</i> or an <i>off-stream artificial lake</i>.</p>
Natural range	<p>has the same meaning as in the National Policy Statement for Indigenous Biodiversity 2023 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>in relation to a species, refers to the geographical area within which that species can be expected to be found naturally (without human intervention).</p> </div>
Naturalised	<p>In relation to <i>river</i> flows, means the flows that occur in the <i>river</i> in the absence of <i>water</i> take or any other flow modification.</p>
Natural wetland	<p>means a <i>wetland</i> (as defined in the RMA) that is not:</p> <p>(a) a deliberately constructed <i>wetland</i>, other than a <i>wetland</i> constructed to offset impacts on, or to restore, an existing or former <i>natural wetland</i>; or</p> <p>(b) a <i>wetland</i> that has developed in or around a deliberately constructed <i>water body</i>, since the construction of the <i>water body</i>.</p>

Term	Definition
Naturally occurring process	has the same meaning as in the National Policy Statement for Freshwater Management 2020 (as set out in the box below) means a process that occurs, or would occur, in the absence of human activity.
Nohoaka or nohoanga	means a site occupied by Kāi Tahu on a seasonal and temporary basis for <i>mahika kai</i> or other customary purposes and, in Otago, are the sites listed in the Nohoaka section in the MW – mana whenua chapter of this plan.
Non-consumptive take	means a take of <i>water</i> from a <i>water body</i> that has an associated <i>discharge</i> , where the <i>discharge</i> returns the same volume of <i>water</i> : (a) as near as practicable to the <i>point of take</i> and no greater than 200m from the <i>point of take</i> ; and (b) to the same <i>water body</i> ; and (c) at the same time or within a timeframe as near as practicable to when the take is operating; and (d) no <i>contaminants</i> are entrained in the <i>water</i> while it is outside of the <i>water body</i> .
Occupancy	has the same meaning as in the PORPS 2021 (as set out in the box below) means, in relation to measuring indigenous biodiversity, the number of units per area occupied by a species or taxa.
Off-stream artificial lake	means a body of <i>water</i> created by artificial means including by an <i>off-stream dam</i>
Off-stream dam	means any <i>dam</i> of which no part is located in, on, under or over the <i>bed</i> of a <i>lake</i> or <i>river</i> , or within a <i>natural inland wetland</i> .
On-site wastewater treatment system	means a system that receives <i>wastewater</i> or <i>sewage</i> from a single property and treats and applies the <i>wastewater</i> or <i>sewage</i> to a <i>land application system</i> on the same property.
Operational need	has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below) means the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints.
Organic waste	biodegradable vegetative material which includes compost and <i>green waste</i> and does not include any <i>sewage</i> , <i>greywater</i> , <i>industrial or trade waste</i> or animal effluent.
Organism of interest	means an organism identified as an organism of interest in a regional pest management plan or regional pathway management plan for Otago.
Other infrastructure	has the same meaning as in regulation 3 of the National Environmental Standard for Freshwater 2020 (as set out in the box below) means infrastructure, other than specified infrastructure, that was lawfully established before, and in place at, the close of 2 September 2020.

Term	Definition
Outstanding water body	<p>has the same meaning as in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a water body, or part of a water body, identified in a regional policy statement, a regional plan, or a water conservation order as having one or more outstanding values.</p> </div>
Over-allocation, or over-allocated	<p>has the same meaning as in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>in relation to both the quantity and quality of freshwater, means the situation where:</p> <ul style="list-style-type: none"> (a) resource use exceeds a limit; or (b) if limits have not been set, an FMU or part of an FMU is degraded or degrading; or (c) an FMU or part of an FMU is not achieving an environmental flow or level set for it under clause 3.16 </div>
Passive flap gate	<p>has the same meaning as in National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a flap gate whose opening or closing –</p> <ul style="list-style-type: none"> (a) Is caused by a positive head differential on the upstream or downstream side, respectively; and (b) is not controlled by an automated and powered system (for example, electric or hydraulic) when the water reaches certain levels. </div>
Pasture-based wintering	<p>means break feeding cattle, other than lactating dairy cows, on pasture between 1 May and 30 September inclusive where supplementary feed offered is more than 10,000kg/DM/ha.</p>
Pest	<p>means an organism specified as a pest in a national pest management plan, or a regional pest management plan for Otago, prepared in accordance with the Biosecurity Act 1993.</p>
Pest agent	<p>has the same meaning as in section 2 of the Biosecurity Act 1993 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>in relation to any pest, means an organism capable of –</p> <ul style="list-style-type: none"> (a) helping the pest replicate, spread, or survive; or (b) interfering with the management of the pest. </div>
Pit toilet	<p>means a hole in the ground over which a small <i>building</i> is sited, used for the disposal of <i>sewage</i>, also referred to as a long drop or pit latrine.</p>
Place of assembly	<p>means any <i>building</i> or <i>land</i> used for public or private assembly or meeting of people and includes libraries, churches, halls, marae, clubrooms, community centres, conference centres, recreational facilities, chartered clubs, premises with a club license, and other similar establishments.</p>

Term	Definition
Plan-enabled	<p>has the same meaning as in the National Policy Statement on Urban Development 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>Development capacity is plan-enabled for housing or for business land if: in relation to the short term, it is on land that is zoned for housing or for business use (as applicable) in an operative district plan in relation to the medium term, either paragraph (a) applies, or it is on land that is zoned for housing or for business use (as applicable) in a proposed district plan in relation to the long term, either paragraph (b) applies, or it is on land identified by the local authority for future urban use or urban intensification in an FDS or, if the local authority is not required to have an FDS, any other relevant plan or strategy.</p> </div>
Point of take	means the point at which <i>water</i> is taken from a <i>water body</i> .
Potentially contaminated	means that part of a site where an activity or industry described in the Ministry for the Environment’s <i>Hazardous Activities and Industries List</i> (October 2011) has been or is being undertaken on it or where it is more likely than not that such an activity or industry is being or has been undertaken on it, but excludes any site where a <i>detailed site investigation</i> has been completed and reported and which demonstrates that any <i>contaminants</i> in or on the site are at, or below, background concentrations.
Primary contact site	<p>has the same meaning as in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a site identified by a regional council that it considers is regularly used, or would be regularly used but for existing freshwater quality, for recreational activities such as swimming, paddling, boating, or watersports, and particularly for activities where there is a high likelihood of water or water vapour being ingested or inhaled.</p> </div>
Primary treatment	means the separation of suspended material from <i>wastewater</i> in septic tanks, primary settling chambers, or other <i>structures</i> , before effluent <i>discharge</i> to either a <i>secondary treatment</i> process, or to a <i>land application system</i> .
Productive capacity	<p>has the same meaning as in National Policy Statement for Highly Productive Land 2022 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>In relation to land, means the ability of the land to support land-based primary production over the long term, based on an assessment of:</p> <ul style="list-style-type: none"> (a) physical characteristics (such as soil type, properties, and versatility); and (b) legal constraints (such as consent notices, local authority covenants, and easements); and (c) the size and shape of existing and proposed land parcels. </div>
Quarry	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a location or area used for the permanent removal and extraction of aggregates (clay, silt, rock or sand). It includes the area of aggregate resource and surrounding land associated with the operation of a quarry and which is used for quarrying activities.</p> </div>

Term	Definition
Quarrying activities	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the extraction, processing (including crushing, screening, washing, and blending), transport, storage, sale and recycling of aggregates (clay, silt, rock, sand), the deposition of overburden material, rehabilitation, landscaping and clean filling of the quarry, and the use of land and accessory buildings for offices, workshops, and car parking areas associated with the operation of the quarry.</p> </div>
Reasonable mixing	<p>means the mixing that occurs in a mixing zone as determined in accordance with Policy IP-P20 – Mixing zones of this Plan.</p>
Receiving environment	<p>has the same meaning as in in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>includes, but is not limited to, any water body (such as a river, lake, wetland or aquifer) and the coastal marine area (including estuaries).</p> </div>
Recovering	<p>means to be in a state of <i>recovery</i>.</p>
Recovery	<p>in relation to a <i>species</i>, means a reduction in the risk of extinction (including as recognised through improvements in national and regional conservation status assessments), and progress towards being fully recovered, which is achieved when a <i>species</i> is:</p> <ul style="list-style-type: none"> (a) present in all parts of its range, even those that are no longer occupied but were occupied prior to major human impacts/disruptions; and (b) viable (i.e., not threatened with extinction) in all parts of its range; and (c) performing its ecological functions in all parts of its range

Term	Definition
Regionally significant infrastructure	<p>has the same meaning as in PORPS 2021 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px;"> <ul style="list-style-type: none"> (1) roads which provide a lifeline connection for a community OR roads classified as being of regional importance in accordance with the One Network Framework, (2) electricity sub-transmission infrastructure, (2A) significant electricity distribution infrastructure, (3) renewable electricity generation facilities that connect with the local distribution network but not including renewable electricity generation facilities designed and operated principally for supplying a single premise or facility, (4) telecommunication and radiocommunication networks, (5) public transport terminals and stations, (6) the following airports: Dunedin, Queenstown, Wānaka, Alexandra, Balclutha, Cromwell, Ōamaru, Taiari. (7) navigation infrastructure associated with airports and commercial ports which are nationally or regionally significant, (8) defence facilities for defence purposes in accordance with the Defence Act 1990, (8A) established community-scale irrigation and stockwater infrastructure, (9) community drinking water abstraction, supply treatment and distribution infrastructure that provides no fewer than 25 households with drinking water for not less than 90 days each calendar year, and community water supply abstraction, treatment and distribution infrastructure (excluding delivery systems or infrastructure primarily deployed for the delivery of water for irrigation of land or rural agricultural drinking-water supplies) (10) community stormwater infrastructure, (11) wastewater and sewage collection, treatment and disposal infrastructure serving no fewer than 25 households, (11A) oil terminals, bulk fuel storage and supply infrastructure, and ancillary pipelines at Port Chalmers and Dunedin, and (12) Otago Regional Council’s hazard mitigation works including flood protection infrastructure and drainage schemes, (13) landfills and associated solid waste sorting and transfer facilities which are designated by, or are owned and operated by, a local authority, (14) ski area infrastructure, (15) any infrastructure identified as nationally significant infrastructure. </div>
Renewable electricity generation	<p>has the same meaning as in the Interpretation section of the National Policy Statement for Renewable Electricity Generation 2011 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px;"> <p>means generation of electricity from solar, wind, hydroelectricity, geothermal, biomass, tidal, wave, or ocean current energy sources.</p> </div>

Term	Definition
Renewable electricity generation activities	<p>has the same meaning as in the Interpretation section of the National Policy Statement for Renewable Electricity Generation 2011 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the construction, operation and maintenance of structures associated with renewable electricity generation. This includes small and community-scale distributed renewable generation activities and the system of electricity conveyance required to convey electricity to the distribution network and/or the national grid and electricity storage technologies associated with renewable electricity.</p> </div>
Replanting	<p>has the same meaning as in regulation 3 of the Resource Management (National Environmental Standards for Commercial Forestry) Regulations 2017 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the planting and growing of commercial forestry trees on land less than 5 years after commercial forestry harvesting has occurred.</p> </div>
Resilience	<p>has the same meaning as in PORPS 2021 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means the capacity and ability to withstand or recover quickly from adverse conditions.</p> </div>
Restoration (in relation to a natural inland wetland)	<p>has the same meaning as in the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means active intervention and management, appropriate to the type and location of the wetland, aimed at restoring its ecosystem health, indigenous biodiversity, or hydrological functioning.</p> </div>
Reticulated wastewater system	<p>means a <i>wastewater</i> treatment plant and the attached network of <i>structures</i> including pipes and pump stations owned and operated by a group, institution, territorial authority or company that primarily treats <i>wastewater</i> from more than one site.</p>
Riparian margin	<p>means a strip of land, usually of varying width, directly adjacent to a waterway and which contributes to the maintenance and enhancement of the natural functioning, quality and character of the waterway and its margins.</p>
River	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a continually or intermittently flowing body of fresh water; and includes a stream and modified watercourse; but does not include any artificial watercourse (including an irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal).</p> </div>

Term	Definition
Sacrifice paddock	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means an area on which—</p> <p>(a) cattle are repeatedly, but temporarily, contained (typically during extended periods of wet weather); and</p> <p>(b) the resulting damage caused to the soil by pugging is so severe as to require resowing with pasture species.</p> </div>
Scheduled drain	<p>means a <i>drain</i> identified in a bylaw made by ORC in accordance with section 149(1)(c) of the Local Government Act 2002.</p>
Secondary take	<p>means the taking of <i>water</i> that has been <i>discharged</i> into a <i>water body</i> for the purpose of supplying that take.</p>
Secondary treatment	<p>means aerobic biological processing and settling or filtering of <i>wastewater</i> received from a <i>primary treatment</i> unit.</p>
Sediment control measures	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means measures or structures that do 1 or more of the following:</p> <p>(a) stop sediment from being washed away from its source:</p> <p>(b) slow or stop water with sediment in it so that the sediment drops out of suspension before the water reaches a water body:</p> <p>(c) divert the flow of water so that it does not become contaminated with sediment.</p> </div>
Sediment trap	<p>means an excavated or bunded area in a <i>critical source area</i>, or the <i>bed of river</i>, that is designed and constructed primarily for the purpose of allowing sediment to drop from the <i>water</i> column.</p>
Setback	<p>means the distance from a feature or boundary that creates a buffer within which certain activities cannot take place.</p>
Sewage	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means human excrement and urine.</p> </div>

Term	Definition
Sign	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px;"> <p>means any device, character, graphic or electronic display, whether temporary or permanent, which:</p> <p>(a) is for the purposes of:</p> <ul style="list-style-type: none"> (i) identification of or provision of information about any activity, property or structure or an aspect of public safety; (ii) providing directions; or (iii) promoting goods, services or events; and <p>(b) is projected onto, or fixed or attached to, any structure or natural object; and</p> <p>(c) includes the frame, supporting device and any ancillary equipment whose function is to support the message or notice.</p> </div>
Sinking lid	<p>(in relation to a <i>take limit</i>), means a <i>take limit</i> that reduces as a result of resource consents being:</p> <ul style="list-style-type: none"> (a) surrendered (b) expired (c) lapsed (d) reclassified: <ul style="list-style-type: none"> (i) to a different take limit, or (ii) from a <i>take limit</i> to a <i>secondary take of stored water</i> (e) replaced (f) transferred (g) substituted
Site-specific river flow	<p>means the flow in the <i>water body</i> that must be maintained below the <i>point of take</i> of a surface <i>water take</i>.</p>
Slope	<p>means the slope over any 20 metre distance of the <i>land</i>.</p>
Sludge	<p>means a semi-liquid residue that settles to the bottom of pipes, tanks and systems used in <i>on-site wastewater treatment systems</i> and community <i>wastewater systems</i>.</p>
Soil water deficit	<p>means the difference (mm) between the soil water content and field capacity. Soil water content is the amount of water (mm) held in the soil. This can be estimated from a soil water budget or measured through a variety of soil moisture monitoring devices.</p>
Solid animal effluent	<p>means solid excreta from land-based animals that cannot be pumped and sprayed, including bedding material and manure, but does not include dead animals or animal parts.</p>

Term	Definition
Species	<p>has the same meaning as in the National Policy Statement for Indigenous Biodiversity 2023 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a group of living organisms consisting of similar individuals capable of freely exchanging genes or interbreeding, including subspecies, varieties and organisms that are indeterminate.</p> </div>
Specified infrastructure	<p>has the same meaning as in clause 3.21 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means any of the following:</p> <ul style="list-style-type: none"> (a) infrastructure that delivers a service operated by a lifeline utility (as defined in the Civil Defence Emergency Management Act 2002), (b) regionally significant infrastructure identified as such in a regional policy statement or regional plan, (c) any water storage infrastructure (d) any public flood control, flood protection, or drainage works carried out: <ul style="list-style-type: none"> (i) by or on behalf of a local authority, including works carried out for the purposes set out in section 133 of the Soil Conservation and Rivers Control Act 1951, or (ii) for the purpose of drainage by drainage districts under the Land Drainage Act 1908 (e) defence facilities operated by the New Zealand Defence Force to meet its obligations under the Defence Act 1990 (f) ski area infrastructure. </div>
Specified rivers and lakes	<p>has the same meaning as in Appendix 3 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means:</p> <ul style="list-style-type: none"> (a) rivers that are fourth order or greater, using the methods outlined in the River Environment Classification System, National Institute of Water and Atmospheric Research, Version 1, and (b) lakes with a perimeter of 1.5km or more. </div>
Sports fish	<p>means <i>species</i> listed in APP7 – Sports fish as desired fish species or undesirable fish species Table 13.</p>
Stockholding area	<p>has the same meaning as in the National Environmental Standards for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> (a) means an area for holding cattle at a density that means pasture or other vegetative ground cover cannot be maintained (for example, feed pads, winter pads, standoff pads, and loafing pads); but (b) does not include an area used for pastoral purposes that is in the nature of a stockyard, milking shed, wintering barn, or sacrifice paddock. </div>
Stored water	<p>means <i>water</i> that has been impounded by an in-stream or <i>off-stream dam</i>.</p>

Term	Definition
Stormwater	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means run-off that has been intercepted, channelled, diverted, intensified or accelerated by human modification of a land surface, or run-off from the surface of any structure, as a result of precipitation and includes any contaminants contained within.</p> </div>
Stormwater network	<p>means an interconnected system of devices or structures used to capture, convey, store, treat or <i>discharge stormwater</i> including, but not limited to kerbs, pipes, soak pits, sumps, swales and constructed ponds and <i>wetlands</i> which are operated by or on behalf of a territorial authority or network utility operator.</p>
Structure	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft.</p> </div>
Suction dredge mining	<p>means any activity utilising a motor, pump and hose within the <i>bed</i> of a <i>river</i> or <i>lake</i> to extract <i>minerals</i> or metals.</p>
Suitably qualified person	<p>means a person that has been assessed and approved by the Otago Regional Council as being appropriately qualified, experienced and competent in the relevant field of expertise in accordance with APP26 – Freshwater Farm Plans or APP27 – Animal effluent.</p>
Taiāpure	<p>means an area in estuarine or littoral <i>coastal waters</i> that is identified as a local fishery under section 175 of the Fisheries Act, and includes:</p> <ul style="list-style-type: none"> (a) East Otago Taiāpure; and (b) any other area approved under section 175 of the Fisheries Act.
Takata whenua or tangata whenua	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>in relation to a particular area, means the iwi, or hapu, that holds mana whenua over that area.</p> </div>
Take limit	<p>has the same meaning as in the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a limit on the amount of water that can be taken from an FMU or part of an FMU, as set under clause 3.17 of the NPSFM.</p> </div>
Targeted application method	<p>means an application technique or method for <i>agricultural</i> application where the application system is targeted, and, where spray is being applied, that spray is directed only at the target species.</p>
Te Mana o te Wai	<p>has the meaning as in clause 1.3 and in the objective developed under clause 3.2 of the National Policy Statement for Freshwater Management 2020 and included in the proposed Otago Regional Policy Statement 2021.</p>

Term	Definition
Threatened species	<p>has the same meaning as in the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>means any indigenous species of flora or fauna that:</p> <ul style="list-style-type: none"> (a) relies on waterbodies for at least part of its life cycle; and (b) meets the criteria for nationally critical, nationally endangered, or nationally vulnerable species in the New Zealand Threat Classification System Manual (see clause 1.8 of the NPSFM). </div>
Threatened freshwater-dependent species	<p>means a <i>species</i> listed in APP6 – Threatened freshwater-dependent species.</p>
Undesirable fish species (in relation to fish passage)	<p>includes:</p> <ul style="list-style-type: none"> (a) in all <i>rivers</i> and <i>receiving environments</i> in Otago, <i>freshwater fish species</i> listed in APP5 – Fish species that are undesirable fish species in all <i>rivers</i> and <i>receiving environments</i>; and (b) in all <i>rivers</i> and <i>receiving environments</i> in Otago, <i>indigenous freshwater fish species</i> that are not naturally in the Otago region, or do not have an <i>expected range</i> in Otago; and (c) <i>sports fish</i> in all <i>rivers</i> and <i>receiving environments</i> except where identified as a <i>desired fish species</i> in particular <i>rivers</i> and <i>receiving environments</i> in APP7 – Sports fish as desired fish species or undesirable fish species; and (d) any other exotic <i>freshwater fish species</i>.
Unwanted organism	<p>has the same meaning as in section 2 of the Biosecurity Act 1993 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>means any organism that a chief technical officer believes is capable or potentially capable of causing unwanted harm to any natural and physical resources or human health; and</p> <ul style="list-style-type: none"> (a) includes— <ul style="list-style-type: none"> (i) any new organism, if the Authority has declined approval to import that organism; and (ii) any organism specified in Schedule 2 of the Hazardous Substances and New Organisms Act 1996; but (b) does not include any organism approved for importation under the Hazardous Substances and New Organisms Act 1996, unless— <ul style="list-style-type: none"> (i) the organism is an organism which has escaped from a containment facility; or (ii) a chief technical officer, after consulting the Authority and taking into account any comments made by the Authority concerning the organism, believes that the organism is capable or potentially capable of causing unwanted harm to any natural and physical resources or human health. </div>

Term	Definition
Valid resource consent	<p>means a resource consent that:</p> <ul style="list-style-type: none"> (a) has not expired; or (b) has expired but where the consent holder can still exercise the permit under s124 of the RMA; or (c) has not been surrendered under s138 of the RMA; or (d) has not been cancelled under s126 of the RMA; or (e) has not lapsed under s125 of the RMA.
Vegetation clearance (in relation to natural inland wetlands)	<p>has the same meaning as in regulation 3 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px;"> <ul style="list-style-type: none"> (a) means the disturbance, damage, destruction, or removal of vegetation by any means (for example, by cutting, crushing, application of chemicals, or burning); and (b) includes activities that result in the disturbance, damage, destruction, or removal of vegetation (for example, over-planting, applying the seed of exotic pasture species, mob-stocking, or draining away <i>water</i>); but (c) does not include— <ul style="list-style-type: none"> (i) the removal of sphagnum moss for the purpose of a harvest in accordance with regulation 48 or 49; or (ii) the crushing of other vegetation for the purpose of maintaining the dominance of sphagnum moss, if the crushing is carried out during a harvest of sphagnum moss or to rehabilitate the moss after it is harvested; or (iii) an activity described in paragraph (a) or (b) that is for the maintenance or construction of fencing for the purpose of excluding stock or marking property boundaries; or (iv) an activity described in paragraph (a) or (b) that is for the maintenance of shelter belts; or (v) grazing. </div>
Vegetation clearance (in relation to commercial forestry)	<p>has the same meaning as in regulation 3 of the National Environmental Standard for Commercial Forestry 2017 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 10px;"> <ul style="list-style-type: none"> (a) means the disturbance, cutting, burning, clearing, damaging, destruction, or removal of vegetation that is not a commercial forest tree; but (b) does not include any activity undertaken in relation to a commercial forest tree. </div>
Vertebrate toxic agent	<p>means a product or agent used to control, kill, or limit the viability of vertebrate <i>pests</i> (such as rabbits, possums, and rodents), including those that have a negative effect on reproduction but do not include attractant or repellent substances that are not toxic.</p>

Term	Definition
Wāhi tūpuna	means landscapes and places that embody the relationship of <i>mana whenua</i> and their culture and traditions with their ancestral lands, <i>water</i> , sites, wāhi tapu and other taoka.
Waitaki catchment	<p>has the same meaning as in section 4 of the Resource Management (Waitaki Catchment) Amendment Act 2004 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>(a) means the area of land bounded by watersheds draining into the Waitaki River; and</p> <p>(b) includes aquifers wholly or partially within that area of land.</p> </div>
Waste	<p>has the same meaning as in the Waste Minimisation Act 2008 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>(a) means anything disposed of or discarded; and</p> <p>(b) includes a type of waste that is defined by its composition or source (for example, organic waste, electronic waste, or construction and demolition waste); and</p> <p>(c) to avoid doubt, includes any component or element of diverted material, if the component or element is disposed of or discarded.</p> </div>
Waste oil	any oil that has been refined from crude oil, or any synthetic hydrocarbon oil, that has been used, and as a result of such use, has become unsuitable for its original purpose due to the presence of impurities or <i>contaminants</i> or the loss of original properties.
Wastewater	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means any combination of two or more the following wastes: sewage, greywater or industrial and trade waste.</p> </div>
Water	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>(a) means water in all its physical forms whether flowing or not and whether over or under the ground:</p> <p>(b) includes fresh water, coastal water, and geothermal water:</p> <p>(c) does not include water in any form while in any pipe, tank, or cistern.</p> </div>
Water body	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area.</p> </div>
Weir	<p>means an open-topped <i>structure</i> within the <i>bed</i> of a <i>lake</i> or <i>river</i> that:</p> <p>(a) alters the <i>water</i> level and the flow characteristics of the <i>water</i>; and</p> <p>(b) allows <i>water</i> to flow passively through or over top.</p>

Term	Definition
Well-functioning urban environments	<p>has the same meaning as in Policy 1 of the National Policy Statement on Urban Development 2020 (as set out in the box below).</p> <div style="border: 1px solid black; padding: 5px;"> <p>well-functioning urban environments are urban environments that, as a minimum:</p> <ul style="list-style-type: none"> (a) Have or enable a variety of homes that: <ul style="list-style-type: none"> (i) meet the needs, in terms of type, price, and location, of different households; and (ii) enable Māori to express their cultural traditions and norms; and (b) have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and (c) have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and (d) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and (e) support reductions in greenhouse gas emissions; and (f) are resilient to the likely current and future effects of climate change. </div>
Wetland	<p>has the same meaning as in section 2 of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.</p> </div>
Wetland maintenance	<p>Has the same meaning as in clause 3.21 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means activities (such as weed control) which prevent the deterioration, or preserve the existing state, of a wetland’s ecosystem health, indigenous biodiversity, or hydrological functioning.</p> </div>

Term	Definition
Wetland utility structure	<p>has the same meaning as in regulation 3 of the National Environmental Standard for Freshwater 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>(a) means a structure placed in or adjacent to a wetland whose purpose, in relation to the wetland, is recreation, education, conservation, restoration, or monitoring, and</p> <p>(b) for example, includes the following structures that are placed in or adjacent to a wetland for a purpose described in paragraph (a):</p> <ul style="list-style-type: none"> (i) jetties (ii) boardwalks and bridges connecting them, (iii) walking tracks and bridges connecting them, (iv) signs, (v) bird-watching hides, (vi) monitoring devices, (vii) maimai. </div>
Wilding conifer	<p>has the same meaning as in regulation 3 of the National Environmental Standard for Commercial Forestry 2017 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means a self-established conifer species tree resulting from seed spread from commercial forestry, shelter belts, amenity planting, or an already established <i>wilding</i> conifer species tree population.</p> </div>

Abbreviations

Abbreviation	Full Terms
FMU	Freshwater Management Unit
HSNO	Hazardous Substances and New Organisms Act 1996
NESF	National Environmental Standards for Freshwater 2020
NESCF	National Environmental Standards for Commercial Forestry 2017
NPSFM	National Policy Statement for Freshwater Management 2020
NPSUD	National Policy Statement on Urban Development 2020
NTCSA	Ngāi Tahu Claims Settlement Act 1998
NZCPS	New Zealand Coastal Policy Statement 2010
NZTM	New Zealand Transverse Mercator
ORC	Otago Regional Council
PORPS 2021	Proposed Otago Regional Policy Statement 2021
RMA	Resource Management Act 1991
WCO	Water Conservation Order

National direction instruments

National policy statements and New Zealand Coastal Policy Statement

National Policy Statements

National policy statements (NPSs) and the New Zealand Coastal Policy Statement (NZCPS) form part of the RMA policy framework and are prepared by central government. NPSs and the NZCPS contain objectives, policies and methods that must be given effect to by policy statements and plans. NPSs and the NZCPS must also be given regard to by consent authorities when making decisions on resource consent applications, alongside other considerations.

The following table provides an overview of whether any relevant review/s of the Otago Land and Water Regional Plan has been undertaken in relation to NPSs and the NZCPS.

National Policy Statement on Electricity Transmission 2008	The plan has been reviewed in October 2024
New Zealand Coastal Policy Statement 2010	The plan has been reviewed in October 2024
National Policy Statement for Renewable Electricity Generation 2011	The plan has been reviewed in October 2024
National Policy Statement for Freshwater Management 2020	The plan has been reviewed in October 2024
National Policy Statement on Urban Development 2020	The plan has been reviewed in October 2024
National Policy Statement for Highly Productive Land 2022	The plan has been reviewed in October 2024
National Policy Statement for Greenhouse Gases from Industrial Process Heat 2023	This national policy statement does not apply to the plan.
National Policy Statement for Indigenous Biodiversity 2023	The plan has been reviewed in October 2024

National environmental standards

National Environmental Standards

National environmental standards (NESs) are prepared by central government and can prescribe technical standards, methods (including rules) and/or other requirements for environmental matters throughout the whole country or specific areas. If an activity does not comply with an NES, it is likely to require a resource consent. NESs must be observed and enforced by local authorities.

The following relevant NESs are currently in force:

- [Resource Management \(National Environmental Standards for Air Quality\) Regulations 2004 \(amended 2011\)](#)
- [Resource Management \(National Environmental Standards for Sources of Human Drinking Water\) Regulations 2007](#)
- [Resource Management \(National Environmental Standards for Electricity Transmission Activities\) Regulations 2009](#)
- [Resource Management \(National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health\) Regulations 2011](#)
- [Resource Management \(National Environmental Standards for Telecommunications Facilities\) Regulations 2016](#)
- [Resource Management \(National Environmental Standard for Commercial Forestry\) Regulations 2017](#)
- [Resource Management \(National Environmental Standards for Freshwater\) Regulations 2020](#)
- [Resource Management \(National Environmental Standards for Marine Aquaculture\) Regulations 2020](#)
- [Resource Management \(National Environmental Standards for Storing Tyres Outdoors\) Regulations 2021](#)
- [Resource Management \(National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat\) Regulations 2023](#)

Regulations

Regulations

The regulations included in this chapter come under the RMA (excluding the national environmental standards listed above). These regulations are:

- [Resource Management \(Transitional, Fees, Rents, and Royalties\) Regulations 1991](#)
- [Resource Management \(Exemption\) Regulations 1996](#)
- [Resource Management \(Marine Pollution\) Regulations 1998](#)
- [Resource Management \(Infringement Offences\) Regulations 1999](#)
- [Resource Management \(Forms, Fees, and Procedure\) Regulations 2003](#)
- [Resource Management \(Discount on Administrative Charges\) Regulations 2010](#)
- [Resource Management \(Measurement and Reporting of Water Takes\) Regulations 2010](#)
- [Resource Management \(Network Utility Operations\) Regulations 2016](#)
- [Resource Management \(Exemption\) Regulations 2017](#)
- [Resource Management \(Stock Exclusion\) Regulations 2020](#)

Water conservation orders

Water Conservation Orders

Regional policy statements, *regional plans* and *district plans* cannot be inconsistent with the provisions of a water conservation order. A water conservation order can prohibit or restrict a regional council issuing new *water* and *discharge* permits, although it cannot affect existing permits.

The following table provides an overview of whether any relevant review/s of the Otago Land and Water Regional Plan have been undertaken in relation to relevant water conservation orders.

[Water Conservation \(Kawarau\) Order 1997](#) The plan has been reviewed in October 2024

[Water Conservation \(Mataura River\) Order 1997](#) The plan has been reviewed in October 2024.

Other legislation

Other legislation

Other legislation can affect the way local authorities carry out their functions under the RMA. The following table provides an overview of whether any relevant review/s of the Otago Land and Water Regional Plan have been undertaken in relation to any other relevant legislation.

[Lake Wānaka Preservation Act 1973](#) The plan has been reviewed in October 2024.

[Resource Management \(Waitaki Catchment\) Amendment Act 2004](#) The plan has been reviewed in October 2024.

MW – Mana whenua

Te Tiriti o Waitangi (the Treaty of Waitangi) establishes a partnership between Kāi Tahu and the Crown. 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 and that the principles of Te Tiriti o Waitangi (the Treaty of Waitangi) are taken into account. In the spirit of this partnership and the Tiriti/Treaty principles the Land and Water Regional Plan seeks to facilitate Kāi Tahu engagement in resource management processes and decision-making in Otago.

This chapter sets out general considerations for the incorporation of Kāi Tahu values and interests into resource management planning, consenting, and implementation processes. These are integrated throughout this document, and this chapter serves to tie the strands together. It reflects the holistic resource management philosophy embraced by Kāi Tahu.

Recognition of hapū and iwi

Kāi Tahu

Kāi Tahu whānui are *takata whenua* of the Otago region. Waitaha were the first people of Te Waipounamu, the South Island. Led by Rākaihautū, they explored and settled Te Waipounamu, and their exploits are reflected in enduring place names and histories across the motu. Waitaha were followed by the arrival of Kāti Māmoe and finally Kāi Tahu. Through warfare, intermarriage, and political alliances a common allegiance to Kāi Tahu was forged. Kāi Tahu means the ‘people of Tahu’, linking them by name to their common ancestor Tahu Pōtiki.

The Kāi Tahu tribal area extends from the sub-Antarctic islands in the south to Te Parinui o Whiti (White Cliffs, Blenheim) in the north and to Kahurangi Point on Te Tai o Poutini (the West Coast).

Customary authority in respect to particular takiwā (areas) is held by whānau and hapū (extended family groups) who are referred to as *mana whenua* for that area. *Mana whenua* status is determined by rights associated with whakapapa (genealogical ties), resource use and ahikāroa (the long burning fires of occupation).

Kāi Tahu tribal structure

Te Rūnanga o Ngāi Tahu is the iwi authority over the Kāi Tahu takiwā as set out in Te Rūnanga o Ngāi Tahu Act 1996. Te Rūnanga o Ngāi Tahu is the collective of 18 papātipu rūnaka, which are representative bodies mandated to make decisions within their takiwā in matters such as resource and environmental management.

The relationship between papatipu rūnaka and Te Rūnanga o Ngāi Tahu is not hierarchical and Te Runanga o Ngāi Tahu must consult with papatipu rūnaka when forming a position on any matter. In practice, Te Rūnanga o Ngāi Tahu defers matters to be determined by the papatipu rūnaka within whose takiwā the matter relates, unless they are matters of tribal significance or involving tribal property. In those instances, papatipu rūnaka and Te Rūnanga o Ngāi Tahu will form a joint position. Parties wishing to engage with *mana whenua* should always start with and take guidance from the relevant papatipu rūnaka.

The takiwā of papatipu rūnaka are defined by whakapapa and traditional associations with an area and are not aligned to regional boundaries. Seven papatipu rūnaka have interests in the Otago region.

Four rūnaka – Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtakou and Hokonui Rūnanga – are referred to collectively as Kāi Tahu ki Otago.

Te Rūnanga o Moeraki

The takiwā of Te Rūnanga o Moeraki is centred on Moeraki and extends from the Waitaki River to the Waihemo/Shag River and inland to the Main Divide.

Kāti Huirapa Rūnaka ki Puketeraki

The takiwā of Kāti Huirapa ki Puketeraki centres on Karitāne and extends from the Waihemo/Shag River to Purehurehu Heyward Point, and includes an interest in Ōtepoti and the greater harbour of Ōtakou. The takiwā extends inland to the Main Divide sharing an interest in the *lakes* and mountains to Whakatipu-Waitai with kā Rūnaka to the south.

Te Rūnanga o Ōtakou

The takiwā of Te Rūnanga o Ōtakou centres on Muaupoko Otago Peninsula, and extends from Purehurehu (Heyward Point), to Te Mata-au Clutha River, and inland, sharing an interest in the *lakes* and mountains to the western coast with kā Rūnaka to the north and south.

Hokonui Rūnanga

The takiwā of Hokonui Rūnanga centres on the Hokonui region and includes a shared interest in the *lakes* and mountains between Whakatipu-Waitai and Tawhitarere with other Murihiku Rūnanga and those located from Waihemo southwards.

Three rūnaka – Te Rūnanga o Awarua, Waihopai Rūnaka and Te Rūnanga o Ōraka-Aparima – are referred to as Ngāi Tahu ki Murihiku. They are based in Southland but also share interests with Kāi Tahu ki Otago in South Otago, the Mata-au Clutha River, and the inland *lakes* and mountains.

Te Rūnanga o Awarua

The takiwā of Te Rūnanga o Awarua centres on Awarua and extends to the coasts and estuaries adjoining Waihopai sharing an interest in the *lakes* and mountains between Whakatipu-Waitai and Tawhitarere with other Murihiku Rūnanga and those located from Waihemo southwards.

Waihopai Rūnaka

The takiwā of Waihopai Rūnaka centres on Waihopai and extends northwards to Te Mata-au Clutha River, sharing an interest in the *lakes* and mountains to the western coast with other Murihiku Rūnaka and those located from Waihemo southwards.

Te Rūnanga o Ōraka Aparima

The takiwā of Te Rūnanga o Ōraka Aparima centres on Ōraka and extends from Waimatuku to Tawhitarere sharing an interest in the *lakes* and mountains from Whakatipu-Waitai to Tawhitarere with other Murihiku Rūnaka and those located from Waihemo southwards.

Mana whenua consultancy services

The papatipu rūnaka consultancy services Aukaha and Te Ao Marama Inc. facilitate Kāi Tahu engagement in resource management processes in Otago. They provide a first point of contact for the public seeking to engage with papatipu rūnaka.

Aukaha acts for Kāi Tahu ki Otago and Te Ao Marama Inc. acts for Ngāi Tahu ki Murihiku. The takiwā of Hokonui Runanga straddles the regions of Otago and Southland so Hokonui Rūnanga are shareholders in both Aukaha and Te Ao Marama Inc.

Environmental management perspectives and values of Kāi Tahu

Toitū te marae o Tāne, toitū te marae o Tangaroa, toitū te iwi – When land and water are sustained the people will prosper.

Mana

Kāi Tahu do not see their existence as separate from te taiao (the natural world), but as an integral part of it. From creation ultimately all things in the universe are interconnected and they share a single source of spiritual authority. This spiritual force is the origin of mana and tapu. **Mana** is the enduring, indestructible power of the atua (deities). All the elements of te taiao – the mountains, the *water*, the birds, *fish* and plants, as well as people - are seen to be vessels of this original power. The mana of the people and that of the natural *environment* in their takiwā are intrinsically linked. In te ao Māori, virtually every activity has a link to maintenance and enhancement of mana. Thus, the failure to secure the sustainability of a resource or *habitat* is linked to a loss of mana.

Tapu is the residual impact of mana. Where there is mana, the influence creates an effect that is tapu. The tapu status of people, places, and resources establishes expectations for the behaviour of whānau, requiring the balancing of rights and responsibilities. Tapu operates much as any legal system, with prohibitions and restrictions acting as means of protecting and respecting the tapu of the *environment* and the people themselves.

Mauri

All things, including living beings, the natural world, and inanimate objects, have the qualities of wairua (spiritual dimension) and mauri (life force) and have a genealogical relationship with each other. **Mauri** is the life-affirming quality evident in all things. It is a protector of the health of a person or place. The nurturing of all taoka and protection of their mauri is a prime concern and a significant obligation for Kāi Tahu as *mana whenua*, and as an expression of rakatirataka. Protection of mauri is thus a fundamental resource management principle for *mana whenua*.

Water bodies with a healthy or strong mauri are characterised by good quality *waters* that flow with energy and life, sustain healthy ecosystems, and support *mahika kai* and other cultural activities. Strong mauri is reflected in the ability of the *water body* to exhibit its natural behaviour and by the absence of unnatural *contaminants*.

If the mauri is *degraded* it has an impact not only on the mana of the wai but also on *mana whenua*. The condition of *water* is seen as a reflection of the condition of the people - when the wai is healthy, the people are strong and healthy and so too is their mana.

Each *water body* has a unique mauri related to its whakapapa and characteristics, and each *water body* has different needs. However, the mauri of different parts of an interconnected catchment cannot be separated. Kāi Tahu believe that the contributions of all parts of the system, including tributaries, riparian areas, springs, *wetlands*, *lakes*, estuaries and *groundwater*, and the natural characteristics and *indigenous biodiversity* of the catchment, must be considered as part of an integrated whole.

Whakapapa

Whakapapa (genealogy) is the foundation upon which all things are built, the anchor which holds all things in place, and the means by which all things link back to the beginning of time. Whakapapa binds Kāi Tahu to the mountains, forests and *waters* and the life supported by them, and this is reflected in attitudes towards the natural world and resource management.

Water is a central element in Kāi Tahu cultural traditions. It was present very early in the whakapapa of the world, as described by Tiramorehu¹¹ in this creation account:

*Nā te Pō, ko te Ao
Tana ko te Ao-marama,`
Tana ko te Aoturoa,
Tana ko Kore-te-whiwhia,
Tana ko Kore-te-rawea,
Tana ko Kore-te-tamaua,
Tana Ko Kore-te-matua,
Tana ko Māku.
Ka noho a Māku i a Mahora-nui-a-tea
Ka puta ko Raki.*

From the Night comes the Day, the Daylight, the Longstanding Day, the Intangible Voids through to the Parentless Realm who create Moisture. Moisture couples with the Inner Space and gave birth to Raki – the sky.

In the beginning there was total darkness, followed by the emergence of light and a great void of nothingness. In time Maku (moisture) mated with Mahoronuiatea (a cloud that grew from the dawn) which resulted in great expanses of *water*. Raki was born of that union. Raki coupled with a number of wives, including Papatūānuku. Papatūānuku and Raki had many children who conspired to force their parents' coupled bodies apart to let the light in. Today, all *water* is seen to have originated from the separation of Raki and Papatūānuku and their continuing tears for one another. Rain is the tears of Raki for his beloved Papatūānuku, and mist is generally regarded as the tears of Papatūānuku for Raki.

To Kāi Tahu, the whakapapa and spiritual source of *water*, *land* and sea are connected, and *water* bodies are the central unifying feature that connects landscapes together. The whakapapa of *mana whenua* and *water* are also integrally connected. There is a close kinship relationship, and *mana whenua* and the wai cannot be separated. The relationship is based in respect for *water's* life-giving powers and sanctity and is central to the identity of Kāi Tahu.

Taoka

All natural resources – air, land, *water*, and *indigenous biological diversity* – are **taoka**. Taoka are treasured resources that are highly valued by Kāi Tahu, derived from the atua (gods), linked to the people through whakapapa, and left by tūpuna (ancestors) to provide for and sustain life. The resources in any given area are a source of prestige for *mana whenua* of that area and are a statement of their identity. Traditionally, the abundance or lack of resources directly determines the welfare of every hapū, and so affects their mana.

¹¹ Matiaha Tiramorehu was an esteemed 19th century Kāi Tahu rakatira and tohuka.

Rakatirataka and kaitiakitaka

Rakatirataka refers to the exercise of mana or authority to give effect to Kāi Tahu culture and traditions across all spheres in their takiwā, including the management of te taiao (the natural environment). Tino rakatirataka is having the unlimited right to make decisions impacting the taoka and resources within a takiwā. This means determining what, from Kāi Tahu perspectives, represents satisfactory environmental conditions and appropriate use. The exercise of these powers in te taiao is through the action of *kaitiakitaka*.

Kaitiakitaka is fundamental to the relationship between Kāi Tahu and the environment. The objectives of *kaitiakitaka* are to protect the mauri and life supporting capacity of the environment and to pass the environment on to future generations in an enhanced state. For Kāi Tahu, *kaitiakitaka* is not passive custodianship, nor is it simply the exercise of customary property rights. It requires an active exercise of responsibility to ensure long-term sustainability of resources as taoka, and for the benefit to future generations. Understanding of what is needed to manage and sustain resources and the environment is inherited from previous generations and has evolved over time.

Whakawhanaukataka

Whakawhanaukataka, the process of maintaining relationships, embraces whakapapa through the relationship between people, and between people and the environment. The nature of these relationships defines people's rights and responsibilities in relation to the use and management of resources. Whakawhanaukataka encompasses the understanding that all environmental elements are interconnected and must be managed as a whole. This holistic resource management approach is often referred to as *ki uta ki tai*.

Utu is the principle of reciprocity or equivalence. It can be thought of as restoring balance in order to maintain whanaukataka. There are many pathways and responses by which utu is put into practice including, in relation to environmental issues, an obligation to seek mutual benefits to achieve improved environmental outcomes.

Mātauraka

Mātauraka is the customary knowledge passed down from one generation to the next. It involves observing, experiencing, participating, studying, and understanding the world from an indigenous cultural perspective. Mātauraka is not static but evolves over time and will continue to be developed for the future. Incorporation of mātauraka in resource management decision-making is important to ensure that cultural interests are appropriately recognised and provided for.

Mātauraka underpins **tikaka and kawa**, the system of beliefs, values, practices, protocols, and procedures that guide appropriate behaviour, including in the relationship between people and the environment. Tikaka and kawa are based on a general understanding that people belong to the land and have a responsibility to care for and manage the land. Tikaka and kawa are based on traditional practices but are dynamic and continue to evolve in response to different situations.

Wāhi tūpuna

Wāhi tūpuna are interconnected ancestral places, landscapes and taoka that link to Kāi Tahu histories and traditions and also hold contemporary importance for *mana whenua*. They are characterised not only by natural and physical aspects, but also by the place names and associated traditions and events that bind *mana whenua* to the landscape. They underpin *mana whenua* status over particular areas.

Freshwater - lakes, rivers, *wetlands*, springs and groundwater - is an integral and enduring part of wāhi tūpuna. The rivers, lakes, and *wetlands*, together with the coast, formed important components of the network of ara tawhito (transport routes) that were used by Kāi Tahu to gather resources, establish and maintain ahi kā (rights of occupation and use), and maintain hapū and iwi connections. Kāika and *nohoaka* (permanent and seasonal settlements) were often located near rivers and lakes, near sources of food and other resources.

The relationship of whānau and hapū with *wāhi tūpuna* is sustained by ongoing access and interaction with these landscapes, and the ability to recognise the landscapes of the ancestors is important to keep the relationship alive. If the shape and behaviour of a river or a *wetland* is changed beyond recognition, then the mātauraka is more likely to be lost.

Taoka species and habitats

Kāi Tahu regard all *indigenous species*, and the *habitats* through which they survive and thrive, as taoka. In many cases taoka *species* are also *mahika kai*, treasured for their use as a resource. The NTCSA recognises the relationship Kāi Tahu has with some of these *species* through the Statutory Acknowledgement for Taonga Species. However, Kāi Tahu do not consider this list to be comprehensive as important taoka *species* such as tuna (eel) are not included.

As well as tuna, taoka *species* that rely on *freshwater* bodies include kanakana (lamprey), kōura (*freshwater* crayfish), kākahi (freshwater mussels), migratory and non-migratory galaxiids, a range of other *fish* and many *water* birds. Estuarine *habitats* support flatfish, shellfish and waterfowl and provide a nursery for whitebait and other *indigenous fish* as well as foraging and breeding places for birds.

Protecting and maintaining the mauri of taoka *species* and *habitats* is a critical function of *kaitiakitaka*, to ensure that the *species* endure into the next generation. For Kāi Tahu, this requires a whole-of-system approach to their sustenance that recognises the importance of the interconnection between land, freshwater and the coastal environment. Failure to recognise or appropriately provide for this connectivity contributes to decreases in the abundance of *indigenous species* and their *habitats*. This inhibits the ability of Kāi Tahu whānui to pass on cultural practices to future generations.

Mahika kai

Mahika kai is one of the cornerstones of Kāi Tahu cultural identity. *Mahika kai* is a term that literally means "food workings" and refers to the customary gathering of food and natural materials and the places where those resources are gathered or produced. However, *mahika kai* is not limited to customary *species* and sites. The concept embodies all aspects of natural resource procurement to sustain people, including resources and sites, but also the associated tikaka, kawa, mātauraka, resource management systems and social networks. Like all social systems as the *environment* and access to natural resources has changed, what constitutes *mahika kai* also evolves. Today *mahika kai* is both traditional and contemporary; customary and commercial; but what is fundamental to *mahika kai* is the hauora or health of the whenua, wai and ecosystems they support and are supported by.

Mahika kai practices underpin the Kāi Tahu relationship with Otago's rivers, lakes, *wetlands*, and estuaries. The waterways of the Otago region once supported rich and healthy *mahika kai* resources. A wide range of food was harvested, including freshwater shellfish, kōura (freshwater crayfish), tuna (eels), kanakana (lamprey), kōkopu, and waterfowl, and harakeke and raupō were gathered for

weaving and the construction of mokihi. River mouths, *wetlands*, hāpua and estuaries along the Otago coastal area supported pātiki (flatfish), waterfowl, and tūaki (cockles), and a variety of plant resources.

The practice of *mahika kai* is important to provide kai for whānau sustenance and as an expression of manaakitaka both at the marae and at home. Maintaining *mahika kai* sites, gathering resources, and continuing to practice the tikaka that governs each resource is also an important means of maintaining and honouring whakapapa connections to land, taoka and tūpuna, and passing on cultural values and mātauraka to the next generation. *Mahika kai*, in a modern context, is one of the principal ‘environmental indicators’ in natural systems. If *mahika kai* is not present, or is unsafe to harvest, then that natural system is under stress and requires remedial action.

Management principles

Freshwater management principles that reflect the Kāi Tahu environmental perspective include the following:

1. Respect and enable the natural behaviour of water bodies

To restore the mauri of a *water body*, the starting point in developing a management approach should be to understand and consider the functioning of the *water body* in its natural state. *Rivers* and streams should be able to flow naturally. Natural flow behaviour can be disrupted by *weirs* or *dams*, artificial straightening, deepening or *diversion* of channels, and patterns of abstraction that alter natural flow variability.

2: Recognise interconnectedness across the catchment

The contributions of all parts of the system, including tributaries, riparian areas, springs, *wetlands*, *lakes*, estuaries and *groundwater*, and the natural characteristics and *indigenous biodiversity* of the catchment, must be considered as part of an integrated whole.

3: Water quality throughout the system should reflect natural water quality

Kāi Tahu do not support use of rivers to dilute pollutants. Direct or indirect *discharge of contaminants* to a *water body* as a result of human activity degrades the mauri of the *water body*.

The flow in *rivers* and streams should also be sufficient to maintain *water* quality standards that reflect historic conditions.

4: Enable healthy ecosystems

Healthy ecosystems are important to ensure that *mahika kai* and taoka *species* are able to thrive. This requires a holistic approach that looks at the interconnected needs of a healthy ecosystem, including good *water* quality, the variety of physical characteristics and flow patterns in the *river* and tributaries that are needed to support different life stages of *species*, and sufficient riparian vegetation to provide shelter and *habitat* and to enhance *water* quality. *Habitat* conditions also need to support healthy populations of the macroinvertebrates and diatoms that *mahika kai* and taoka *species* depend on.

5: Recognise Kāi Tahu rakatirataka to enable whānau to breathe life into their relationship with the water bodies

To keep the relationship to the *rivers*, *lakes* and *wetlands* vital and to ensure that it is maintained for the next generation, the ability to exercise rakatirataka and *kaitiakitaka* by being involved in decisions

about management of the *water bodies* is crucial. It is also important that Kāi Tahu whānau are able to use the *water bodies*, including tributaries and *wetlands*, for *mahika kai* and other customary purposes.

For *mahika kai* to be sustained, populations of *species* must be present across all life stages and must be plentiful enough for long term sustainable harvest. Safe access to *mahika kai* sites must be available, kai must be safe to gather, safe to harvest and safe to eat, and management and *harvesting* practices must be able to be carried out in accordance with tikaka.

6: Manaakitaka and utu (reciprocity)

In the modern context, manaakitaka encompasses the act of being hospitable, to share in a resource, to provide *waters* that are safe to drink or to swim in, or to be generous in showing mutual respect. Kāi Tahu recognise that *water* is important to *land* and *water* users as well as to other sectors of the community for their economic, social and cultural wellbeing. However, in accordance with the principle of reciprocity, any use of the *river* must respect the *river* and must enhance the mana of the *river* as well as the mana of the people using it.

Ngāi Tahu Claims Settlement Act 1998 (NTCSA)

The NTCSA was enacted to settle historical Ngāi Tahu claims against the Crown. The NTCSA provides redress for breaches of Te Tiriti o Waitangi and to signal a new age of co-operation of the Crown and its agencies with Kāi Tahu. The Crown apology recorded in section 4 of the NTCSA explicitly recognises the rakatirataka of Kāi Tahu within its takiwā, and Part 12 of the NTCSA includes specific provisions that provide for exercise of rakatirataka and *kaitiakitaka* by *mana whenua* in respect to *mahika kai*, taoka *species* and other resource management matters. These include rights in relation to the management of specified significant areas (statutory acknowledgement areas, tōpuni and *nohoaka*) and customary fisheries.

Statutory acknowledgement areas

Statutory Acknowledgements recognise the special relationship Kāi Tahu has with specific areas. They are statements by Te Rūnanga o Ngāi Tahu of the particular cultural, spiritual, historic and traditional association of Kāi Tahu with these areas. The Council must have regard to Statutory Acknowledgements when considering resource consent applications and advise Kāi Tahu of any application that may affect Statutory Acknowledgement areas.

The statutory acknowledgements are wāhi tūpuna, but *wāhi tūpuna* are not confined to these areas. All *water bodies* are important to Kāi Tahu.

The following *water bodies* in Otago are recognised by statutory acknowledgements, and their values are described in Schedules to the NTCSA:

- Ka Moana Haehae (Lake Roxburgh) - Schedule 22
- Kakaunui River - Schedule 23
- Kuramea (Lake Catlins) - Schedule 28
- Lake Hāwea - Schedule 30
- Lake Wānaka - Schedule 36
- Mata-Au (Clutha River) - Schedule 40
- Poumāhaka (Pomahaka River) - Schedule 52

- Te Tauraka Poti (Merton Tidal Arm) - Schedule 60
- Te Wairere (Lake Dunstan) - Schedule 61
- Waihola/Waipōuri Wetland - Schedule 70
- Waitaki River – Schedule 72
- Whakatipu Waimāori (Lake Wakatipu) - Schedule 75.

The NTCSA also recognises as statutory acknowledgement areas the following mauka (mountains):

- Pikirakatahi (Mount Earnslaw) - Schedule 51
- Tititea (Mount Aspiring) - Schedule 62.

These mauka are the source of *waters* that feed Whakatipu Waimāori (Lake Wakatipu) and Te Ana-au (Lake Te Anau), and activities that affect the mauka may also affect the mauri of the *water bodies* they feed into.¹²

The *coastal marine area* of Otago (Te Tai O Arai Te Uru) is also recognised by a statutory acknowledgement (NTCSA Schedule 103). The coastal *environment* is integral to the way of life for Kāi Tahu in Otago and continues to support significant *mahika kai* resources. There is a close interconnection between *land* and sea *environments*. *Coastal waters* are a *receiving environment* for *freshwater* and impacts on *freshwater* quality and quantity can also affect these areas.

Tōpuni

The concept of tōpuni derives from the traditional Kāi Tahu custom of persons of raketira status extending their mana and protection over a person or area by placing their cloak over them or it. A number of areas on public conservation land that have significant values to Kāi Tahu because of their cultural, spiritual, historic and traditional associations are recognised in the NTCSA as tōpuni. Although the specific provisions in the NTCSA relate only to management of conservation land, the interests of Kāi Tahu should be recognised and provided for when considering activities in nearby areas that may impact on the values of tōpuni or *waters* flowing from them.

Tōpuni in Otago that have a close relationship to *freshwater* are:

- Maukaatua Scenic Reserve – Schedule 84
- Pikirakatahi (Mount Earnslaw) – Schedule 87
- Te Koroka (Dart/Slipstream) – Schedule 91
- Tititea (Mount Aspiring) – Schedule 92.¹³

Nohoaka

Nohoanga (or *nohoaka*) entitlements provide a right of seasonal occupation and use for Kāi Tahu whānui on specified areas of Crown-owned land near *water bodies* for harvest of natural resources. These rights are intended as partial redress for the loss of *mahika kai* through alienation of land.

The ability of Kāi Tahu whānui to access and use *nohoaka* as intended relies on protection and restoration of *mahika kai* values associated with them. Kāi Tahu interests in these areas should be recognised and provided for when considering activities that could impact on *mahika kai* values in the associated *water bodies*.

¹² A Statutory Acknowledgement is also recognised for Matakāea (Shag Point). This is not listed above because it relates to a land area adjacent to the coast and is not linked to any *freshwater* bodies.

¹³ A tōpuni is also recognised for Matakāea (Shag Point).

Nohoaka entitlements are listed in Schedule 95 of the NTCSA. The table below identifies those located in Otago.

Table 1 – *Nohoaka* sites in Otago

Site No	Waterbody	Site	Legal Description/Allocation Plan	Special conditions
23	Hāwea River	Albert Town Recreation Reserve	1 hectare, approximately, being Part Section 52, Block V, Lower Wanaka Survey District. Part Certificate of Title 13D/754. Subject to survey, as shown on Allocation Plan MN 476 (SO 24683).	
26	Lake Hāwea	Adjoining Hawea Camping Ground	1 hectare, approximately, being Part Section 1, Block II, Lower Hawea Survey District (SO 13367). Part <i>Gazette</i> Notice 328163. Subject to survey, as shown on Allocation Plan MN 448 (SO 24676).	Subject to operating easement. No dogs.
27	Lake Hāwea	Timaru Creek	1 hectare, approximately, being Part Section 3, Block XIV, Mid Hawea Survey District (SO 17340). Part <i>Gazette</i> Notice 385850. Subject to survey, as shown on Allocation Plan MN 456 (SO 24675).	Subject to operating easement. Subject to continued use in emergencies as a rural firefighting base. No dogs in December and January. At other times of the year, campers will be required to obtain and produce on demand a certificate certifying that any dog on the site is free of all diseases.
28	Lake Hāwea	Lake Hāwea – Western Shore	1 hectare, approximately, being Part Recreation Reserve, Mid Hawea Survey District (SO 16522). Part <i>Gazette</i> 1891, page 1049. Subject to survey, as shown on Allocation Plan MN 447 (SO 24674).	

Site No	Waterbody	Site	Legal Description/Allocation Plan	Special conditions
30	Whakatipu Waimāori/Lake Wakatipu	Wye Creek	1 hectare, approximately, being Part Section 9, Block V, Coneburn Survey District (SO 22367). Subject to survey, as shown on Allocation Plan MN 502 (SO 24678).	
31	Lake Wānaka	Dublin Bay	1 hectare, approximately, being Part Section 31, Block V, Lower Wanaka Survey District (SO 17404). Part Certificate of Title 13D/754. Subject to survey, as shown on Allocation Plan MN 449 (SO 24671).	
32	Lake Wānaka	Waterfall Creek	1 hectare, approximately, being Part Section 1, Block XIII, Lower Wanaka Survey District (SO 962). Part <i>Gazette</i> Notice 599665/1. Subject to survey, as shown on Allocation Plan MN 71 (SO 24684).	
33	Lower Clutha	Kaitangata	1 hectare, approximately, being Part Sections 5 to 7, Block II, North Molyneux Survey District (DP 4896). Part <i>Gazette</i> Notice 600374/1. Subject to survey, as shown on Allocation Plan MN 452 (SO 24673).	
34	Lower Clutha	Te Kōwhai/Beaumont Bridge	1 hectare, approximately, being Crown Land adjoining Section 11, Block IV, Beaumont Survey District, (SO 150). Subject to survey, as shown on Allocation Plan MN 451 (SO 24669).	

Site No	Waterbody	Site	Legal Description/Allocation Plan	Special conditions
35	Kimiākau/Shotover River	Tuckers Beach	1 hectare, approximately, being Part Section 92, Block II, Shotover Survey District (SO 18180). Part <i>Gazette</i> Notice 445904/1. Subject to rights to convey <i>water</i> and electricity embodied in the Register as Certificate of Title 15A/504 and Certificate of Title 15B/529. Subject to survey, as shown on Allocation Plan MN 463 (SO 24668).	The entitlement will run from 1 September to 16 May.
36	Kimiākau/Shotover River	Māori Point	1 hectare, approximately, being Part Run 27, Block XI, Skippers Creek Survey District. Subject to survey, as shown on Allocation Plan MN 464 (SO 24682).	
37	Taiari River	Loganburn	1 hectare, approximately, being Part Section 2, Block IV, Serpentine Survey District (SO 1486). Subject to survey, as shown on Allocation Plan MN 454 (SO 24667).	
38	Taiari River	Taiari River off Murray Road	1.4 hectares, approximately, being Section 17, Block XII, Strath Taiari Survey District (SO 19864). Subject to survey, as shown on Allocation Plan MN 477 (SO 24705).	
39	Taiari River	Paerau Reservoir	1 hectare, approximately, being Part Section 8, Block 1, Loganburn Survey District (SO 970). Subject to survey, as shown on Allocation Plan MN 453 (SO 24704).	
40	Upper Clutha River	Clutha River Island	1 hectare, approximately, being Part Clutha Riverbed, Block III, Tarras Survey District. Subject to survey, as shown on Allocation Plan MN 461 (SO 24681).	

Site No	Waterbody	Site	Legal Description/Allocation Plan	Special conditions
41	Upper Clutha River	McNulty Point	1 hectare, approximately, being Part Section 1, SO 23940. Part <i>Gazette</i> Notices 924201 and 926769. Subject to survey, as shown on Allocation Plan MN 462 (SO 24685).	
42	Waianakarua River	Glencoe Reserve	1 hectare, approximately, being Part Lot 3 DP 4745. Part Certificate of Title 279/125. Subject to survey, as shown on Allocation Plan MN 167 (SO 24706).	
43	Waitaki River	Ferry Road	6000 square metres, approximately, being Part Waitaki Riverbed, Block VII, Papakaio Survey District. Subject to survey, as shown on Allocation Plan MN 527 (SO 24800).	
44	Waitaki River	Waitaki River Mouth	1 hectare, approximately, being Part Section 53, Block VIII, Papakaio Survey District (SO 1400). Subject to survey, as shown on Allocation Plan MN 450 (SO 24670).	

Customary fisheries

Sections 297 to 311 of the NTCSA include provisions recognising Kāi Tahu rights and interests in customary fisheries, and provide for involvement in management of these resources through the Conservation Act 1987 and the Fisheries Acts 1983 and 1996. The interconnection between *freshwater* and *coastal waters* means that activities that affect the health of *fresh water bodies* will also affect the health of the receiving *coastal waters*. The interests of Kāi Tahu should be recognised and provided for when considering activities that may impact on the habitat of customary fisheries, including fisheries in estuarine and coastal *receiving environments*.

Mātaitai and *taiāpure* are mechanisms under the Fisheries Act that provide for management of customary fisheries areas and are applicable to both coastal and *freshwater* fisheries *environments*.

The East Otago Taiāpure includes the estuarine and inshore marine *waters* between Cornish Head and Potato Point.

There are also four *mātaimai* in Otago:

- Moeraki Mātaimai Reserve includes areas of *coastal waters* at Moeraki and Katiki (<https://www.mpi.govt.nz/dmsdocument/15220-Moeraki-North-Otago-Mataimai-Reserve>)
- Waikōuaiti Mātaimai Reserve includes *freshwater* and *estuarine waters* of the Waikōuaiti River (<https://www.mpi.govt.nz/dmsdocument/12954-Waikouaiti-South-Canterbury-Mataimai-Reserve->)
- Ōtākou Mātaimai Reserve includes most of the Otago Harbour north of a line from Harwood to Pulling Point (<https://www.mpi.govt.nz/dmsdocument/14077-Otakou-mataimai-reserve>)
- Puna-wai-Tōriki (Hays Gap) Mātaimai Reserve includes an area of *coastal waters* north of Nugget Point (<https://www.mpi.govt.nz/dmsdocument/15223-Puna-wai-Toriki-Hays-Gap-South-Otago-Mataimai-Reserve>).

Hapu and iwi planning documents

There are four iwi planning documents lodged with ORC:

- Te Rūnanga o Ngāi Tahu Freshwater Policy 1999
- Kāi Tahu ki Otago Natural Resource Management Plan 2005
- Te Tangi a Tauira: Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008
- Waitaki Iwi Management Plan 2019

The iwi planning documents provide cultural context and guidance as to the values, concerns and issues of Kāi Tahu ki Otago and Ngāi Tahu ki Murihiku in respect to management of *freshwater* and other natural resources.

They are to be used in the development of planning policy and to assist decision makers to make informed decisions, recognising the local knowledge of the *environment* held by papatipu rūnaka and the significance of the natural resource values to Kāi Tahu. Objectives and policies of these planning documents have been taken into account in the development of provisions across the whole of this Land and Water Regional Plan.

The iwi planning documents are also used to guide engagement with rūnaka and set out the expectations for consultation. They are not a substitute for direct communication with papatipu rūnaka.

Mana whenua – local authority relationships

Kāi Tahu relationships with Otago Regional Council

ORC is committed to working in partnership with Kāi Tahu and making mātauraka Kāi Tahu an integral part of decision-making. The process of engagement is based on continuing to build trusted and enduring relationships, which requires an ongoing commitment. The Council has committed to a range of channels and relationships to enable *mana whenua* participation, support the development of capability and build relationships.

Relationship agreements between Kāi Tahu papatipu rūnaka and ORC include:

- Memorandum of Understanding and Protocol between ORC, Te Rūnanga Ngāi Tahu and Kāi Tahu ki Otago for Effective Consultation and Liaison (2003)

- He Huarahi mō Ngā Uri Whakatupu¹⁴ – Charter of Understanding between Te Ao Marama Incorporated, representing Ngāi Tahu ki Murihiku, and councils including ORC (2016).

A Mana to Mana forum is also in place to enable councillors and rūnaka leaders to regularly meet to identify and agree key areas for engagement and partnership. This forum provides a means to build a strengthened relationship between the Council and Kāi Tahu.

ORC, Kāi Tahu and territorial authorities also participate in Otago and Southland Te Roopū Taiao hui.

Mana whenua involvement and participation in resource management

ORC is committed to a partnership approach to establishing and maintaining effective resource management relationships with Kāi Tahu.

ORC will:

- engage with Kāi Tahu at an early stage in resource management processes and implementation;
- work with Kāi Tahu to ensure opportunities are available for Kāi Tahu to be actively involved at all levels, including in decision-making;
- work with Kāi Tahu to determine how mātauraka should be incorporated in monitoring; and
- facilitate efficient and effective processes for applicants to consult Kāi Tahu on resource consent applications and private plan change requests.

Transfer or delegation of functions, powers or duties in accordance with sections 33 (transfer) and 34A (delegation) of the RMA will be considered as part of this approach.

Kāi Tahu have been involved in development of this Land and Water Regional Plan through:

- rūnaka representation on the Strategy and Planning/Environmental Science and Policy Committee and the Land and Water Regional Plan Governance Group;
- facilitation by Aukaha and Te Ao Marama of engagement with *mana whenua* on their concerns and aspirations for *freshwater*;
- input of *mana whenua* and Aukaha to a report on the Kāi Tahu economy to contribute to the economic analysis of policy direction; and
- participation of Aukaha and Te Ao Marama staff in policy development, public engagement and plan drafting.

Other iwi, hapū and mātāwaka

Otago is also home to Māori from other iwi, hapū, and mātāwaka. The Araiteuru marae in Dunedin and Te Whare Koa in Ōamaru are important pan-tribal cultural centres for mātāwaka and sit within the manaakitaka of takata whenua.

¹⁴ Available from <https://www.es.govt.nz/repository/libraries/id:26gi9ayo517q9stt81sd/hierarchy/about-us/plans-and-strategies/regional-plans/iwi-management-plan/documents/The%20Charter%20of%20Understanding.pdf> (accessed 10 October 2024)

PART 2 – MANAGEMENT OF RESOURCES

Overview

The strategic direction for this plan is set out in:

- the provisions in the IM – Integrated management chapter, and
- the *environmental outcomes* included as objectives in:
 - FMU1 – Clutha Mata-au FMU,
 - FMU2 – Taiari FMU,
 - FMU3 – North Otago,
 - FMU4 – Dunedin & Coast FMU, and
 - FMU5 – Catlins FMU.

The provisions above apply in addition to all of the provisions included in other parts of this plan. The provisions above are relevant for the development of other chapters in the Plan, and the subsequent implementation and interpretation of those chapters. This relationship is shown below in Figure 2.

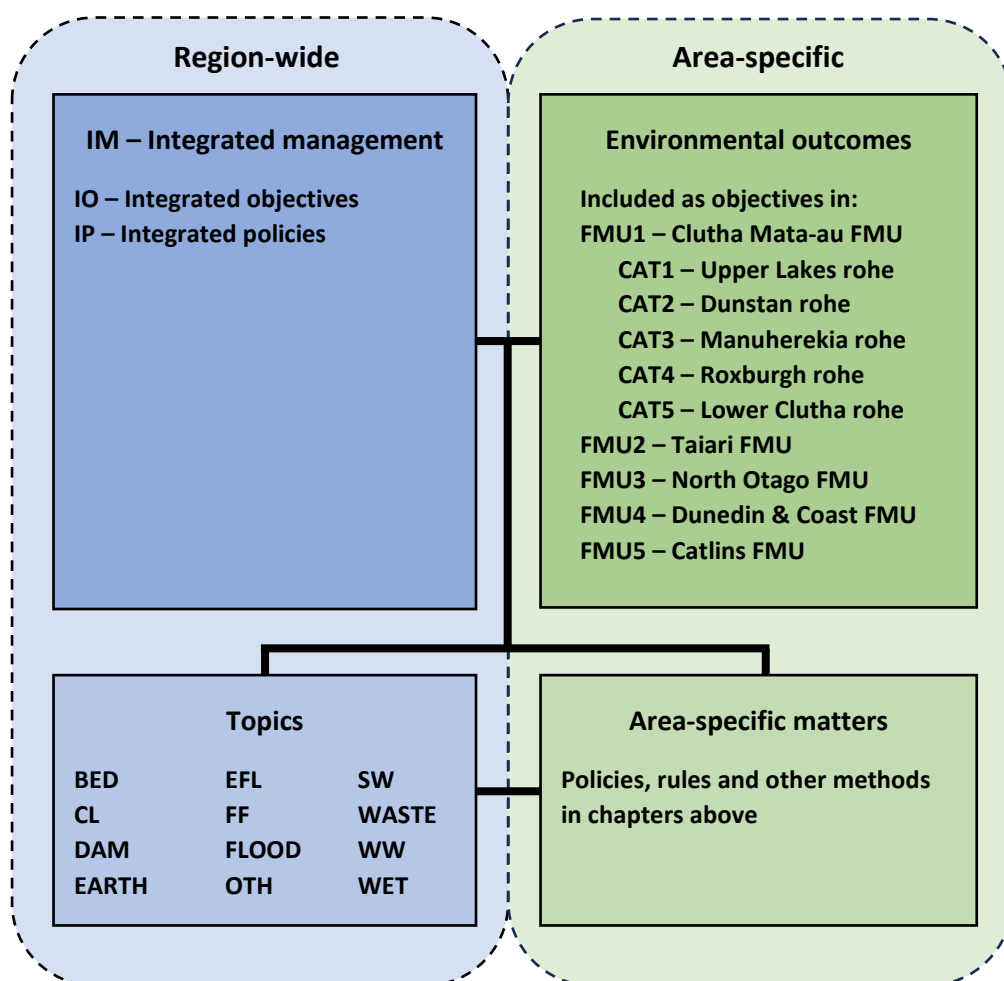


Figure 2 – Relationship between region-wide and area-specific parts of the plan

The topic chapters contain objectives, policies, and rules that apply to the whole region. These rules determine when an activity is permitted and when resource consent is required. Activities may be subject to the provisions of one or more of the chapters in the topics section, and they must comply with all relevant rules in the Plan unless the rule itself states otherwise.

The area-specific matters chapters contain provisions that apply to different *FMUs* (FMU1 to FMU5). The provisions in the topic chapters continue to apply unless expressly provided for otherwise in the *FMU* chapters. The FMU1 – Clutha Mata-au freshwater management unit chapter includes five rohe (CAT1 to CAT5). Unless expressly stated otherwise, the provisions in FMU1 prevail over those provisions in CAT1 to CAT5.

IM – Integrated management

IO – Integrated objectives

IO-01 – Te Mana o te Wai

The management of *land* and *water* gives effect to *Te Mana o te Wai* which is a fundamental concept underpinning this plan.

IO-02 – Relationship of Kāi Tahu to freshwater

The relationship of *mana whenua* with *freshwater* in Otago is sustained through:

- (1) recognising and enabling the exercise of *rakatirataka* and *kaitiakitaka*; and
- (2) protecting and restoring the *mauri* of *water bodies*; and
- (3) upholding *mātauraka* and *tikaka* in management and decision-making affecting *freshwater* and *freshwater ecosystems*; and
- (4) enabling *mahika kai* and other customary practices, and
- (5) recognising and providing for *mana whenua* aspirations as *land* and *water* users.

IO-03 – Long-term visions and environmental outcomes

Otago’s *land* and *water* are managed to achieve:

- (1) the *long-term visions* within the timeframes specified in those visions; and
- (2) the *environmental outcomes* for each *FMU* and rohe set out in the Area-specific matters chapters of this plan and in Table 2 below:

Table 2 – Environmental outcomes for FMU and rohe

Value	Environmental outcome	FMU / rohe
Ecosystem health	<i>Freshwater</i> bodies support healthy and resilient <i>freshwater</i> ecosystems and <i>habitats</i> for <i>indigenous</i> species, and their life stages.	All
Human health	<i>Water bodies</i> are clean and safe for <i>human contact activities</i> and support the health of people and their connections with <i>water bodies</i> .	All

Value	Environmental outcome	FMU / rohe
<i>Threatened species (habitat)</i>	The <i>habitats</i> of <i>threatened species</i> are protected and restored, to the extent practicable, to support the <i>recovery</i> of <i>threatened species</i> .	All
<i>Threatened species (recovery)</i>	<i>Threatened species</i> are <i>recovering</i> throughout their <i>range</i> to be <i>resilient, viable, and functioning</i> .	All
<i>Mahika kai (condition)</i>	Populations of <i>mahika kai species</i> valued by Kāi Tahu are self-sustaining and plentiful enough to support cultural take.	All
<i>Mahika kai (access, harvest, and use)</i>	<i>Mana whenua</i> can safely access, harvest and use <i>mahika kai</i> resources now and in the future.	All
Natural form and character	<i>Freshwater bodies</i> and their <i>riparian margins</i> 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 <i>receiving environments</i> .	All
<i>Drinking water supply (source water)</i>	<i>Source water</i> from <i>waterbodies</i> (after treatment) is safe and reliable for the <i>drinking water supply</i> needs of the community.	All
Animal drinking water	<i>Water</i> sourced from <i>water bodies</i> is safe for the reasonable <i>drinking water</i> needs of stock and domestic animals.	All
Wāhi tūpuna	Cultural associations with <i>wāhi tūpuna</i> are maintained, visible, and whānau are able to access, use and relate to <i>wāhi tūpuna</i> now and in the future.	All
Taoka species	<i>Habitats</i> for <i>indigenous species</i> are restored and sustained so that they are thriving and connected, and their mauri is intact.	All
Fishing	Fish are safe to eat and, insofar as it is consistent with the protection of <i>indigenous species</i> , the spawning and juvenile rearing <i>waters</i> for trout and salmon are provided for.	All
<i>Cultivation, and production of food and beverages</i>	The <i>cultivation</i> and production of food, beverages and fibre is enabled, while supporting the health and wellbeing of <i>water bodies</i> and <i>freshwater</i> ecosystems and human health.	All
<i>Commercial and industrial use</i>	<i>Commercial</i> and <i>industrial activities</i> are enabled while supporting the health and wellbeing of <i>water bodies</i> and <i>freshwater</i> ecosystems and human health needs.	All
Hydro electricity generation	Hydro-electricity generation contributes to achieving the national target for renewable electricity while supporting the health and well-being of <i>water bodies</i> and <i>freshwater</i> ecosystems and human health needs.	All

IO-04 – Ki uta ki tai/integrated management

The connections and interactions between *water bodies* (including between surface *water* and *groundwater*) as well as between *land*, *fresh water*, and *coastal water* across the whole of a catchment are recognised and provided for through integrated management of *land* and *water*.

IO-05 – Manahau āhuarangi/climate change

Land and *water* are managed as part of New Zealand’s integrated response to *climate change* and in a way that:

- (1) supports implementation of the *national adaptation plan* for climate change; and
- (2) supports achieving the *emissions reduction plan* and any national and, if relevant, regional and district targets for greenhouse gas emissions reductions; and
- (3) ensures that *renewable electricity generation* in Otago supports the overall reduction in New Zealand’s greenhouse gas emissions; and
- (4) supports the *resilience* of ecosystems and communities to the *effects of climate change*, including by:
 - (a) promoting *climate change* adaptation;
 - (b) providing for changes in *land* use;
 - (c) recognising the importance of *water* availability and security; and
- (5) avoids or mitigates *natural hazards*.

IO-06 – Fish passage

Fish passage within and between catchments is maintained or improved 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*.

IO-07 – Freshwater species

In *water bodies* in Otago:

- (1) the *habitats of indigenous freshwater species* are protected and sustained; and
- (2) the *habitats* of trout and salmon are protected to support a healthy sports fishery insofar as this is consistent with (1).

IO-08 – Land and soil resources

Land and soil support *biological diversity* and healthy *habitats for indigenous species* and ecosystems and their use and development ensures that:

- (1) to the extent reasonably practicable, their life-supporting capacity and *productive capacity* is not permanently reduced; and
- (2) the role of these resources in providing for the social, economic, and cultural well-being of Otago’s people and communities and for their health and safety is recognised.

IO-09 – Community well-being

Otago’s people and communities adopt sustainable *land* and *water* management practices that enable them to provide for their social, economic, and cultural well-being and for their health and safety now and in the future.

IO-010 – Significant infrastructure

The benefits of *nationally significant infrastructure* and *regionally significant infrastructure* are recognised, and their effective and efficient development, operation, *maintenance* and upgrading is provided for.

IP – Integrated policies

IP-P1 – Plan implementation

For the purpose of plan implementation and interpretation:

- (1) the provisions in this chapter and the objectives in the Area-specific matters provide the strategic direction for the plan, including for developing the other chapters within the plan and for its subsequent implementation and interpretation; and
- (2) the provisions in the topic chapters apply to the whole region unless expressly provided for otherwise in the topic chapters or in the Area-specific matters; and
- (3) the provisions in FMU1 – Clutha Mata-au freshwater management unit prevail over those in CAT1 to CAT5 unless expressly provided for otherwise.

IP-P2 – Rakatirataka and kaitiakitaka

Recognise Kāi Tahu rakatirataka and enable the exercise of *kaitiakitaka* in respect of *freshwater* by:

- (1) facilitating partnership with *mana whenua* in *freshwater* management, including policy development, implementation and monitoring; and
- (2) providing opportunities for the active involvement of Kāi Tahu in policy and resource consent decision-making processes, including by appointing independent commissioners approved or nominated by Kāi Tahu on hearing panels for resource consent applications, plan changes, or plans where Kāi Tahu values may be affected; and
- (3) facilitating engagement with Kāi Tahu in resource consent processes to ensure that *mana whenua freshwater values* are provided for; and
- (4) actively pursuing opportunities for:
 - (a) delegation or transfer of functions to Kāi Tahu; and
 - (b) partnership arrangements or iwi participation agreements; and
- (5) taking into account iwi management plans when making resource management decisions; and
- (6) working with Kāi Tahu to incorporate *mātauraka* in decision-making processes and monitoring programmes; and
- (7) supporting *mana whenua* initiatives that contribute to maintaining or improving the health and well-being of *water bodies*.

IP-P3 – Kā honoka ki te wai

Land and *freshwater* are managed to support the Kāi Tahu relationship with *fresh water* by:

- (1) recognising that Kāi Tahu hold an ancestral and enduring relationship with *fresh water* within their takiwā, and that the health and mana of *mana whenua* is inextricably linked to the health and mana of the wai; and
- (2) recognising the interconnectivity of whenua, wai, ecosystems and takata, ki uta ki tai, and managing catchments; and
- (3) ensuring activities are undertaken in a way that maintains or improves the health and well-being of *water bodies* and *freshwater* ecosystems and supports the restoration of mauri, including as measured by the *mana whenua* environmental indicators set out in APP8 – Mana whenua environmental indicators; and
- (4) achieving the *environmental outcomes* for the *Māori freshwater values* of wāhi tūpuna, *mahika kai*, and taoka species; and
- (5) enabling *mahika kai* and other customary practices; and
- (6) recognising and providing for the economic, cultural and social aspirations of *mana whenua* as *land* and *water* users.

IP-P4 – Integrated approach

In all decision-making under this plan, recognise and provide for:

- (1) the interactions between *land*, *fresh water* and *coastal water*; and
- (2) the inter-relationship between *water* quality and *water* quantity; and
- (3) the characteristics of tributaries and their contribution to the values of connected *water bodies*; and
- (4) the integrated management of *fresh water*, and *land* use and development, that avoids, remedies, or mitigates adverse *effects*, including cumulative *effects*, on the health and well-being of *water bodies*, *freshwater* ecosystems, and *receiving environments*.

IP-P5 – Facilitating transition

Facilitate effective and efficient implementation of *Te Mana o te Wai* now and in the future by:

- (1) recognising that changes to practices and activities necessary for achieving the long-term visions and *environmental outcomes* will need to continue beyond the life of this plan; and
- (2) enabling the development and use of new or improved practices and activities where they will support achieving the *long-term visions* and *environmental outcomes*; and
- (3) where practicable minimising the adverse impacts on people and communities from these changes; and
- (4) recognising the level of existing investment in environmental actions that have occurred in the last ten years; and
- (5) promoting *land* use change that assists with achieving the *long-term visions* and *environmental outcomes* sought in this plan; and

- (6) having regard to the lag time between implementing action and measurable change in *water bodies*.

IP-P6 – Decision-making on all applications

All decision-making on resource consent applications must:

- (1) ensure that the activity is consistent with achieving the relevant *environmental outcomes* set out in:
 - (a) FMU1 – Clutha Mata-au FMU,
 - (b) FMU2 – Taiari FMU,
 - (c) FMU3 – North Otago FMU,
 - (d) FMU4 – Dunedin & Coast FMU,
 - (e) FMU5 – Catlins FMU, and
- (2) consider the extent to which an activity is consistent with the matters in APP8 – Mana whenua environmental indicators; and
- (3) have particular regard to the *effects of climate change*.

IP-P7 – Good environmental practice

All activities managed under this plan are carried out:

- (1) in a way that is consistent with the concept of *Te Mana o Te Wai*; and
- (2) within *limits* and in accordance with any relevant *environmental flows and levels*; and
- (3) using practices that are designed to:
 - (a) optimise efficient resource use, including by recognising the characteristics of individual properties and catchments; and
 - (b) support the delivery of *ecosystem services*; and
 - (c) safeguard the life-supporting capacity of the region's *land* and soils; and
 - (d) contribute to maintaining or, if *degraded*, improving the health and well-being of *water bodies*, and *freshwater* and *coastal water* ecosystems; and
- (4) in a manner that enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety.

IP-P8 – Over-allocation

Avoid any future *over-allocation of fresh water* and phase out existing *over-allocation* in a way that:

- (1) recognises the needs of present and future generations; and
- (2) recognising the investment of existing uses and providing for new opportunities; and
- (3) supports the efficient allocation and use of resources, including providing for re-allocation where this is consistent with achieving the *long-term visions* and *environmental outcomes*; and

- (4) when considering reductions in actual resource use, prioritises reductions for uses that are within the third priority in the hierarchy of obligations set out in LF-WAI-P1 of the PORPS 2021; and
- (5) implements any additional direction on *over-allocation* elsewhere in this plan, including EFL-P16 – Over-allocation.

IP-P9 – Natural character, form and function and instream values

Protect the natural character, including form and function, and instream values of *water bodies* from inappropriate use and development by:

- (1) avoiding the *loss of values* or extent of a *river* or a *natural lake* unless:
 - (a) there is a *functional need* for the activity in that location; and
 - (b) the *effects* of the activity are managed by applying the *effects management hierarchy*; and
- (2) maintaining ecological processes that provide for the health and *resilience* of naturally occurring *freshwater* ecosystems and the life cycles of *indigenous species*; and
- (3) providing sufficient flow and water quality to support the life cycles and *habitats* of *indigenous species* with life stages dependent on *water bodies*; and
- (4) ensuring that, to the extent practicable:
 - (a) the movement of *water* within the natural *bed* is not artificially constrained or diverted; and
 - (b) natural connections between *water bodies*, *groundwater*, *riparian margins*, and the coastal *environment* are maintained; and
 - (c) flow variability within and between seasons provides for natural variation in flow patterns (including the cleansing, replenishment, and *river*-shaping functions of freshes and flood flows); and
 - (e) flows and levels contribute to maintaining or improving *water* quality; and
 - (f) the hydrological functions of *wetlands* are sustained or, if *degraded*, restored; and
- (5) preventing modification that would permanently reduce the extent of braiding of a *river*; and
- (6) maintaining or enhancing *riparian margins*.

IP-P11 – Outstanding water bodies

The significant and outstanding values of Otago's *outstanding water bodies* are protected from inappropriate use and development by:

- (1) implementing any restrictions and prohibitions set out in a water conservation order or the Lake Wānaka Preservation Act 1973; and
- (2) providing for activities that would have no more than minor adverse *effects* on the significant or outstanding values of the *outstanding water body*; and
- (3) enabling activities that would enhance or restore, or contribute to the enhancement or restoration, of the values of the *outstanding water body*; and

- (4) for *nationally significant infrastructure* and *regionally significant infrastructure*:
 - (a) avoiding, as a first priority, locating within an *outstanding water body*; and
 - (b) if it is not demonstrably practicable to avoid locating within an *outstanding water body*, managing the adverse *effects* of the activity in a way that protects the significant and outstanding values of the *outstanding water body*; and
- (5) other than as provided for in (1) to (4), avoiding adverse *effects* that would result in the permanent loss of the significant or outstanding values of the *outstanding water body*.

IP-P10 – Applications relating to values and extent of rivers and natural lakes

Consent must not be granted for activities undertaken in accordance with clause (1) of IP-P9 – Natural character, form and function and instream values that would result (directly or indirectly) in the *loss of values* or extent of a *river* or *natural lake* unless:

- (1) the applicant has demonstrated how each step in the *effects management hierarchy* will be applied to any loss of extent or values of the *river* or *natural lake* (including cumulative *effects* and loss of potential value), particularly (without limitation) in relation to the values of: ecosystem health, *indigenous biodiversity*, hydrological functioning, *Māori freshwater values*, and *amenity values*; and
- (2) if *aquatic offsetting* or *aquatic compensation* is applied, the applicant has complied with principles 1 to 6 in APP10 – Principles for aquatic offsetting and APP11 – Principles for aquatic compensation and has had regard to the remaining principles in APP10 and APP11 as appropriate; and
- (3) there are methods or measures that will ensure that the offsetting or compensation will be maintained and managed over time to achieve the conservation outcomes; and
- (4) any consent granted is subject to conditions that:
 - (a) apply the *effects management hierarchy*; and
 - (b) specify how the requirements in (3) will be achieved.

IP-P12 – Improved information on outstanding water bodies

Where site-specific information is available that better identifies, delineates, or assesses the significance of the values of an *outstanding water body* in accordance with the identification criteria set out in APP1 – Criteria for identifying outstanding water bodies of the PORPS 2021, that information must be taken into account when determining an application for resource consent for an activity that would affect that *outstanding water body*, including by applying a precautionary approach when considering that information.

IP-P13 – Threatened species

Support the *recovery* of *threatened species*, and protect and restore their *habitats* including by:

- (1) ensuring that, to the extent practicable, there is no overall:
 - (a) *fragmentation*, reduction in size, or deterioration of the *ecological integrity* of the *habitats* of *threatened freshwater-dependent species*; or

- (b) reduction in population size or *occupancy of threatened freshwater-dependent species* across their *natural range* (including the *habitats* described in APP6 – Threatened freshwater-dependent species that are located within the areas identified in MAP[TS] – Threatened species habitat); and
- (2) if relevant, recognising the extent to which adverse *effects* have been managed by applying the *effects management hierarchy* in accordance with IP-P9 – Natural character, form and function and instream values or WET-P3 – Protection of wetlands; and
- (3) promoting actions that support the *recovery of threatened species*.

IP-P14 – Fish passage

Manage activities and *structures* in the *beds* and *riparian margins* of *water bodies* so that passage is provided for the adults and juveniles of *desired fish species* insofar as this is consistent with protecting the *habitats of indigenous freshwater species* except where it is necessary and appropriate to impede *fish passage* for:

- (1) *sports fish* in all *rivers* and *receiving environments* unless they have been identified as a *desired fish species* in a particular *river* or *receiving environment*, or part thereof, in accordance with APP7 – Sports fish as desired fish species or undesirable fish species; or
- (2) any other *undesirable fish species* in all *rivers* and *receiving environments*.

IP-P15 – Remediation of existing structures

Improve passage for *desired fish species* and prevent passage for *undesirable fish species* by:

- (1) requiring remediation of existing *structures* that have been identified in an *action plan* prepared in accordance with clause 3.26 of the NPSFM; and
- (2) promoting remediation of other existing *structures*.

IP-P16 – Decision-making on instream structures

When considering resource consent applications for instream *structures* have regard to:

- (1) the extent to which the *structure*:
 - (a) provides and will continue to provide for the objectives in IO-O6 – Fish passage and IO-O7 – Freshwater species for the foreseeable life of the *structure*; and
 - (b) provides efficient and safe upstream and downstream passage for *fish*, other than *undesirable fish species*, at all their life stages including larvae; and
 - (c) provides the physical and hydraulic conditions necessary for unassisted passage of *fish*; and
- (2) any proposed monitoring and *maintenance* plan for ensuring the *structure* meets the objectives in IO-O6 – Fish passage and IO-O7 – Freshwater species now and in the future.

IP-P17 – Renewable electricity generation

The national and regional benefits of *renewable electricity generation*, including reducing greenhouse gas emissions, are recognised and provided for by:

- (1) maintaining or increasing the overall generation capacity, storage, and operational flexibility of existing *renewable electricity generation* schemes; and
- (2) during times of low flow, prioritising the use of *water* for *renewable electricity generation* ahead of other uses within the third priority in the hierarchy of obligations set out in LF-WAI-P1 of the PORPS 2021; and
- (3) enabling the operation, maintenance, and minor upgrading of *renewable electricity generation activities* where their adverse *effects* are managed; and
- (4) providing for the development of new *renewable electricity generation activities* where any take is either:
 - (a) *non-consumptive*; or
 - (b) complies with the relevant *environmental flows and levels* and *take limits* in:
 - (i) SCHED3 – Rivers: A Block environmental flows, levels and take limits,
 - (ii) SCHED4 – Rivers: B Block environmental flows, levels and take limits, and
 - (ii) SCHED5 – Lakes: Environmental levels and take limits; and
- (5) managing activities to minimise reverse sensitivity *effects* on *renewable electricity generation activities*.

IP-P18 – Natural hazard risk

Manage new and existing activities in areas subject to *natural hazard* risk by:

- (1) in areas subject to *natural hazards*:
 - (a) until a region-wide *natural hazard* risk assessment has been completed in accordance with HAZ-NH-M2 of the PORPS 2021, requiring a resource consent application to include a *natural hazard* risk assessment in accordance with APP6 – Methodology for natural hazard risk assessment of the PORPS 2021 that is commensurate with the level of risk from the proposed activity; and
 - (b) only allowing new activities where, as assessed by either the region-wide *natural hazard* risk assessment or an assessment provided with a resource consent application under (a):
 - (i) significant *natural hazard* risks are avoided; and
 - (ii) when the *natural hazard* risk is tolerable, the level of risk is managed so that it does not exceed tolerable; and
 - (iii) when the *natural hazard* risk is acceptable, the level of risk is maintained; and
- (2) providing for activities that reduce risk or reduce community vulnerability, including *flood protection and drainage infrastructure* and *flood protection and drainage infrastructure works*; and
- (3) encouraging design that reduces risk, including by facilitating relocation of activities to areas of acceptable risk or, if that is not practicable, to areas of lower risk; and
- (4) protecting or enhancing the ability of natural or modified features and systems to mitigate the *effects of natural hazards*; and

- (5) where the *natural hazard* risk, either individually or cumulatively, is uncertain or unknown, but potentially significant or irreversible, applying a precautionary approach to identifying, assessing and managing that risk by adopting an avoidance or adaptive management response.

IP-P19 – Discharges to land or water

When considering an application for a resource consent to *discharge water* or a *contaminant* into *water*, or onto or into *land* in circumstances where it may enter *water*, decision-makers must:

- (1) require applicants to demonstrate that measures will be implemented that, where practicable:
 - (a) avoid the use or production of the *contaminant*; then
 - (b) minimise the volume or amount of the *discharge*; then
 - (c) reuse, recover or recycle the *contaminant*; then
 - (d) utilise land-based treatment or a designed treatment system prior to *discharge*; and
- (2) except as provided for by WW-P1 – Existing reticulated wastewater systems, WW-P2 – New reticulated wastewater systems, WW-P7 – Industrial and trade waste, SW-P3 – Interim consent framework for stormwater networks, SW-P4 – Comprehensive consent framework for stormwater networks, OTH-P1 – Approved substances or OTH-P2 – Unapproved substances, prefer *discharges to land* over *discharges to water* unless:
 - (a) adverse *effects* associated with a *discharge to land* are greater than a *discharge to water*; or
 - (b) the *discharge* is for the elimination or control of an aquatic *pest, pest agent, unwanted organism, or organism of interest*; or
 - (c) the *discharge* will comply with the receiving *water* standards in APP13 – Receiving water standards.

IP-P20 – Mixing zones

If an application for a resource consent to *discharge water* or a *contaminant* directly to *water* proposes to use a mixing zone, the applicant must demonstrate that:

- (1) within the mixing zone, *contaminant* concentrations will not cause acute toxicity *effects* on aquatic ecosystems unless the *discharge* is for the elimination or control of an *aquatic pest, pest agent, unwanted organism, or organism of interest* and is targeted to the *species* being controlled; and
- (2) the mixing zone proposed is either:
 - (a) the default mixing zone, which is:
 - (i) for *rivers, modified watercourses, and artificial watercourses* with flowing *water* present at all times:
 - (1) no longer than 200 metres along the longest axis of the zone or 10 times the wetted channel width for that location (whichever is the lesser); and
 - (2) occupies no greater than two-thirds of the wetted channel width for that location; and

- (ii) for *rivers, modified watercourses, and artificial watercourses* with intermittent flows, no longer than 20 metres at times of flow and 0 metres at no flow; or
- (iii) for *lakes*:
 - (1) if the *discharge* location is within 50 metres of the *lake water* edge at any time, a circle with a diameter of 50 metres; or
 - (2) if the *discharge* location is greater than 50 metres from the *lake water* edge at all times, a circle with a diameter of 100 metres; or
- (iv) when within a *drinking water protection zone*, 0 metres; or
- (b) a site-specific mixing zone that:
 - (i) takes into account the distances set out in (1) above; and
 - (ii) is the smallest zone necessary to achieve the required *water* quality in the receiving *waters*.

IP-P21 – Activities within drinking water protection zones

Except as provided by CL-P1, when considering an application for resource consent for an activity within a *drinking water protection zone*, decision-makers must:

- (1) ensure compliance with the NESDW; and
- (2) for *land* uses and *discharges* to land:
 - (a) not grant consent for any *discharge* of a *contaminant*, including as a result of a *land* use activity, within 5 metres of a *bore* listed in APP14 – Drinking water supplies; and
 - (b) outside the area described in (a), only grant consent if the applicant demonstrates that the affected *bore* head(s) is secure and all practicable measures are implemented to reduce the risk of *contaminants* reaching *groundwater*; and
- (3) avoid or mitigate the risk of contamination of *drinking water supplies* by taking into account:
 - (a) the amount, concentration and type of *contaminants* likely to be present as a result of the activity or in any *discharge*; and
 - (b) the potential pathways for those *contaminants*, including any likely or potential preferred pathways; and
 - (c) the mobility and survival rates of any pathogens likely to be in the *discharge* or arising as a result of the activity; and
 - (d) any risks the activity has either on its own or in combination with other existing activities, including as a result of non-routine events; and
 - (e) any risks of any abstraction of *groundwater* where abstraction has the potential to have more than a minor impact on flow direction or speed and/ or hydrostatic pressure; and
 - (f) the effectiveness of any mitigation measures to avoid or mitigate risk of *contaminants* entering the source *water* and the extent to which the effectiveness of the mitigation measure can be verified, including whether the activity is regulated by and/or complies with relevant codes of practice or guidelines; and
 - (g) notification, monitoring or reporting requirements to the *drinking water supplier*; and

- (h) outcomes of consultation with the *drinking water supplier* with respect to the risks to source *water* from the activity, including measures to minimise risks and protocols for notification to the *drinking water supplier* should an event presenting a risk to *groundwater* occur.

IP-P22 – Managing uncertainty

In all decision-making under this plan, manage uncertainties by:

- (1) using the best information available at the time, including scientific data and mātauraka Māori; and
- (2) taking all practicable steps to reduce uncertainty, and:
 - (a) in the absence of complete and scientifically robust data, using information obtained from modelling, reliable partial data, and local knowledge, with preference for sources of information that provide the greatest level of certainty; and
 - (b) avoiding unreasonable delays in making decisions because of uncertainty about the quality or quantity of the information available; and
- (3) for activities whose *effects* are uncertain, unknown, or little understood but potentially significantly adverse, adopting a precautionary approach to the management of the activity, including through use of adaptive management and reference to mātauraka and tikaka.

IP-P23 – Cross-boundary matters

Adopt a consistent and integrated approach to managing cross-boundary matters by:

- (1) coordinating the management of natural and physical resources and the *environment* across jurisdictional boundaries and, whenever practicable, between overlapping or related agency responsibilities; and
- (2) where practicable, having regard to *effects on receiving environments* that are in neighbouring regions; and
- (3) when processing resource consent applications that are likely to require a resource consent from another local authority:
 - (a) advising the other local authority as soon as practicable; and
 - (b) holding joint processes for resource consent applications and hearings to the extent practicable; and
 - (c) having regard to the extent to which consistency in decision-making is required to promote integrated management and achieve the objectives of all relevant plans; and
- (4) sharing relevant information with other local authorities, *mana whenua*, and communities; and
- (5) establishing and building upon working relationships with other resource management stakeholders, including neighbouring local authorities; and
- (6) considering the use of alternative mechanisms for addressing cross-boundary issues such as transfers of power, delegation of functions, and joint management agreements.

IP-P24 – Consent duration

For all applications other than those subject to BED-P12 – Duration of consents to extract gravel and SW-P3 – Interim consent framework for stormwater networks, when determining the duration of a resource consent:

- (1) require applications to demonstrate the extent to which the activity will support the achievement of all relevant *environmental outcomes* and *long-term visions*; and
- (2) decision-makers must:
 - (a) ensure that the duration of any consent is consistent with:
 - (i) the timeframes for implementing *environmental flows and levels* and *take limits* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits; and SCHED4 – Rivers: B Block environmental flows, levels and take limits; and
 - (ii) the consent review dates and catchment expiry dates set out in APP9 – Consent reviews and catchment expiry dates; and
 - (iii) any other timeframes for implementing particular actions specified in this plan; and
 - (b) take into account the extent to which the activity will implement actions identified in an *action plan* or *catchment action plan*; and
- (3) the duration is no longer than 10 years unless either:
 - (a) the application is to replace an existing *water* permit that expires within fifteen years before a relevant catchment expiry date set out in APP9 – Consent reviews and catchment expiry dates; and a longer duration would align with the relevant catchment expiry date; or
 - (b) the application is for the construction, *maintenance*, repair, alteration, replacement, or removal of *nationally significant infrastructure*, *regionally significant infrastructure*, or any *structures*, pipes, or *artificial watercourses* used for conveying or storing *water* but excludes any permanent take, *damming*, or *diversion* of *water*; or
 - (c) the application is for a *land* use consent for the ongoing use of a *bore* or defence against *water*; or
 - (d) the application is consistent with the relevant objectives and policies of this plan and demonstrates that the activity will contribute to achieving the relevant *environmental outcomes*, target *attribute* states and interim target *attribute* states, and *environmental flows and levels* or *take limits* to an extent that corresponds with the scale and significance of the activity by:
 - (i) implementing staged improvements over the duration of the consent to reduce *contaminant* losses or actual *water* use; or
 - (ii) replacing an existing activity with one that has lower *contaminant* losses or actual *water* use; or
 - (iii) either already implementing, or proposing to implement, best practice for the management of the activity as recognised by a relevant industry or organisation.

Topics

BED – Beds of lakes and rivers

Objectives

There are no topic-specific objectives. Refer to IO – Integrated objectives and the objectives in the Area-specific matters chapters.

Policies

BED-P1 – Value of works in the bed

Recognise the value of *structures* and works in the *beds of rivers and lakes* where they provide for the social and cultural well-being of people and communities, and their health and safety.

BED-P2 – Disturbance of the beds of lakes and rivers

Provide for the disturbance of the *bed* of a *lake or river* where:

- (1) works in the *bed* are managed to minimise duration and scale to the extent necessary to achieve the desired outcome; and
- (2) works in *water* and the *discharge* of sediment to *water* are avoided where practicable, and otherwise minimised; and
- (3) adverse *effects* on the use of *nationally significant infrastructure, regionally significant infrastructure* and other *lawfully established structures* are avoided as far as practicable; and
- (4) significant adverse *effects* on ecosystems are avoided, and all other adverse *effects* on ecosystems will cease once the active disturbance of the *bed* is complete.

BED-P3 – Management of activities in the bed

For any resource consent application for works in the *bed* of a *lake or river*, or in a *riparian margin*:

- (1) applicants must demonstrate the *functional need* for the works to occur in the *bed* or *riparian margin*, and that there are no other practical alternatives; and
- (2) applicants must consider how the activity may be affected by *climate change*, including any measure taken to avoid or mitigate the *effects* of *climate change*, including managed retreat; and
- (3) applicants must demonstrate how the activities will be managed so that:
 - (a) they will comply with IP-P9 – Natural character, form and function and instream values and IP-P10 – Applications relating to values and extent of rivers and natural lakes; and
 - (b) existing legal public access to or along a *lake or river* is maintained or improved as far as practicable; and
 - (c) adverse *effects* on the use of *nationally significant infrastructure, regionally significant infrastructure* and other *lawfully established structures* are avoided as far as practicable; and

- (d) the passage of *desired fish species* is maintained; and
 - (e) works in spawning sites are avoided during spawning seasons of *indigenous species* and *desired fish species*, and otherwise managed to minimise disturbance of spawning *habitats*; and
 - (f) *habitats* of *indigenous freshwater fish species* are protected from disturbances, and the quality of their *habitat* is maintained or improved; and
 - (g) the introduction and spread of *pests, pest agents, unwanted organisms* or organisms of interest in *lakes, rivers* and *riparian margins* is avoided; and
 - (h) where an archaeological site may be disturbed, the accidental discovery protocol set out in APP15 – Accidental discovery protocol is applied; and
 - (i) adverse effects on *water* quality are avoided where practicable, and otherwise minimised; and
- (4) decision-makers must take into account both the temporary and permanent *effects* associated with the works, and the permanent *effects* associated with any *structure*.

BED-P4 – Use, maintenance, alteration, replacement and placement of structures

Enable the use, *maintenance*, alteration, replacement and placement of *structures* in, on, under or over the *bed* of a *lake* or *river* where:

- (1) there is a *functional need* for the *structure* to be located in the *bed*, and there are no practicable alternatives outside of the *bed*; and
- (2) the *structure* does not pose any risk to the health or safety of people or communities; and
- (3) the *structure* does not impede legal public access to or along the *lake* or *river*; and
- (4) the *structure* does not cause or exacerbate flooding, erosion, *land* instability or sedimentation.

BED-P5 – Placement or replacement of hard protection structures

Avoid the replacement or placement of *hard protection structures* in the *bed* of a *lake* or *river* unless:

- (1) either:
 - (a) the *hard protection structure* is for the purpose of maintaining or reducing the level of risk to people or communities and does not result in the displacement of risk off-site; and
 - (b) there are no other reasonable alternatives that result in an equivalent or further reduction in the level of risk; or
- (2) the *hard protection structure* protects a *lifeline utility*, or a facility for essential or emergency services.

BED-P6 – Restoration of lake and river extent and values

Encourage the restoration of *lake* or *river* extent and value, including:

- (1) works that support adaptation to *climate change*, or managed retreat in response to *natural hazard* risks; and
- (2) works that allow *rivers* to return to more natural behaviours; and

- (3) works that utilise nature-based solutions; and
- (4) the placement, alteration, replacement, removal or demolition of existing structures that provide for or impede *fish* passage in accordance with IP-P14 and IP-P15; and
- (5) the demolition or removal of *structures* in, on, under or over the *bed* of a *lake* or *river* where they:
 - (a) are not *lawfully established*; or
 - (b) cease to be maintained, operated or used; and
- (6) activities that will result in the removal or reduction of *pests, pest agents, unwanted organisms* or *organisms of interest* which threaten the values of *rivers* and *lakes*.

BED-P7 – Removal and planting of vegetation

Provide for the removal of, or the planting of vegetation, in or on the *bed* of a *lake* or *river*, or *riparian margin* if:

- (1) either:
 - (a) the activity protects or restores the natural character, form, function, extent or value of the *lake, river* or *riparian margin*; or
 - (b) the activity enhances or restores the *habitat* of *indigenous freshwater species*; and
- (2) the introduction or spread of *pests, pest agents, unwanted organisms* or organisms of interest in *lakes, rivers* and *riparian margins* is avoided; and
- (3) no vegetation used for flood control or bank stabilisation is removed or adversely affected; and
- (4) the use of *nationally significant infrastructure, regionally significant infrastructure* and other *lawfully established structures* is not adversely affected.

BED-P8 – Drain maintenance

Provide for the removal of sediment and vegetation from *drains* and *modified watercourses* where:

- (1) the *drain* or *modified watercourse* mitigates the risks associated with flooding; and
- (2) there is a demonstrable need for the removal of sediment and vegetation in order to maintain the capacity of the *drain* or *modified watercourse*; and
- (3) the clearance is undertaken in a way that:
 - (a) maintains or enhances *habitat* values within the *drain* or *modified watercourses*, when compared to the values that existed immediately prior to the *maintenance*; and
 - (b) minimises the quantity of sediment released from the *maintenance* works; and
 - (c) provides passage for *desired fish species* throughout the works; and
 - (d) avoids, to the extent practicable, the removal of sediment with a grain size greater than 2 millimetres.

BED-P9 – Code of practice for drain maintenance

Encourage the removal of sediment and vegetation from *drains* and *modified watercourses* to be undertaken in a manner that is consistent with a *code of practice for drain maintenance*.

BED-P10 – Gravel extraction

For any application for a resource consent to extract gravel from the *bed* of a *river* or *lake*:

- (1) decision-makers must consider the extent to which there has been engagement with ORC prior to the lodgement of any resource consent application; and
- (2) the applicant demonstrates that:
 - (a) the volume, extent, and duration of the extraction is sustainable and will not result in a decrease in the mean *bed* level of the *water body* at or downstream of the proposed location, taking into account (at a minimum):
 - (i) the rate of erosion and deposition (gravel recharge); and
 - (ii) the amount of stored gravel in the area; and
 - (iii) the mean and current *bed* level; and
 - (iv) any sediment aggradation or degradation trends; and
 - (v) *river* morphology, hydrological and ecological processes throughout the wider catchment; and
 - (vi) any existing consents authorising the extraction of gravel; and
 - (b) the activity will not cause or exacerbate erosion or instability of the *bed* or banks and maintains or improves the flood carrying capacity that existed prior to the extraction; and
 - (c) processing of gravel in the *bed* will be avoided where possible, and where it cannot be avoided, the *functional need* for any processing of gravel in the *bed* is demonstrated; and
- (3) encourage extractions to be undertaken in a manner that is consistent with a *code of practice for gravel extraction*; and
- (4) require that either:
 - (a) the extraction is for the purpose of protecting or maintaining *nationally significant infrastructure* or *regionally significant infrastructure* and local transport *infrastructure* that is in the *bed*, provided that there are no other reasonable alternatives to protect or maintain the *nationally significant infrastructure*, *regionally significant infrastructure* or local transport *infrastructure*; or
 - (b) the extraction is for the purpose of flood hazard mitigation and it is 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; or
 - (c) the resource consent application demonstrates the *functional need* and *operational need* for the extraction and that there are no other practical alternatives to the proposed extraction.

BED-P11 – Future gravel management

Management of the gravel resource in Otago will occur in accordance with:

- (1) any guidance prepared by ORC which describes a framework for managing the extraction of gravel from *rivers* across Otago, including the outcomes to be achieved through gravel extraction; and
- (2) a *code of practice for gravel extraction*.

BED-P12 – Duration of consents to extract gravel

Limit the duration of any resource consent to extract gravel to five years, unless the applicant can demonstrate that a longer duration is required and is appropriate in relation to the location and volume of extraction sought.

Rules

Advice notes:

- (1) The placement, use, alteration, extension, or reconstruction of *culverts* and *passive flap gates* in, on, over, or under the *bed* of any *river* are permitted under regulations 70, 71 and 74 of the NESF. The disturbance of the *bed* of a *river* associated with placing a *culvert* or *passive flap gates* in, on, over or under the *bed* of any *river* is not covered under the NESF and is managed by BED-R7-PER1 and BED-R7-DIS1.
- (2) Where an activity includes the placement of a *culvert*, *weir*, *flap gate*, *dam* or *ford* in, on, over, or under the *bed* of any *river* or connected area, the NESF sets out information requirements in regulations 62 to 68 that must be provided to ORC within 20 working days of the activity being finished.
- (3) Activities associated with the operation, maintenance, upgrading, relocation or removal of existing transmission *lines* are managed under the NESETA. This includes altering, relocating or replacing a tower or pole of an existing transmission *line*, *discharges to water* associated with existing *lines* and the clearance of vegetation.
- (4) Work affecting archaeological sites is subject to an authority process under the Heritage New Zealand Pouhere Taonga Act 2014. If any activity could modify, damage or destroy any archaeological site(s), an authority (consent) from Heritage New Zealand must be obtained for the work to proceed lawfully.
- (5) Any person constructing a *structure* likely to impede *fish* passage (including *culverts*, *fords*, *dams* or *diversion structures*) will need to comply with the requirements of the Freshwater Fisheries Regulations 1983, administered by the Department of Conservation.
- (6) For all activities in or near waterways, refer also to requirements and restrictions under the ORC Flood Protection Management Bylaw 2022.

BED-R1 – Use and maintenance of a structure

BED-R1-PER1

The use and *maintenance* of any *structure* that is fixed in, on, under, or over the *bed* of any *lake* or *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge*

of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *structure* was *lawfully established*; and
- (2) if a change in use of the *structure* occurs, the *effects* of the new use of the *structure* are the same, similar or lesser in character, intensity and scale as the preceding use; and
- (3) the *structure* is maintained in a good and safe condition; and
- (4) if the *structure* is identified in an *action plan* as a *structure* requiring remediation to provide for fish passage, the remediation has been completed by the date specified in the *action plan*; and
- (5) the *structure* does not impede legal public access to or along the *lake* or *river*; and
- (6) any build-up of debris excluding gravel against the *structure* which may adversely affect flood risk, drainage capacity or *bed* or bank stability is removed as soon as practicable; and
- (7) any build-up of gravel against the *structure* which may adversely affect flood risk, drainage capacity or *bed* or bank stability is redistributed in the *bed*, or removed if redistribution is not practicable; and
- (8) the *maintenance* works do not:
 - (a) impede legal public access to or along the *lake* or *river*; or
 - (b) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (c) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (d) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (e) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (9) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (10) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (11) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (12) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (13) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (14) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R1-RDIS1

Unless provided for by BED-R1-PER1, the use and *maintenance* of any *structure* that is fixed in, on, under, or over the *bed* of any *lake* or *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a restricted discretionary activity.

ORC restricts its discretion to the following matters:

- (1) the actual and potential environmental *effects* of not meeting the condition or conditions of Rule BED-R1-PER1; and
- (2) the lapsing period and duration of the resource consent; and
- (3) review of the conditions of the resource consent; and
- (4) the need for a bond; and
- (5) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (6) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

BED-R2 – Alteration, placement or replacement of a structure

BED-R2-PER1

The alteration, placement or replacement of a *structure* specified in clause (1) that is fixed in, on, under or over the *bed* of a *lake* or *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the *structure* is a:
 - (a) fence, pipe, *line*, or cable; or
 - (b) monitoring and sampling *structure*; or
 - (c) navigational aid *structure*; or
 - (d) *sign*; or
 - (e) submersible pump and any connected pipe; or
 - (f) flow or level recording device; or
 - (g) water intake *structure* excluding a *dam* or *weir*; or
 - (h) maimai; or
 - (i) whitebait stand or eel trap; or
 - (j) floating boom; and
- (2) the *structure* does not:
 - (a) impede the passage of *desired fish species*, except where specified in condition (15)(e); or
 - (b) impede legal public access to or along the *lake* or *river*; or
 - (c) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
- (3) the alteration, placement or replacement works do not:
 - (a) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (b) disturb the roosting or nesting of *indigenous* birds and bats; or

- (4) the *structure* and alteration, placement or replacements works do not:
- (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) any *mātaitai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (d) frustrate the use of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (5) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (6) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (7) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (8) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (9) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (10) the site is left tidy on completion of the activity, including removal of any debris associated with the activity; and
- (11) for any fence, pipe, *line*, or cable:
- (a) no part of any fence is fixed to the *bed* of the *lake* or *river*, unless it is attached to a *lawfully established structure*; and
 - (b) the fence, pipe, *line* or cable does not interfere with navigation; and
 - (c) the fence, pipe, *line* or cable does not impede the flow of flood *water* or debris, or is managed so that it does not cause or exacerbate flooding or erosion; and
 - (d) the location of the pipe, *line* or cable is identified by markers on the banks of the *lake* or *river*; and
 - (e) for existing overhead network utility services over the *bed* of a *lake* or *river*, there is no reduction in the *height* of clearance above the *lake* or *river*; and
- (12) any monitoring and sampling *structure*, navigational aid *structure* or sign:
- (a) does not exceed 2 square metres in area; and

- (b) except in the case of a navigational aid, safety signage, or the sight board of any gauge, any visible part of the *structure* or *sign* is of a neutral colour to blend in with the surroundings; and
- (13) any flow or level recording device or *water* intake *structure*, excluding a *dam* or *weir*:
- (a) does not exceed 2 square metres in area provided that in respect of any flow or level recording device any catwalk to the nearest bank shall be excluded from the area calculation; and
 - (b) any visible part of the *structure* is of a neutral colour to blend in with the surroundings; and
- (14) any maimai:
- (a) does not exceed 10 square metres in area; and
 - (b) is open piled; and
 - (c) is at least 90 metres from any other maimai; and
 - (d) is secure against *bed* erosion, flood *water* and debris loading; and
- (15) any whitebait stand or eel trap:
- (a) is open piled; and
 - (b) does not exceed 3 square metres in area; and
 - (c) has a dimension (perpendicular to the flow of *water*) of no more than 10 percent of the width of the *bed* of the *lake* or *river*, or no more than three metres, whichever is the lesser; and
 - (d) is at least 20 metres from any other *lawfully established structure*, *flood gate*, *culvert* or confluence located within the *bed* of a *lake* or *river*; and
 - (e) outside the capture of the intended species, does not impede the passage of any other *desired fish species*; and
- (16) any floating boom:
- (a) is securely fixed to the *bed* or margins of the *lake* or *river*; and
 - (b) is not more than 850 metres upstream of a *lawfully established* hydro-electric *dam* or control *structure* or within 200 metres of any other *lawfully established dam* or control *structure*; and
 - (c) all associated equipment is clearly visible.

BED-R2-DIS1

Unless provided for by BED-R2-PER1, the alteration, placement or replacement of a *structure* specified in condition (1) of BED-R2-PER1 that is fixed in, on, under or over the *bed* of a *lake* or *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or discharge of *bed substrate* to *water* or to *land* where it may enter *water* is a discretionary activity.

BED-R3 – Alteration, placement or replacement of a barrier to upstream fish passage

BED-R3-PER1

The alteration, placement or replacement of a *structure*, including a *culvert*, but not including a *dam* or *weir*, that prevents the upstream passage of *undesirable fish species* in order to protect an upstream population of a threatened *fish species*, that is fixed in, on, under or over the *bed* of a *lake* or *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the *structure* does not:
 - (a) impede the passage of *desired fish species*; or
 - (b) impede legal public access to or along the *lake* or *river*; or
 - (c) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (d) result in any reduction in the flow carrying capacity of the *river*; and
- (2) the alteration, placement or replacement works do not:
 - (a) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (b) disturb the roosting or nesting of *indigenous* birds and bats; or
- (3) the *structure* and alteration, placement or replacement works do not:
 - (a) occur within:
 - (i) any *mātaitai* or *taiāpure*; or
 - (ii) a *drinking water protection zone*; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; and
 - (d) frustrate the use of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (4) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15– Accidental discovery protocol must be applied; and
- (5) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (6) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (7) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (8) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and

- (9) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R3-DIS1

Unless provided for by BED-R3-PER1, the alteration, placement or replacement of a *structure*, including a *culvert*, but not including a *dam* or *weir*, that prevents the upstream passage of *undesirable fish species* in order to protect an upstream population of a threatened *fish species*, that is fixed in, on, under or over the *bed* of a *lake* or *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where a *contaminant* may enter *water* is a discretionary activity.

BED-R4 – Alteration, placement, or replacement of a single span bridge

BED-R4-PER1

The alteration, placement, or replacement of any single span bridge, including for carrying pipes, in, on or over the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *structure* does not:
 - (a) impede legal public access to or along the *river*; or
 - (b) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (c) result in any reduction in the flow carrying capacity of the *river*; and
- (2) the alteration, placement or replacement works do not:
 - (a) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (b) disturb the roosting or nesting of *indigenous* birds and bats; or
- (3) the *structure* and alteration, placement or replacement works do not:
 - (a) occur within:
 - (i) any *mātaimai* or *taiāpure*; or
 - (ii) a *drinking water protection zone*; or
 - (iii) an *outstanding water body* shown on MAP[OWB] – Outstanding water bodies or listed in SCHED1 – Outstanding water bodies as having outstanding landscape values, unless the activity is the alteration or replacement of an existing bridge; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (d) frustrate the use of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (4) the bridge soffit is higher than the top of the higher *river* bank; and

- (5) where the bridge is intended to be used by stock, measures are taken to avoid animal effluent entering the *river*; and
- (6) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (7) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (8) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (9) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *river*; and
- (10) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (11) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R4-DIS1

Unless provided for by BED-R4-PER1, the alteration, placement, or replacement of any single span bridge, including for carrying pipes, in, on or over the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R5 – Alteration, placement or replacement of a ford

BED-R5-PER1

The alteration, placement or replacement of a *ford* in or on the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *ford* has a maximum width of 3.5 metres; and
- (2) the *ford* is stable under flood conditions, and secured against *bed* erosion, flood *water* and debris loading; and
- (3) the *ford* does not:
 - (a) impede legal public access to or along the *river*; or
 - (b) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (c) impede the movement of *bed substrate*; or
 - (d) impede the passage of *desired fish species*; or
 - (e) result in any reduction in the flow carrying capacity of the *river*; and
- (4) the alteration, placement or replacement works do not:
 - (a) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (b) disturb the roosting or nesting of *indigenous* birds and bats; or

- (5) the *ford* and alteration, placement or replacement works do not:
- (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) an *outstanding water body* shown on MAP[OWB] – Outstanding water bodies or listed in SCHED1 – Outstanding water bodies, unless the activity is the alteration or replacement of an existing *ford*; or
 - (iii) any *mātaitai* or *taiāpure*; or
 - (iv) a *drinking water protection zone*; and
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive);
 - (c) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (d) frustrate the use of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (6) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15– Accidental discovery protocol must be applied; and
- (7) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (8) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (9) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *river*; and
- (10) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (11) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R5-DIS1

Unless provided for by BED-R5-PER1, the alteration, placement or replacement of a *ford* in or on the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R6 – Alteration, placement or replacement of any other structure

BED-R6-DIS1

Unless provided for by any other rule in this plan the alteration, placement or replacement of a *structure* in or on the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R7 – Disturbance associated with culverts or passive flap gates

BED-R7-PER1

Unless provided for by BED-R3-PER1, the disturbance of the *bed* of a *river* for the purpose of placing a *culvert* or *passive flap gate* in, on, over or under the *bed*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the placement, use, alteration, extension or reconstruction of the *culvert* or *passive flap gate* is authorised under the NESF; and
- (2) the disturbance does not:
 - (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) any *mātaitai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; and
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (d) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (e) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (f) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (g) frustrate the use of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (3) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (4) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (5) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (6) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (7) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (8) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R7-DIS1

Unless provided for by Rule BED-R7-PER1, the disturbance of the *bed* of a *river* for the purpose of placing a *culvert* or *passive flap gate* in, on, over or under the *bed*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R8 – Demolition or removal of a structure

BED-R8-PER1

The demolition or removal of any *structure* or any part of a *structure* that is fixed in, on, under, or over the *bed* of a *lake* or *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *structure* to be removed or demolished is not a *dam* or *weir*; and
- (2) no *structure* is removed or demolished without the prior written permission of the person or agency responsible for operating or maintaining the *structure*; and
- (3) if the *structure* prevented the passage of *undesirable fish species*, the removal or demolition of the *structure* does not provide for the passage of *undesirable fish species*; and
- (4) the demolition or removal does not:
 - (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat, unless the removal or demolition of the *structure* will provide for the passage of *desired fish species*; or
 - (ii) any *mātaimai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; and
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (d) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (e) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (f) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; or
 - (g) frustrate the use of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (5) where any part of the *structure* remains in situ, the section that remains in situ does not present a risk to navigation or safety; and
- (6) there is no use of explosives; and

- (7) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (8) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (9) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (10) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *river*; and
- (11) the site is left tidy on completion of the activity, including removal of any debris associated with the activity; and
- (12) the following information is supplied to ORC following the demolition or removal of the *structure*:
 - (a) the nature, function and location of the *structure* that was demolished or removed; and
 - (b) the date the *structure* was demolished or removed; and
 - (c) the method of demolition or removal.

BED-R8-DIS1

Unless provided for by BED-R8-PER1, the demolition or removal of any *structure* or any part of a *structure* that is fixed in, on, under, or over the *bed* of a *lake* or *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R9 - Drilling

BED-R9-PER1

Drilling in the *bed* of a *river* or *lake*, other than for the purpose of creating a *bore*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the *drilling* does not penetrate an *aquifer*; and
- (2) for directional or horizontal *drilling*, the *drilling* is above the *water table*; and
- (3) the *drilling* complies with NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock; and
- (4) the *drilling* does not:
 - (a) occur within:
 - (i) the wetted *bed*; or
 - (ii) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (iii) any *mātaitai* or *taiāpure*; or

- (iv) a *drinking water protection zone*; and
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (d) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (e) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (f) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; or
 - (g) frustrate the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (5) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (6) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the activity; and
- (7) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *river*; and
- (8) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (9) on completion of works:
- (a) the drill hole is filled or sealed so that *contaminants* are prevented from entering the hole at any level; and
 - (b) the site is left tidy, including removal of any debris associated with the activity.

BED-R9-DIS1

Unless provided for by BED-R9-PER1, *drilling* in the *bed* of a *river* or *lake*, other than for the purpose of creating a *bore*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water* is a discretionary activity.

BED-R10 – Sediment traps

BED-R10-PER1

The use and *maintenance* of a *sediment trap* in a *critical source area* or in the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the *sediment trap* is maintained in a good and safe condition; and
- (2) the *sediment trap* does not impede legal public access to or along the *river*; and

- (3) any build-up of sediment and other debris, including vegetation, within the *sediment trap* is removed regularly to maintain the effectiveness of the *sediment trap*; and
- (4) the *maintenance* works do not:
 - (a) impede legal public access to or along the *lake* or *river*; or
 - (b) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (c) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (d) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (e) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (5) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15–Accidental discovery protocol must be applied; and
- (6) all reasonable steps are taken to return any *fish* or *kōura* captured or stranded by the activity to *water* immediately, including re-checking removed spoil one hour after removal; and
- (7) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *river*; and
- (8) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (9) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R10-PER2

The alteration, placement or replacement of a *sediment trap* in a *critical source area* or in the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the *sediment trap* does not:
 - (a) impede legal public access to or along the *river*; or
 - (b) result in any reduction in the flow carrying capacity of the *river*; or
 - (c) frustrate or prevent the exercise of any lawful take of *water* by any other person; and
- (2) the alteration, placement or replacement works do not:
 - (a) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (b) disturb the roosting or nesting of *indigenous* birds and bats; and
- (3) the *sediment trap* and alteration, placement or replacement works do not:
 - (a) occur within:
 - (i) flowing *water*; and

- (ii) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
- (iii) any *mātaitai* or *taiāpure*; or
- (iv) a *drinking water protection zone*; or
- (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
- (c) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
- (d) frustrate the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure* that is not a, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (4) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (5) works in the wetted *bed* do not exceed 10 hours in duration total, unless the works are immediately upstream of an established *sediment trap*; and
- (6) all reasonable steps are taken to return any fish or kōura captured or stranded by the activity to *water* immediately, including re-checking removed spoil one hour after removal; and
- (7) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *river*; and
- (8) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (9) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R10-CON1

Unless provided for by BED-R10-PER2, the alteration, placement or replacement of a *sediment trap* in a *critical source area* or in the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge of bed substrate* to *water* or to *land* where it may enter *water* is a controlled activity if all of the following conditions are met:

- (1) the works are undertaken:
 - (a) in flowing *water*; and
 - (b) the *sediment trap* is located within a *critical source area*, or a *river* that is no greater than order two, using the methods outlined in the River Environment Classification System, National Institute of Water and Atmospheric Research, Version 1; and
- (2) the *sediment trap* does not:
 - (a) impede legal public access to or along the *river*; or
 - (b) frustrate or prevent the exercise of any lawful take of *water* by any other person; and

- (3) the alteration, placement or replacement works do not:
 - (a) disturb the spawning *habitat of desired fish species* during their spawning seasons; or
 - (b) disturb the roosting or nesting of *indigenous* birds and bats; and
 - (c) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) any *mātaitai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; or
 - (d) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (e) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (f) frustrate the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure* that is not a *flood protection and drainage asset*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (4) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (5) all reasonable steps are taken to return any fish or kōura captured or stranded by the activity to *water* immediately, including re-checking removed spoil one hour after removal; and
- (6) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *river*; and
- (7) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and

ORC reserves control over the following matters:

- (1) the location, extent and design of the *sediment trap*; and
- (2) the timing and methods of construction for the *sediment trap*; and
- (3) potential adverse *effects* of the activity on:
 - (a) the flow carrying capacity of the river; or
 - (b) the exercise of lawful takes of *water* by any other person; and
 - (c) the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure*; and
- (4) measures to:
 - (a) minimise the adverse *effects* of fish stranding during works; and
 - (b) minimise the *discharge* of sediment from works; and

- (c) on completion of the activity, leave the site tidy including removal of any debris associated with the activity; and
- (5) the application of the accidental discovery protocol set out in APP15 – Accidental discovery protocol if the activity disturbs an archaeological site; and
- (6) the lapsing period and duration of the resource consent; and
- (7) review of the conditions of the resource consent; and
- (8) the need for a bond; and
- (9) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (10) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

BED-R10-DIS1

Unless provided for by BED-R10-PER1, BED-R10-PER2 or BED-R10-CON1, the alteration, placement, replacement, use or *maintenance* of a *sediment trap* in a *critical source area* or in the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R11 – Vehicle access

BED-R11-PER1

The disturbance of the *bed* of a *river* or *lake* for the purpose of the entry into, or passage across, the *bed* of a *river* by any wheeled or tracked vehicle or machine, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) entry into the *bed* or passage across the *bed* is:
 - (a) demonstrated as being necessary for the purpose of:
 - (i) crossing over the *bed*; or
 - (ii) undertaking works in the *bed* that are permitted or authorised by a resource consent; and
 - (b) limited to the greatest extent possible; and
- (2) the activity does not:
 - (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) any *mātaitai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; or

- (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (d) change the original profile of the *bed*; or
 - (e) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (3) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15– Accidental discovery protocol must be applied.

BED-R11-DIS1

Unless provided for by BED-R11-PER1, the disturbance of the *bed* of a *lake* or *river* for the purpose of the entry into, or passage across, the *bed* of a *lake* or *river* by any wheeled or tracked vehicle or machine, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R12 – Clearance of material accumulated as a result of a natural hazard

BED-R12-PER1

The disturbance of the *bed* of a *lake* or *river* for the purpose of clearing any material that has accumulated as a result of a *natural hazard*, and any associated deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the activity is for the purpose of:
 - (a) maintaining the function and integrity of a *lawfully established structure*; or
 - (b) restoring flood carrying capacity to that which existed prior to the debris accumulation; and
- (2) any build-up of gravel is redistributed in the *bed*, or removed if redistribution is not practicable; and
- (3) the activity does not cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (4) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (5) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (6) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (7) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (8) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and

- (9) the activity does not disturb the roosting or nesting of *indigenous* birds and bats; and
- (10) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R12-DIS1

Unless provided for by BED-R12-PER1, the disturbance of the *bed* of a *lake* or *river* for the purpose of clearing any material that has accumulated as a result of a *natural hazard*, and any associated deposition of *bed substrate*, use of *land* or *discharge of bed substrate to water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R13 – Bank rebattering and reshaping

BED-R13-PER1

The rebattering or reshaping of the bank of a *river* or *drain*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge of bed substrate to water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the activity is for the purpose of improving *water* quality, *freshwater* ecosystems or *resilience to natural hazards*; and
- (2) the rebattering or reshaping works are limited to a length of 50 metres in any consecutive 90 day period; and
- (3) the *slope* of the rebattered or reshaped bank is no steeper than 30 degrees; and
- (4) the rebattered or reshaped bank includes a vertical 300 mm step at the base of the *water's* edge; and
- (5) the rebattered or reshaped banks do not:
 - (a) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (b) impede legal public access to or along the *river* or *drain*; or
 - (c) result in any reduction in the flow carrying capacity of the *river* or *drain*; and
- (6) the rebattering or reshaping works do not:
 - (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) any *mātaimai* or *taiāpure*; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (d) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (e) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; or

- (f) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (g) frustrate the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (7) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
 - (8) works in the wetted *bed* do not exceed 10 hours in duration total; and
 - (9) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
 - (10) there is no fuel storage, machinery refuelling, or storage or placement of any *hazardous substance* on any part of the *bed* of the *river*; and
 - (11) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
 - (12) measures are put in place to stabilise or contain soil that is exposed after the disturbance is complete, and those measures remain in place until vegetation covers more than 80 percent of the disturbed area; and
 - (13) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R13-DIS1

Unless provided for by BED-R13-PER1, the rebattering or reshaping of the bank of a *river* or *drain*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R14 – Bank reinstatement

BED-R14-PER1

Unless provided for by FLOOD-R2 – Flood protection and drainage works, the reinstatement of any bank of a *lake* or *river* which has been damaged by a *natural hazard*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the reinstatement works are limited to a length of 50 metres in any consecutive 90 day period; and
- (2) material used for the bank reinstatement is:
 - (a) *bed substrate*; or
 - (b) *cleanfill material*, provided that:
 - (i) any *cleanfill material* is used that is similar in character and composition to the previous bank construction; and
 - (ii) the *cleanfill material* is free of *pests, pest agents, unwanted organisms, and organisms of interest*; and

- (3) the reinstated bank does not:
 - (a) reduce the extent of the *bed* that occurred prior to the *natural hazard*; or
 - (b) result in any reduction in the flow carrying capacity of the *river*; or
 - (c) impede legal public access to or along the *lake* or *river*; or
 - (d) frustrate or prevent the exercise of any lawful take of *water* by any other person; and
- (4) the reinstatement works do not:
 - (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) any *mātaitai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (d) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; and
- (5) the reinstated bank and reinstatement works do not:
 - (a) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (b) frustrate the use of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (6) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (7) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (8) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (9) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (10) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (11) measures are put in place to stabilise or contain soil that is exposed after the disturbance is complete, and those measures remain in place until vegetation covers more than 80 percent of the disturbed area; and
- (12) the surrounding *bed* is returned as near as practicable to the natural contour, on completion of the activity; and

- (13) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R14-DIS1

Unless provided for by FLOOD-R2 – Flood protection and drainage works or BED-R14-PER1, the reinstatement of any bank of a *lake* or *river* which has been damaged by a *natural hazard*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R15 – Suction dredge mining

BED-R15-PER1

Suction dredge mining in a *river* or *lake*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the internal diameter of the nozzle used for *suction dredge mining* does not exceed 150 millimetres; and
- (2) the maximum area of *bed* disturbed by the activity does not exceed 30 square metres per day; and
- (3) the activity only occurs between 1 December and 30 April the following year, for a maximum of 30 days; and
- (4) the activity does not:
 - (a) occur within:
 - (i) an *outstanding water body* shown on MAP[OWB] – Outstanding water bodies or listed in SCHED1 – Outstanding water bodies as having outstanding ecological values; or
 - (ii) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (iii) any *mātaitai* or *taiāpure*; or
 - (iv) a *drinking water protection zone*; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) impede legal public access to or along the *lake* or *river*; or
 - (d) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (e) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (f) result in any reduction in the flow carrying capacity of the *river*; or
 - (g) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or

- (h) frustrate the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (5) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (6) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (7) there is no fuel storage, machinery refuelling, or storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (8) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (9) the site is left tidy on completion of the activity, including removal of any debris associated with the activity; and
- (10) the following information is supplied to ORC by 14 May each year:
 - (a) the date and location of any *suction dredge mining* that occurred in the most recent 1 December to 30 April period; and
 - (b) the area where *suction dredge mining* occurred; and
 - (c) the method of *suction dredge mining*.

BED-R15-DIS1

Unless provided for by BED-R15-PER1, *suction dredge mining* in a *river* or *lake*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R16 – Maintenance of drains and modified water bodies

BED-R16-PER1

The removal of sediment and vegetation from a *drain* or *modified watercourse*, and any associated *land* use, disturbance of the *bed*, deposition of *bed substrate* or *discharge* of *bed substrate*, sediment or vegetation to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) either:
 - (a) the sediment or vegetation is removed by hand or with hand tools; or
 - (b) the activity is undertaken in accordance with a *code of practice for drain maintenance*; or
 - (c) the sediment or vegetation is removed when there is no *water* in the *drain* or *modified watercourse*; and
- (2) the removal undertaken in accordance with (1)(c) does not:
 - (a) occur within:

- (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
- (ii) any *mātaitai* or *taiāpure*; or
- (iii) a *drinking water protection zone*; or
- (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
- (c) disturb the roosting or nesting of *indigenous* birds and bats; or
- (d) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; and
- (e) frustrate the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (3) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (4) the surrounding *bed* or channel is returned as near as practicable to the natural contour, on completion of the activity; and
- (5) sediment and vegetation removed from the *drain* or *modified watercourse* is not placed where it can enter a *river* or *lake*, a *natural inland wetland*, an *artificial watercourse*, or *coastal water*; and
- (6) the following information is supplied to ORC by 1 July each year:
 - (a) the date and location of any removal activities that occurred in the previous calendar year; and
 - (b) the nature of the material removed, including quantity; and
 - (c) the method of removal.

BED-R16-CON1

The removal of sediment and vegetation from a *drain* or *modified watercourse*, and any associated *land* use, disturbance of the *bed*, deposition of *bed substrate* or *discharge* of *bed substrate*, sediment or vegetation to *water* or to *land* where it may enter *water*, is a controlled activity if all of the following conditions are met:

- (1) the removal of sediment or vegetation is required in order to maintain or improve the function of the *drain* or *modified watercourse*; and
- (2) works in the wetted *bed* or in *water* in a *drain* do not exceed 10 hours in duration total; and
- (3) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (4) within a *drain* or *modified watercourse*, following every 200 metre long reach where sediment or vegetation is removed, a 10 metre long reach is left undisturbed; and
- (5) the activity does not:

- (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) any *mātaitai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; or
- (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
- (c) disturb the roosting or nesting of *indigenous* birds and bats; or
- (d) disturb the spawning *habitat* of *desired fish species* during their spawning seasons.

ORC reserves control over the following matters:

- (1) the location, timing, methods and extent of sediment and vegetation removal to occur; and
- (2) potential adverse *effects* of the activity on:
 - (a) the exercise of lawful takes of *water* by any other person; and
 - (b) the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure*; and
- (3) measures to:
 - (a) reduce the extent and frequency of sediment and vegetation removal undertaken; and
 - (b) minimise the adverse *effects* of *fish* stranding during works; and
 - (c) minimise the *discharge* of sediment from works; and
 - (d) avoid the removal of sediment with a grain size greater than 2 millimetres; and
 - (e) on completion of the activity, leave the site tidy including removal of any debris associated with the activity; and
- (4) the application of the accidental discovery protocol set out in APP15 – Accidental discovery protocol if the activity disturbs an archaeological site; and
- (5) the lapsing period and duration of the resource consent; and
- (6) review of the conditions of the resource consent; and
- (7) the need for a bond; and
- (8) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (9) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

BED-R16-DIS1

Unless provided for by BED-R16-PER1 or BED-R16-CON1, the removal of sediment and vegetation from a *drain* or *modified watercourse*, and any associated *land* use, disturbance of the *bed*, deposition of

bed substrate or *discharge of bed substrate*, sediment or vegetation to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R17– Gravel extraction

BED-R17-PER1

The extraction of gravel from the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge of bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions have been met:

- (1) the volume of gravel extracted by an individual from a *river* does not exceed 20 cubic metres in any 12 consecutive months; and
- (2) the gravel is not extracted from the bank of a *river* or from any *flood protection and drainage asset*; and
- (3) the gravel is not extracted below a *height* of 300 millimetres above the *water* level at the time of excavation; and
- (4) there is no processing of gravel in the *bed*; and
- (5) the activity does not:
 - (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) any *mātaimai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; or
 - (iv) the wetted *bed*; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) impede legal public access to or along the *river*; or
 - (d) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (e) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (f) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (g) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; and
 - (h) frustrate the use of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (6) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and

- (7) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (8) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *river*; and
- (9) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (10) the surrounding *bed* is returned as near as practicable to the natural contour, on completion of the activity; and
- (11) the site is left tidy on completion of the activity, including removal of any debris associated with the activity; and
- (12) the following information is supplied to ORC by 1 July each year:
 - (a) the date and location of any gravel extractions that occurred in the previous calendar year; and
 - (b) the volume of any gravel extracted; and
 - (c) the method of extraction.

BED-R17-CON1

The extraction of gravel from the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a controlled activity if all of the following conditions have been met:

- (1) the volume of gravel extracted by an individual from a *river* is between 20 cubic metres and 240 cubic metres in any 12 consecutive months; and
- (2) the gravel is not extracted from the bank of a *river* or from any *flood protection and drainage asset*; and
- (3) the gravel is not extracted below a *height* of 300 millimetres above the *water* level at the time of excavation; and
- (4) there is no processing of gravel in the *bed*; and
- (5) the activity does not:
 - (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) any *mātaimai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; or
 - (iv) the wetted *bed*; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or

- (c) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
- (d) disturb the roosting or nesting of *indigenous* birds and bats.

ORC reserves control over the following matters:

- (1) the location, timing and volume of gravel to be extracted, to ensure that the extraction is sustainable and will not result in a decrease in the mean *bed* level of the *water body* in the proposed location, taking into account (at a minimum):
 - (a) the rate of erosion and deposition (gravel recharge); and
 - (b) the amount of stored gravel in the area; and
 - (c) the mean and current *bed* level; and
 - (d) any sediment aggradation or degradation trends; and
 - (e) *river* morphology, hydrological and ecological processes throughout the wider catchment; and
 - (f) any existing consents authorising the extraction of gravel; and
- (2) potential adverse *effects* of the activity on:
 - (a) *water* quality; and
 - (b) the exercise of lawful takes of *water* by any other person; and
 - (c) the use of any *nationally significant infrastructure, regionally significant infrastructure or other lawfully established structure*; and
 - (d) the movement of *water* within the *bed*; and
 - (e) the *habitats* of *indigenous freshwater fish*; and
 - (f) the spawning *habitats* of *desired fish species* during their spawning seasons; and
- (3) measures to:
 - (a) prevent flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
 - (b) return the surrounding *bed* as near as practicable to the channel shape, area, depth, and gradient that existed prior to the works, on completion of the activity; and
 - (c) leave the site tidy including removal of any debris associated with the activity, on completion of the activity; and
- (4) the application of the accidental discovery protocol set out in APP15 – Accidental discovery protocol if the activity disturbs an archaeological site; and
- (5) the lapsing period and duration of the resource consent; and
- (6) review of the conditions of the resource consent; and
- (7) the need for a bond; and
- (8) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and

- (9) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

BED-R17-RDIS1

Unless provided for by BED-R17-PER1 or BED-R17-CON1, the extraction of gravel from the *bed* of a *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a restricted discretionary activity if all of the following conditions have been met:

- (1) the extraction is undertaken in accordance with a *code of practice for gravel extraction*.

ORC restricts its discretion to the following matters:

- (1) the location, timing, and volume of gravel to be extracted; and
- (2) measures to avoid, remedy, or mitigate adverse *effects* on:
- (a) *water* quality; and
 - (b) the exercise of lawful takes of *water* by any other person; and
 - (c) the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure*; and
 - (d) the movement of *water* within the *bed*; and
 - (e) the *habitats* of *indigenous freshwater fish* and *threatened species*; and
 - (f) the spawning *habitats* of *desired fish species* during their spawning seasons; and
 - (g) any *drinking water supply*; and
 - (h) the roosting and nesting of *indigenous* birds and bats; and
- (3) measures to:
- (a) prevent flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
 - (b) return the surrounding *bed* as near as practicable to the channel shape, area, depth, and gradient that existed prior to the works, on completion of the activity; and
 - (c) leave the site tidy including removal of any debris associated with the activity, on completion of the activity; and
- (4) the application of the accidental discovery protocol set out in APP15 – Accidental discovery protocol if the activity disturbs an archaeological site; and
- (5) the lapsing period and duration of the resource consent; and
- (6) review of the conditions of the resource consent; and
- (7) the need for a bond; and
- (8) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (9) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

BED-R17-DIS1

Unless provided for by BED-R17-PER1, BED-R17-CON1, or BED-R17-RDIS1 the extraction of gravel from the *bed* of a *lake* or *river* and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge of bed substrate to water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R18 – Introduction or planting of vegetation

BED-R18-PER1

The introduction or planting of vegetation in or on the *bed* of a *lake*, *river*, or *riparian margin*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge of bed substrate to water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the plant is not classified as a *pest*, *pest agent*, *unwanted organism*, or *organism of interest*; and
- (2) the activity does not:
 - (a) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (b) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (c) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; or
 - (d) frustrate the use of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established structure*, unless the person carrying out the works has a written agreement with the owner or operator of the *structure*; and
- (3) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (4) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (5) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and
- (6) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (7) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (8) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R18-DIS1

The introduction or planting of vegetation in or on the *bed* of a *lake*, *river*, or *riparian margin*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge of bed substrate to water* or to *land* where it may enter *water*, that does not meet one or more of the conditions of BED-R18-PER1(2) to (7) is a discretionary activity.

BED-R18-PER1

The introduction or planting of vegetation in or on the *bed* of a *lake, river* or *riparian margin*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to land where it may enter *water*, that does not meet BED-R18-PER1(1) is a prohibited activity.

BED-R19 – Vegetation clearance

BED-R19-PER1

Vegetation clearance (excluding via application of *agrichemicals*) from the *bed* of a *lake* or *river* and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the vegetation clearance is of predominantly exotic species, and any clearance of *indigenous vegetation* is limited to the extent practicable; and
- (2) no vegetation used for flood control or bank stabilisation is removed or cleared without the prior written permission of the person or agency responsible for maintaining that vegetation; and
- (3) where the clearance is of a *pest, pest agent, unwanted organism* or *organism of interest*, containment is utilised to ensure no weed fragments are released downstream; and
- (4) other than where the clearance is undertaken by hand, the activity does not occur within:
 - (a) the *habitat* of a threatened *freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (b) any *mātaitai* or *taiāpure*; or
 - (c) a *drinking water protection zone*; and
- (5) other than where the clearance is undertaken by hand, the activity does not occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
- (6) the activity does not:
 - (a) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (b) disturb the roosting or nesting of *indigenous* birds and bats; and
 - (c) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; and
- (7) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (8) works in the wetted *bed* do not exceed 10 hours in duration total; and
- (9) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works; and

- (10) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (11) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (12) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

BED-R19-DIS1

Unless provided for by Rule BED-R19-PER1, the removal or clearance of plant material from the *bed* of any *lake* or *river*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

BED-R20 – All other disturbances of the bed

BED-R20-DIS1

Unless provided for by any other rule in this chapter, the disturbance of the *bed* of a *lake* or *river*, and any associated deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a discretionary activity.

CL – Contaminated Land

Objectives

CL-O1 – Natural hazard risks

Contaminated land is identified and remediated to avoid risks from *natural hazards*, including where these risks may arise from the *effects of climate change*.

Policies

CL-P1 – Contaminated land management

Ensure that the disturbance of *contaminated land* or *potentially contaminated land*, including *closed landfills*, and the associated *discharge* of *contaminants* onto *land* or into *water*, does not adversely impact the health of soil, *freshwater* and aquatic ecosystems, or human health by:

- (1) identifying and recording the details of *closed landfills*, *contaminated land*, or *potentially contaminated land*; and
- (2) requiring any use or development of *land* containing elevated levels of *contaminants* resulting in *discharges* to *land* or *water* to manage or remediate the contamination to a level that:
 - (a) allows *contaminants* to remain in the ground, where it can be demonstrated that the level of residual contamination is not reasonably likely to pose a significant adverse *effect* on the *environment*; and
 - (b) avoids adverse *effects* on potable *water* supplies; and
 - (c) avoids significant adverse *effects* on ecological values and *water* quality; and
- (3) requiring the use of best practice *contaminated land* management, including the preparation and consideration of preliminary and *detailed site investigations*, remedial action plans, site validation reports and site management plans for the identification, monitoring, and remediation of *contaminated land* and *closed landfills*; and
- (4) managing the disposal of contaminated soil and other contaminated material removed from a site to minimise adverse *effects* on the *environment*.

CL-P2 – Improved information on background contaminant concentrations

Where site-specific information is available that better identifies background *contaminant* concentration levels in accordance with the identification criteria set out in APP12 – Background contaminant concentration levels, that information must be taken into account when determining an application for resource consent.

CL-P3 – Closed landfills

The ongoing adverse *effects* of *closed landfills* are contained, prevented, or remediated by requiring that:

- (1) the management of the *closed landfill* is in accordance with 'A Guide for the Management of Closing and Closed Landfills in New Zealand (MfE, 2001)'; and

- (2) *closed landfills* at risk from erosion or flooding, including from the *effects of climate change*, are:
 - (a) identified; and
 - (b) moved or remediated; and
 - (c) any adverse *effects* are avoided, remedied, or mitigated.

CL-P4 – New contaminated land

Avoid the creation of new *contaminated land* where practicable.

Rules

Advice notes:

- (1) Users of this plan should consult the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 for further regulations for the disturbance of *contaminated land* and associated *discharge*.
- (2) Where the disturbance of *contaminated land* involves any *earthworks*, the provisions in the EARTH – Earthworks and bores chapter also apply in addition to the provisions of the CL chapter.

CL-R1 – Site investigations

CL-R1-PER1

The disturbance and use of *land* for a site investigation to assess concentrations of *hazardous substances* that may be present in the soil, and any associated *discharge of water or contaminants* as a result of the site investigation into or onto *land* in circumstances where they may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the activity does not occur within:
 - (a) a *drinking water protection zone*; or
 - (b) 600 millimetres from the seasonal high-water table in locations where soils are classified as Category 2-6 in accordance with the New Zealand Standard AS/NZ 1547:2012 Onsite Domestic Wastewater Management; or
 - (c) 2 metres from the seasonal high-water table in locations where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZ 1547:2012 Onsite Domestic Wastewater Management; and
- (2) the activity does not:
 - (a) result in ponding or overland flow; or
 - (b) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (3) the site investigation is undertaken in accordance with Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils (Ministry for the Environment, 2021); and

- (4) the site investigation is reported on in accordance with the Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand, (Ministry for the Environment, 2021); and
- (5) effective erosion and *sediment control measures* are implemented and addressed within a site management plan; and
- (6) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol is applied; and
- (7) the *discharge* does not contain any *pest, pest agent, unwanted organism, or organism of interest*; and
- (8) a copy of the reporting produced under (4) is provided to ORC within 40 working days of completion of the investigation.

CL-R1-RDIS1

Unless provided for by CL-R1-PER1, the disturbance and use of *land* for a site investigation to assess concentrations of *hazardous substances* that may be present in the soil, and any associated *discharge* of *water* or *contaminants* as a result of the site investigation into or onto *land* in circumstances where they may enter *water*, is a restricted discretionary activity.

ORC restricts its discretion to the following matters:

- (1) the location of the site investigation; and
- (2) measures to avoid the dispersal of the substances or associated *contaminants* onto or into *land* or *water*; and
- (3) the methodology of the investigation and the associated reporting; and
- (4) the lapsing period and duration of the resource consent; and
- (5) review of the conditions of the resource consent; and
- (6) the need for a bond; and
- (7) the collection, recording, monitoring, and provision of information to ORC about the exercise of the resource consent; and
- (8) the extent to which the activity is consistent with the matters set out in APP8 – Mana whenua environmental indicators.

CL-R2 – Passive discharges from contaminated land

CL-R2-PER1

The passive *discharge* of *contaminants* from *contaminated land* (excluding *closed landfills*) onto or into *land*, including in circumstances where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) there has been a site investigation report provided to ORC in accordance with CL-R1-PER1 or under a resource consent required under CL-R1-RDIS1; and

- (2) either a *detailed site investigation* report or *groundwater* and *surface water* sampling demonstrates that there is a statistically significant decreasing trend in the concentration of *contaminants*:
- (a) in *groundwater* or *surface water* downstream of the property boundary; or
 - (b) at any existing *bore* (excluding any monitoring *bore* located on the property); or
 - (c) within a *drinking water protection zone*; or
 - (d) at any point where *groundwater* exits to *surface water* when measured against:
 - (i) the relevant *contaminant* concentrations in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022; and
 - (ii) the relevant *contaminant* concentrations [measured as dissolved concentrations] in the toxicant default guideline values in the Australia and New Zealand Guidelines for Fresh and Marine Water Quality at the level of 90 percent protection of species; and
 - (iii) for concentrations of petroleum hydrocarbons in soil gas, the *land* use specific target soil air concentrations at one metre depth in Appendix 4J of the Ministry for the Environment’s Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (2011); and
- (3) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards.

CL-R2-DIS1

Unless provided for by CL-R2-PER1, the passive *discharge* of *contaminants* from *contaminated land* (excluding *closed landfills*) to *water*, or onto or into *land*, including in circumstances where a *contaminant* may enter *water*, is a discretionary activity.

CL-R3 – Closed landfills

CL-R3-PER1

The *discharge* of *contaminants* from a *closed landfill* onto or into *land* in circumstances where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) previous monitoring demonstrates:
- (a) a statistically significant reduction in concentrations of *contaminants* over a 20-year period; and
 - (b) the *contaminants* present are within 10 percent range of the background *contaminant* concentration levels set out in APP12 – Background contaminant concentration levels; and
- (2) a risk assessment demonstrates that the environmental risk is low and is carried out in accordance with the appropriate risk screening system, either:
- (a) the Ministry for the Environment’s Small Landfill Closure Criteria Risk Assessment for Small Closed Landfills (2002); or

- (b) the Ministry for the Environment's Guide to the Management of Closing and Closed Landfills in New Zealand (2001); and
- (3) a copy of the reporting produced under (1) and (2) is provided to ORC within 40 working days of the completion of the investigation.

CL-R3- CON1

Unless provided for by CL-R3-PER1, the *discharge of contaminants* from a *closed landfill* onto or into *land* in circumstances where a *contaminant* may enter *water* is a controlled activity.

ORC reserves control over the following matters:

- (1) *effects* of the *discharge* on *water* quality and the health of *freshwater* and coastal ecosystems; and
- (2) mitigation and rehabilitation measures; and
- (3) contingency in the event of accidental *discharges*; and
- (4) *contaminant* type and volume; and
- (5) management of *stormwater* and leachate; and
- (6) compliance with relevant guidelines within the Ministry for the Environment's Guide for the Management of Closing and Closed Landfills in New Zealand (2001) and Ministry for the Environment's Small Landfill Closure Criteria Risk Assessment for Small Closed Landfills (2002).

CL-R3-DIS1

The *discharge of contaminants* from a *closed landfill* to *water* is a discretionary activity.

DAM – Damming and diversion

Objectives

There are no topic-specific objectives. Refer to IO – Integrated objectives and the objectives in the Area-specific matters chapters.

Policies

DAM-P1 – New in-stream dams and weirs in protected areas

Avoid the placement of new *in-stream dams* and *weirs* in:

- (1) areas identified on MAP[WCO] – Water conservation order layer (areas protected by WCO) where *damming* is restricted or prohibited by a water conservation order; and
- (2) Lake Wānaka and the Upper Clutha River/Mata-au between its source to its confluence with the Cardrona River/Ōrau, as identified on MAP[DAM] - Water bodies where long-term damming is prohibited and SCHED2 - Water bodies where long-term damming is prohibited, other than for the duration of an emergency as declared by the Guardians of Lake Wānaka under the Lake Wānaka Preservation Act 1973; and
- (3) the following areas, other than temporary *in-stream dams* or *weirs*:
 - (a) Poumāhaka River, including its tributaries, from its sources to its confluence with the Clutha River/Mata-Au, as identified on MAP[DAM] – Water bodies where long-term damming is prohibited and SCHED2 – Water bodies where long-term damming is prohibited; and
 - (b) Waipahī River, including its tributaries, from its sources to its confluence with the Poumāhaka River, as identified on MAP[DAM] – Water bodies where long-term damming is prohibited and SCHED2 – Water bodies where long-term damming is prohibited; and
 - (c) Lower Clutha River/Mata-Au from its confluence with the Poumāhaka River to the sea at the mouths of the Matau and Koau Branches, as identified on MAP[DAM] - Water bodies where long-term damming is prohibited and SCHED2 – Water bodies where long-term damming is prohibited.

DAM-P2 – New in-stream dams and weirs in other areas

Manage the placement and use of new *in-stream dams* or *weirs* by:

- (1) only allowing the placement and use of new *in-stream dams* and *weirs* where they:
 - (a) comply with IP-P9 – Natural character, form and function and instream values and IP-P10 – Applications relating to values and extent of *rivers* and *natural lakes*; and
 - (b) are not in an area identified in DAM-P1 – New in-stream dams and weirs in protected areas; and
- (2) having particular regard to the positive *effects* of new *in-stream dams* and *weirs* that are:
 - (a) temporary *in-stream dams* or *weirs*; or

- (b) *renewable electricity generation* facilities that connect with the local distribution network or *national grid* (but are not facilities designed and operated principally for supplying a single premise or facility); or
- (c) for the primary purpose of protecting, restoring or enhancing the ecosystem health, *indigenous biodiversity*, or hydrological functioning of *water bodies*.

DAM-P3 – Replacement or upgrading of existing in-stream dams and weirs

Provide for the replacement or upgrading of *lawfully established in-stream dam* or *weir structures* where the applicant demonstrates that the new or upgraded *in-stream dam* or *weir structures* will:

- (1) provide for or impede fish passage in accordance with IP-P14 – Fish passage and IP-P15 – Remediation of existing structures; and
- (2) meet the relevant *environmental flows and levels* and *take limits* in SCHED3 – Rivers: A Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits, and
- (3) have the same or lesser adverse *effects* on the values and extent of *rivers* and *natural lakes* than the existing *lawfully established in-stream dam* or *weir structure*.

DAM-P4 – Managing in-stream damming and diversion activities

For any resource consent application:

- (1) for an *in-stream dam* or *weir* or *diversion*, applicants must demonstrate:
 - (a) the introduction or spread of *pests*, *pest agents*, *unwanted organisms* and organisms of interest is avoided; and
 - (b) legal public access to or along a *lake* or *river* is maintained or improved as far as practicable; and
 - (c) fish passage is provided for or impeded in accordance with IP-P14 – Fish passage and IP-P15 – Remediation of existing structures; and
 - (d) the stranding of fish in pools and channels during works is avoided; and
- (2) for an existing *lawfully established in-stream dam* or *weir*, applicants must:
 - (a) demonstrate how the *environmental flows and levels* and *take limits* in in SCHED3 – Rivers: A Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits will be met; and
 - (b) specify a series of time bound steps to be implemented, demonstrating how the activity will be managed to achieve any *water* quantity improvements required to achieve the *environmental flows and levels* and *take limits* in SCHED3 – Rivers: A Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits, as required by (2)(a); and
 - (c) demonstrate measures to be implemented to avoid significant adverse *effects* and minimise other adverse *effects* on the health and well-being of *water bodies*, receiving *environments* and *freshwater* ecosystems to the extent practicable; and

- (d) for *in-stream dams* that are not *classifiable dams*, demonstrate that the *in-stream dam* is structurally sound and operated and maintained in accordance with industry guidelines for *dam safety*; and
- (3) for a new *in-stream dam* or *weir*, applicants must demonstrate that:
- (a) the activity will meet any relevant *environmental flows and levels* and *take limits* in SCHED3 – Rivers: A Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and
 - (b) the activity will not reduce *water quality* in any *water bodies*; and
 - (c) there is no practicable alternative method or location available for the activity.

DAM-P5 – Managing discharges of water from in-stream dams

Provide for ecological health and maintain natural variations in flow patterns below *in-stream dams* by:

- (1) requiring that *water is discharged* from *in-stream dams* for the purpose of maintaining flow variability in the *river*, including provision for flushing flows; and
- (2) where *stored water* is conveyed via a *river* for *secondary takes*, encouraging management of the *secondary takes* by the consent holder for the *damming of water* by the *in-stream dam*, and requiring that:
 - (a) any *water discharged* for *secondary takes* is in addition to *water* released for the purpose of meeting a relevant *environmental flow or level* in SCHED3 – Rivers: A Block environmental flows, levels and take limits or SCHED5 – Lakes: Environmental levels and take limits or residual flow; and
 - (b) the impoundment volume and *dam* inflows and outflows are measured or modelled by the consent holder for the *damming* by the *in-stream dam* to inform *freshwater* quantity accounting and *take limits* associated with the *in-stream dam* activities; and
 - (c) where one take point from the *river* is used for a combination of A Block, B Block and *secondary takes*, all *secondary takes* are metered and reported separately to A and B Block takes, unless the consent holder for the *secondary take* can demonstrate how the *secondary take* will be identified separately within the metering record; and
 - (d) *secondary takes* of *stored water* are distinguished from A and B block takes to ensure that *take limits* accurately reflect the amount of *water* taken from the *river*, and do not take into account *stored water* that has been released for a *secondary take*.

DAM-P6 – Managing off-stream dams

Provide for the development and ongoing use of *off-stream dams*, including the associated *damming of water*, where:

- (1) the placement of a new *off-stream dam* is not:
 - (a) within the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (b) on *contaminated land* or *potentially contaminated land*; or

- (c) within an area subject to a *natural hazard*; and
- (2) the applicant demonstrates that the activity will not cause incidental *discharges* of *contaminants* other than *water to land* from *off-stream dams*.

DAM-P7 – Demolition or removal of in-stream dams and weirs

Encourage the demolition or removal of *in-stream dams* or *weirs* where they:

- (1) are not *lawfully established*; or
- (2) cease to be maintained, operated, or used.

DAM-P8 – Risks to people and property

The design, placement, use, *maintenance*, upgrade, replacement, demolition or removal of *dams* or *weirs*:

- (1) does not increase the risk of flooding or inundation of *land* outside of the *dam* or *weir* reservoir unless it arises from the demolition or removal of a *dam* or *weir*; and
- (2) minimises any risk of overspill, leakage, slips, or other types of failure; and
- (3) does not result in:
 - (a) significant erosion of the *bed* or bank of any *water body*, sedimentation, or aggradation; or
 - (b) land instability and property damage; or
 - (c) the creation or exacerbation of *natural hazard* risks; and
- (4) for *classifiable dams*, is in accordance with the Building (Dam Safety) Regulations 2022.

DAM-P9 – Temporary diversions

Provide for the temporary *diversion* of *water* if:

- (1) the activity does not occur within an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO), or if it does occur within an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO) it is not restricted or prohibited by a water conservation order; and
- (2) it does not impede the passage of *desired fish species* or enable the passage of an *undesirable fish species*; and
- (3) the volume and rate of *water* diverted, and the duration and distance of the *diversion*, is minimised to the smallest practicable extent; and
- (4) it has no more than minor adverse *effects* on the *water bodies* and *freshwater* ecosystems.

Rules

Advice notes:

- (1) The taking and using of *water* associated with a *damming* or *diversion* activity is managed in the EFL – Environmental flows, levels and allocation chapter.

- (2) The taking, using, *damming*, *diversion*, or *discharge of water* within, or within a 100 metre *setback* from, a *natural inland wetland* is managed under Part 3 Subpart 1 of the NESF.
- (3) The placement, use, alteration, extension, or reconstruction of *weirs* in, on, over, or under the *bed* of any *river* with respect to fish passage is also managed by regulations 72 and 73 of the NESF. Regulations 62, 64 and 66 of the NESF outline information requirements relating to fish passage for *dams* and *weirs* in, on, over, or under the *bed* of any *river* or connected area that must be provided to ORC within 20 working days after the activity is finished.
- (4) The *diversion of water* associated with a *commercial forestry activity* is managed under Regulation 97 of the NESCF.
- (5) Work affecting archaeological sites is subject to an authority process under the Heritage New Zealand Pouhere Taonga Act 2014. If any activity could modify, damage or destroy any archaeological site(s), an authority (consent) from Heritage New Zealand Pouhere Taonga must be obtained for the work to proceed lawfully.
- (6) Any person constructing a *structure* likely to impede fish passage (including *culverts*, *fords*, *dams* or *diversion structures*) will need to comply with the requirements of the Freshwater Fisheries Regulations 1983, administered by the Department of Conservation.
- (7) Any *dam* that has a *height* of 4 or more metres and holds 20,000 or more cubic metres volume of *water* or other fluid may also require a building consent under the Building Act 2004. All building work on *dams* must comply with the Building Code (Building Regulations 1992) irrespective of the size of the dam. Section 157 and 159 of the Building Act 2004 additionally apply to all dams.
- (8) For good design practice and advice on dams, reference should be made to the New Zealand Dam Safety Guidelines, 2023 – NZSOLD.
- (9) *Classifiable dams* must also comply with the Building (Dam Safety) Regulations 2022.
- (10) Any *diversion of water* associated with an *in-stream dam* or *weir* is managed by DAM-R2 to DAM-R6.

DAM-R1 – Off-stream dams

DAM-R1-PER1

The *damming of water* by an *off-stream dam* is a permitted activity if all of the following conditions are met:

- (1) the *off-stream dam*:
 - (a) is maintained in a good and safe condition; and
 - (b) is managed in accordance with the Building (Dam Safety) Regulations 2022 if it is a *classifiable dam*; and
- (2) any *off-stream dam*, and reservoir resulting from the *damming* which was not *lawfully established* before 31 October 2024, is not:

- (a) in the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (b) on *contaminated land* or *potentially contaminated land*; or
 - (c) within an area subject to a *natural hazard*; and
- (3) the activity does not:
- (a) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (b) disturb the roosting or nesting of *indigenous* birds and bats; and
- (4) if the volume of *water* impounded by a new *off-stream dam* is greater than 1000 cubic metres, the following information is supplied to ORC within 20 working days of the construction of the *off-stream dam*:
- (a) the physical address, legal description of, and map showing the location of the *off-stream dam*; and
 - (b) the reservoir capacity and dimensions of the *off-stream dam*.

DAM-R1-DIS1

Unless provided for by DAM-R1-PER1, the *damming of water* by an *off-stream dam* is a discretionary activity.

DAM-R2 – Temporary in-stream dams and weirs

DAM-R2-PER1

The placement and use of an *in-stream dam* or *weir* for no longer than a total of 30 days in any consecutive 12-month period, including any associated *damming* or *diversion of water*, use and disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge of water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *in-stream dam* or *weir* is not a *classifiable dam*; and
- (2) the activity does not:
 - (a) occur within:
 - (i) an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO) or if it does occur within an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO) the *damming or diversion* is not restricted or prohibited by a water conservation order; or
 - (ii) Lake Wānaka or the Upper Clutha River/Mata-au between its source to its confluence with the Cardrona River/Ōrau, as identified on MAP[DAM] - Water bodies where long-term damming is prohibited and SCHED2 - Water bodies where long-term damming is prohibited, other than for the duration of an emergency as declared by the Guardians of Lake Wānaka under the Lake Wānaka Preservation Act 1973; or

- (iii) the *Waitaki catchment*; or
 - (iv) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (v) any *mātaimai* or *taiāpure*; or
 - (vi) a *drinking water protection zone*; or
- (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (d) frustrate the use or integrity of any *nationally significant infrastructure, regionally significant infrastructure, or other lawfully established structure*; or
 - (e) impede the passage of a *desired fish species* or enable the passage of an *undesirable fish species* where this passage does not already exist; or
 - (f) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (g) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (h) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; and
- (3) for a *weir* located in, on, over, or under the *bed* of any *river*, the placement and use of the *weir* meets the permitted activity conditions of regulation 72(2) of the NESF; and
 - (4) the level of any *lake* or the downstream flow in any *river* is not permanently reduced below an *environmental flow or level* in SCHED3 – Rivers: A Block environmental flows, levels and take limits or SCHED5 – Lakes: Environmental levels and take limits, as a result of the activity; and
 - (5) the activity meets any relevant *take limits* in environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels, and take limits and SCHED5 – Lakes: Environmental levels and take limits; and
 - (6) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
 - (7) any *discharge*:
 - (a) does not contain any *hazardous substance, pest, pest agent, unwanted organism, or organism of interest* unless it is associated with the passive flow of *water* through or over the *in-stream dam* or *weir*; and
 - (b) complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the activity; and
 - (8) at least ten working days prior to the placement of the *in-stream dam* or *weir*, ORC is notified of the timing, location, and extent of the activity; and
 - (9) within ten working days after the completion of the activity:
 - (a) any plant, equipment, or machinery associated with the activity is removed from the *bed*; and

- (b) the surrounding *bed* is returned as near as practicable to its original channel shape, area, depth, and gradient that existed prior to works; and
- (c) any debris associated with the activity are removed.

DAM-R2-DIS1

The placement and use of an *in-stream dam* or *weir* for no longer than a total of 30 days in any consecutive 12-month period, including any associated *damming* or *diversion of water*, use and disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge of water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a discretionary activity provided:

- (1) the activity is not prohibited under DAM-R2-PR1; and
- (2) the activity is not non-complying under DAM-R2-NC1; and
- (3) the activity is not permitted under DAM-R2-PER1.

DAM-R2-NC1

The placement and use of an *in-stream dam* or *weir* for no longer than a total of 30 days in any consecutive 12-month period, including any associated *damming* or *diversion of water*, use and disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge of water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a non-complying activity in Welcome Creek.

DAM-R2-PR1

The placement and use of an *in-stream dam* or *weir* for no longer than a total of 30 days in any consecutive 12-month period, including any associated *damming* or *diversion of water*, use and disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge of water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a prohibited activity in the following areas:

- (1) an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO) and where the *damming* or *diversion of water* is prohibited by a water conservation order; and
- (2) Lake Wānaka or the Upper Clutha River/Mata-au between its source to its confluence with the Cardrona River/Ōrau, as identified on MAP[DAM] - Water bodies where long-term damming is prohibited and SCHED2 – Water bodies where long-term damming is prohibited, other than for the duration of an emergency as declared by the Guardians of Lake Wānaka under the Lake Wānaka Preservation Act 1973.

DAM-R3 – Other in-stream dams and weirs

DAM-R3-DIS1

The placement and use of an *in-stream dam* or *weir* for longer than a total of 30 days in any consecutive 12-month period or the replacement or upgrading of an *in-stream dam* or *weir*, including any associated *damming* or *diversion of water*, use and disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge of water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a discretionary activity provided:

- (1) the activity is not prohibited under DAM-R3-PR1; and
- (2) the activity is not non-complying under DAM-R3-NC1.

DAM-R3-NC1

The placement and use of an *in-stream dam* or *weir* for longer than a total of 30 days in any consecutive 12-month period, including any associated *damming* or *diversion of water*, use and disturbance of the *bed* of a *lake* or *river* deposition of *bed substrate*, and *discharge of water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a non-complying activity in Welcome Creek.

DAM-R3-PR1

The placement of an *in-stream dam* or *weir* for longer than a total of 30 days in any consecutive 12-month period, including any associated *damming* or *diversion of water*, use and disturbance of the *bed* of a *lake* or *river* deposition of *bed substrate*, and *discharge of water* or *contaminants* into *water*, is a prohibited activity in the following areas:

- (1) an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO) and where the *damming* or *diversion of water* is prohibited by a water conservation order; and
- (2) Lake Wānaka or the Upper Clutha River/Mata-au between its source to its confluence with the Cardrona River/Ōrau, as identified on MAP[DAM] – Water bodies where long-term damming is prohibited and SCHED2 – Water bodies where long-term damming is prohibited, other than for the duration of an emergency as declared by the Guardians of Lake Wānaka under the Lake Wānaka Preservation Act 1973; and
- (3) the Poumāhaka River, including its tributaries, from its sources to its confluence with the Clutha River/Mata-Au, as identified on MAP[DAM] – Water bodies where long-term damming is prohibited and SCHED2 – Water bodies where long-term damming is prohibited; and
- (4) Waipahī River, including its tributaries, from its source to its confluence with the Poumāhaka River, as identified on MAP[DAM] – Water bodies where long-term damming is prohibited and SCHED2 – Water bodies where long-term damming is prohibited; and
- (5) Lower Clutha River/Mata-Au from its confluence with the Poumāhaka River to the sea at the mouths of the Matau and Koau Branches, as identified on MAP[DAM] – Water bodies where long-term damming is prohibited and SCHED2 – Water bodies where long-term damming is prohibited.

DAM-R4 – Use of existing in-stream dams and weirs

DAM-R4-PER1

The use of an *in-stream dam* or *weir* that was *lawfully established* as at 31 October 2024, including any associated use of the *bed* of a *lake* or *river*, *damming* or *diversion of water* and *discharge of water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *in-stream dam* or *weir*:
 - (a) is not a *classifiable dam*; and

- (b) is maintained in a good and safe condition; and
- (c) is not located in the *Waitaki Catchment*; and
- (2) for a *weir* located in, on, over, or under the *bed* of any *river*, the placement and use of the *weir* meets the permitted activity conditions of regulation 72(2) of the NESF; and
- (3) if the *in-stream dam* or *weir* is identified in an *action plan* as a *structure* requiring remediation to provide for passage of a *desired fish species* or to prevent the passage of an *undesirable fish species*, the remediation has been completed by the date specified in the *action plan*; and
- (4) the level of any *lake* or the downstream flow in any *river* is not reduced below an *environmental flow or level* identified in SCHED3 – Rivers: A Block environmental flows, levels and take limits or SCHED5 – Lakes: Environmental levels and take limits, as a result of the activity; and
- (5) any *discharge* from the *in-stream dam* or *weir*:
 - (a) complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the activity; and
 - (b) does not contain any *hazardous substance*, *pest*, *pest agent*, *unwanted organism*, or *organism of interest* unless it is associated with the passive flow of *water* through or over the *in-stream dam* or *weir*; and
- (6) the activity does not cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage.

DAM-R4-DIS1

The use of an *in-stream dam* or *weir* that was *lawfully established* as at 31 October 2024, including any associated use of the *bed* of a *lake* or *river*, *damming* or *diversion* of *water* and *discharge* of *water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a discretionary activity provided:

- (1) the activity is not non-complying under DAM-R4-NC1; and
- (2) the activity is not permitted under DAM-R4-PER1.

DAM-R4-NC1

The use of an *in-stream dam* or *weir* that was *lawfully established* as at 31 October 2024, including any associated use of the *bed* of a *lake* or *river*, *damming* or *diversion* of *water* and *discharge* of *water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a non-complying activity in Welcome Creek.

DAM-R5 – Maintenance of in-stream dams and weirs

DAM-R5-PER1

The *maintenance* of an *in-stream dam* or *weir*, including any associated *damming* or *diversion* of *water*, disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge* of *water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *in-stream dam* or *weir* is *lawfully established*; and

- (2) the level of any *lake* or the downstream flow in any *river* is not reduced below an *environmental flow or level* identified in SCHED3 – Rivers: A Block environmental flows, levels and take limits or SCHED5 – Lakes: Environmental levels and take limits as a result of the activity; and
- (3) the *maintenance* works do not:
 - (a) increase the volume of *water* impounded by the *in-stream dam* or *weir* beyond what is *lawfully established*; or
 - (b) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (c) impede the passage of a *desired fish species* or enable the passage of an *undesirable fish species* where this passage does not already exist; or
 - (d) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (e) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (f) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; and
- (4) any build-up of sediment or debris against the *in-stream dam* or *weir* which may adversely affect flood risk, drainage capacity or *bed* or bank stability is removed as soon as practicable; and
- (5) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (6) any *discharge*:
 - (a) does not contain any *hazardous substance, pest, pest agent, unwanted organism, or organism of interest* unless it is associated with the passive flow of *water* through or over the *in-stream dam* or *weir*; and
 - (b) complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards 200 metres downstream of the activity; and
- (7) within ten working days after the completion of the activity:
 - (a) any plant, equipment, or machinery associated with the activity is removed from the *bed*; and
 - (b) the surrounding *bed* is returned as near as practicable to its original channel shape, area, depth, and gradient that existed prior to works; and
 - (c) any debris associated with the activity are removed.

DAM-R5-DIS1

Unless provided for by DAM-R5-PER1, the *maintenance* of an *in-stream dam* or *weir*, including any associated *damming* or *diversion* of *water*, disturbance of the *bed* of a *lake* or *river* deposition of *bed substrate* and *discharge* of *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, or *contaminants* into *water*, is a discretionary activity.

DAM-R6 – Demolition or removal of dams and weirs

DAM-R6-PER1

The demolition or removal of any *in-stream dam* or *weir* or part of any *in-stream dam* or *weir*, including any associated disturbance of the *bed of a lake or river* deposition of *bed substrate*, *discharge of water* or *contaminants* into *water*, or onto or into *land* in circumstances where a *contaminant* may enter *water*, and *damming* or *diversion of water*, is a permitted activity if all of the following conditions are met:

- (1) the *in-stream dam* is not a *classifiable dam*; and
- (2) the *in-stream dam* or *weir* is not removed without the prior written permission of the person or agency responsible for operating or maintaining the *in-stream dam* or *weir*; and
- (3) if the *in-stream dam* or *weir* prevents the passage of *undesirable fish species*, the removal of the *in-stream dam* or *weir* does not provide for the passage of *undesirable fish species*; and
- (4) the activity does not:
 - (a) occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat, unless the removal of the *in-stream dam* or *weir* will provide for the passage of a *desired fish species*; or
 - (ii) a *mātaitai* or *taiāpure*; or
 - (iii) a *drinking water protection zone*; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (d) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (e) frustrate or prevent the exercise of a lawful take of *water* by any other person; or
 - (f) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (g) involve the use of explosives; and
- (5) where any part of the *in-stream dam* or *weir* remains in situ, the section that remains in situ does not present a risk to navigation or safety; and
- (6) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (7) any *discharge*:
 - (a) does not contain any *hazardous substance*, *pest*, *pest agent*, *unwanted organism*, or *organism of interest* unless it is associated with the passive flow of *water* through or over the *in-stream dam* or *weir*; and

- (b) complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards 200 metres downstream of the activity; and
- (8) at least ten working days prior to the activity, ORC is notified of the timing, location, and extent of the activity; and
- (9) within ten working days after the completion of the activity:
 - (a) any plant, equipment, or machinery associated with the activity is removed from the *bed*; and
 - (b) any debris associated with the activity are removed.

DAM-R6-DIS1

Unless provided for by DAM-R6-PER1, the demolition or removal of any *in-stream dam* or *weir* or part of any *in-stream dam* or *weir*, including any associated disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, *discharge* of *water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, and *damming* or *diversion* of *water* is a discretionary activity.

DAM-R7 – Diversion of floodwaters outside of the bed of a lake or river

DAM-R7-PER1

The *diversion* of *floodwaters* outside of the *bed* of a *lake* or *river* to alleviate surface flooding, and any associated *discharge* of *water* or *contaminants* in *floodwaters* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) any *discharge* is within or from the same catchment in which the *water* would naturally flow; and
- (2) the activity does not cause or exacerbate erosion, *land* instability, or property damage.

DAM-R7-DIS1

Unless provided for by DAM-R7-PER1, the *diversion* of *floodwaters* outside of the *bed* of a *lake* or *river* to alleviate surface flooding, and any associated *discharge* of *water* or *contaminants* in *floodwaters* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a discretionary activity.

DAM-R8 – Diversion of water within the bed of a lake or river

DAM-R8-PER1

The *diversion* of *water* within the *bed* of a *lake* or *river*, including any associated disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge* of *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the activity is for the purpose of:

- (a) facilitating temporary works in the *bed* of a *lake* or *river* associated with the *maintenance*, alteration, placement, or replacement of a *lawfully established structure*; or
 - (b) protecting, restoring, or enhancing the ecosystem health, *indigenous biodiversity*, or hydrological functioning of *water bodies*; and
- (2) the activity occurs for no longer than a total of 14 days in any consecutive 12-month period and the course of the *water* is returned as near as practicable to the original course that existed immediately prior to the activity; and
- (3) the total volume of *water* is returned within 100 metres of the *diversion* point; and
- (4) the activity does not:
- (a) occur within:
 - (i) an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO), or if it does occur within an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO) the *diversion* of *water* is not restricted or prohibited by a water conservation order; or
 - (ii) the *Waitaki Catchment*; or
 - (iii) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (iv) a *mātaitai* or *taiāpure*; or
 - (v) a *drinking water protection zone*; or
 - (b) occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); or
 - (c) cause or exacerbate flooding or erosion within any *water body* or any property; or
 - (d) impede the passage of a *desired fish species* or enable the passage of an *undesirable fish species* where this passage does not already exist; or
 - (e) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (f) frustrate the use or integrity of any *nationally significant infrastructure*, *regionally significant infrastructure* or other *lawfully established structure*; or
 - (g) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (h) frustrate or prevent the exercise of any lawful *water take*; or
 - (i) reduce the level of any *lake* or the downstream flow in any *river* below an *environmental flow* or *level* identified in SCHED3 – Rivers: A Block environmental flows, levels and take limits or SCHED5 – Lakes: Environmental levels and take limits; and
- (5) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
- (6) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the activity; and

- (7) at least ten working days prior to the activity, ORC is notified of the timing, location and extent of the activity.

DAM-R8-DIS1

The *diversion of water* within the *bed* of a *lake* or *river*, including any associated disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge* of *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a discretionary activity provided:

- (1) the activity is not prohibited under DAM-R8-PR1; and
- (2) the activity is not non-complying under DAM-R8-NC1; and
- (3) the activity is not permitted under DAM-R8-PER1.

DAM-R8-NC1

The *diversion of water* within the *bed* of a *lake* or *river*, including any associated disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge* of *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a non-complying activity in Welcome Creek.

DAM-R8-PR1

The *diversion of water* within the *bed* of a *lake* or *river* including any associated disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge* of *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a prohibited activity if the activity occurs within an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO) and the *diversion of water* is prohibited by a water conservation order.

DAM-R9 – All other in-stream damming or diversion activities

DAM-R9-DIS1

Unless provided for by any other rule in this chapter, the *damming* or *diversion of water*, use or disturbance of the *bed* of a *lake* or *river*, deposition of *bed substrate*, and *discharge* of *water* or *contaminants* into *water* or onto or into *land* in circumstances where a *contaminant* may enter *water* associated with an *in-stream dam* or *weir*, is a discretionary activity.

EARTH – Earthworks and bores

Advice notes:

- (1) The provisions in this chapter do not apply to *earthworks* associated with forestry, which are managed by the National Environmental Standards for Commercial Forestry 2017 (NESCF).
- (2) The provisions in this chapter do not apply to the *discharge* of dust suppressants, which is managed by provisions in the OTH - Other discharges chapter.
- (3) Where *earthworks* are occurring on *contaminated land* or *potentially contaminated land*, the provisions in the CL – Contaminated land chapter apply in addition to the provisions of the EARTH chapter.

Objectives

EARTH-O1 – Earthworks and bores

The use of *land* for *earthworks* and *drilling* is enabled whilst maintaining or enhancing *land* stability and soil health and maintaining *water* quality and quantity.

Policies

EARTH-P1 – Earthworks

Avoid, or where avoidance is not achievable, minimise adverse *effects* from *earthworks* and associated *discharges* of sediment by ensuring that:

- (1) the activity is managed in accordance with best practice erosion and *sediment control measures* tailored to the site characteristics, the project, and the characteristics of the receiving *environment* in which it is occurring. Where it is applicable and adequate, use the Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region 2016 (Auckland Council Guideline Document GD2016/005); and
- (2) the activity does not cause or exacerbate soil erosion, *land* instability, flooding, or property damage; and
- (3) the risk of any *discharge* or loss of sediment to *water* bodies during and after the *earthworks* is avoided where practicable, or otherwise minimised; and
- (4) resource consents are granted only where consent applications contain:
 - (a) an erosion and sediment control management plan prepared in accordance with APP16 – Erosion and sediment control plans that demonstrates how site-specific measures will be implemented, and
 - (b) an accidental discovery protocol that outlines actions taken if the *earthworks* disturb an archaeological site.

EARTH-P2 – Bores and drilling

Prevent contamination of groundwater and the mixing of *water* from different *aquifers* by:

- (1) ensuring the *drilling*, construction, maintenance and decommissioning of *bores* complies with NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock; and
- (2) minimising the risk of:
 - (a) *contaminants* entering the *aquifer*; and
 - (b) the creation of a hydraulic connection between penetrated *aquifers*; and
 - (c) the leaking of *water* to the surface through the *bore* casing; and
 - (d) *bore* interference affecting other *bore* users; and
- (3) giving preference to above-ground *bore* head design; and
- (4) ensuring Council’s information on the *drilling* of *bores* is accurate and comprehensive.

Rules

Advice notes:

- (1) Consent applicants should check with their local territorial authority to confirm if *earthworks* activities require District or City Council consent.
- (2) Work affecting archaeological sites is subject to an authority process under the Heritage New Zealand Pouhere Taonga Act 2014. If any activity could modify, damage or destroy any archaeological site(s), an authority (consent) from Heritage New Zealand Pouhere Taonga must be obtained for the work to proceed lawfully.

EARTH-R1 – Earthworks

EARTH-R1-PER1

The use of *land* for *earthworks*, and the associated *discharge* of sediment or other *contaminants* to *water*, or onto or into *land* including where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) for *earthworks* (excluding *earthworks* for farm-tracks, riparian planting, or erosion control undertaken in accordance with condition EARTH-R1-PER1(2)) either:
 - (a) the area of *earthworks* is up to and including 2500 square metres in any consecutive 12-month period per *landholding*; and
 - (i) *earthworks* do not occur within 10 metres of the *bed* of a *river* or *lake*, a *modified watercourse*, a *bore*, or *coastal water* and
 - (ii) *earthworks* occur on a *slope* less than 10 degrees; or
 - (b) the area of *earthworks* is up to and including 1000 square metres in any consecutive 12-month period per *landholding*; and
 - (i) *earthworks* do not occur within 50 metres of the *bed* of a *river* or *lake*, a *modified watercourse*, a *bore*, or *coastal water*; and
 - (ii) *earthworks* occur on a *slope* greater than 10 degrees and less than 30 degrees; or
 - (c) the area of *earthworks* is greater than 2500 square metres but less than 10,000 square metres in any consecutive 12-month period per *landholding*; and

- (i) *earthworks* do not occur within 50 metres of the *bed* of a *river* or *lake*, a *modified watercourse*, a *bore*, or *coastal water*; and
 - (ii) *earthworks* occur on a *slope* less than 10 degrees; and
- (2) for *earthworks* with an area of over 250 square metres in any consecutive 12-month period per *landholding*, best practice erosion and *sediment control measures* are implemented in accordance with Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region 2016 (Auckland Council Guideline Document GD2016/005); and
- (3) there is no *discharge* of sediment or other *contaminants* to any part of a *stormwater network*, except where prior written approval is obtained from the network operator; and
- (4) if the *earthworks* disturb an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol is applied; and
- (5) the *earthworks* and associated *discharge* do not occur within:
 - (a) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (b) 50 metres of a *wetland* unless it is a *natural inland wetland* managed by Regulation 38(2) of the NESF; or
 - (c) any *mātaitai* or *taiāpure*; or
 - (d) a *drinking water protection zone*; or
 - (e) an area subject to a *natural hazard*; or
 - (f) a *critical source area*; and
- (6) there are no *earthworks* on, or *discharges* from, into or onto, *contaminated land* or *potentially contaminated land* unless the activity meets all of the conditions of CL-R1-PER1; and
- (7) any *discharge* leaving the site does not contain any *hazardous substance*, *pest*, *pest agent*, *unwanted organism* or *organism of interest*; and
- (8) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards; and
- (9) the *earthworks* and associated *discharge* do not:
 - (a) result in flooding, permanent or semi-permanent ponding or overland flow following the completion of the *earthworks*; or
 - (b) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; and
- (10) soil or debris from *earthworks* is not placed where it can enter a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse* (except where *earthworks* involve the clearing, maintenance or infilling of an *artificial watercourse*), or *coastal water*; and
- (11) exposed earth is stabilised within 1 month of completion of the *earthworks* to minimise erosion and avoid *slope* failure; and

- (12) the deposition of soil or *cleanfill material* into *land* does not cause the background *contaminant* concentration levels set out in APP12 – Background contaminant concentration levels to be exceeded.

EARTH-R1-DIS1

Unless provided for by EARTH-R1-PER1, the use of *land* for *earthworks*, and the associated *discharge* of sediment or other *contaminants* to *water*, or onto or into *land* including where a *contaminant* may enter *water*, is a discretionary activity.

EARTH-R2 – Fire breaks

EARTH-R2-PER1

The use of *land* for *earthworks* for a firebreak, and the associated *discharge* of sediment or other *contaminants* to *water*, or onto or into *land* including where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *earthworks* are for the purpose of a firebreak and the firebreak is constructed under the direction of Fire and Emergency New Zealand; or
- (2) the *earthworks* are for the purpose of a firebreak and the firebreak is constructed pre-emptively on a boundary with *land* managed by the Department of Conservation.

EARTH-R2-DIS1

Unless provided for by EARTH-R2-PER1, the use of *land* for *earthworks* for a firebreak, and the associated *discharge* of sediment or other *contaminants* to *water*, or onto or into *land* including where a *contaminant* may enter *water*, is a discretionary activity.

EARTH-R3 – Existing bores

EARTH-R3-PER1

The use of *land* for the operation, maintenance, or repair of a *bore* is a permitted activity if all of the following conditions are met:

- (1) the *bore* is secured and maintained at all times to prevent:
 - (a) the entry of *contaminants*; and
 - (b) the uncontrolled *discharge* or leakage of *water* onto or into *land*; and
 - (c) the mixing of *water* from different *aquifers*; and
- (2) the *bore* has a functioning backflow prevention device fitted to the *bore* head; and
- (3) there are no *hazardous substances* stored within 20 metres of the *bore*; and
- (4) the *bore* is maintained in accordance with section 2.5 of NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock; and
- (5) records of maintenance and repairs are kept in accordance with section 4 of NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock and submitted to ORC within 10 working days of maintenance or repair occurring, or on request by ORC.

EARTH-R3-DIS1

Unless provided for by EARTH-R3-PER1, the use of *land* for the operation, maintenance, or repair of a *bore* is a discretionary activity.

EARTH-R4 – Decommissioning bores

EARTH-R4-PER1

The use of *land* for the decommissioning of a *bore* is a permitted activity if all of the following conditions are met:

- (1) decommissioning is completed in accordance with section 2.7 of NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock; and
- (2) a record of the decommissioning works is kept in accordance with section 4 of NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock and submitted to ORC within 10 working days of decommissioning occurring.

EARTH-R4-DIS1

Unless provided for by EARTH-R4-PER1 the use of *land* for the decommissioning of a *bore* is a discretionary activity.

EARTH-R5 – Drilling

EARTH-R5-PER1

The use of *land* for *drilling* for a purpose other than the construction of a *bore* is a permitted activity if all of the following conditions are met:

- (1) the *drilling* does not penetrate an *aquifer*; and
- (2) for directional or horizontal *drilling*, the *drilling* is above the *water* table; and
- (3) the *drilling* does not occur:
 - (a) in or within 3 metres of a *water body* (excluding a *natural inland wetland*); or
 - (b) in or within 100 metres of a *natural inland wetland*; or
 - (c) within a *drinking water protection zone*; or
 - (d) on *contaminated land* or *potentially contaminated land* unless the activity meets all the conditions of clause 8 of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011; and
- (4) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol is applied; and
- (5) the *drilling* complies with NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock where applicable.

EARTH-R5-CON1

The use of *land* for *drilling* for the construction of a *bore*, including the alteration or replacement of an existing *bore*, is a controlled activity if all of the following conditions are met:

- (1) the *drilling* does not occur:
 - (a) on the *bed* of a *lake* or *river*; or
 - (b) within 100 metres of, a *natural inland wetland*; or
 - (c) on *contaminated land* or *potentially contaminated land*; or
 - (d) within the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; and
- (2) the *drilling* and construction of the *bore* complies with NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock; and
- (3) the *bore* is constructed, operated and maintained to avoid
 - (a) *contaminants* from entering the *aquifer*; and
 - (b) the creation of a hydraulic connection between penetrated *aquifers*; and
 - (c) the leaking of *water* to the surface through the *bore* casing; and
- (4) the *bore* has an above ground *bore* head design, or below ground only if it can be demonstrated that below ground is necessary to prevent freezing of the *bore* head; and
- (5) in areas of Otago with known artesian *groundwater* conditions including the Papakaio Aquifer, lower Taiari/Taieri Aquifer, and deep areas in the Maniototo Tertiary Aquifer, using corrosion-resistant casing material; and
- (6) where the *bore* is to be used for the supply of *water* from an unconfined *aquifer*, the *bore* must adequately penetrate the *aquifer* by having a depth 3 times the seasonal fluctuations interval below the mean *groundwater* level; and
- (7) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol is applied; and
- (8) a record is kept in accordance with section 4 of NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock, and submitted to ORC within 5 days of the completion of the *bore*.

ORC reserves control over the following matters:

- (1) the location of the *bore* including its relationship to other *bores*, *surface water*, and other activities; and
- (2) the depth of the *bore*; and
- (3) the design and material of the *bore*; and
- (4) the design and management of the *bore* head, in particular the protection of the *bore* and *groundwater* if the *bore* head is below ground; and
- (5) the purpose of the *bore*; and
- (6) the method of *drilling* or excavation; and

- (7) the lapsing period and duration of the resource consent; and
- (8) review of the conditions of the resource consent; and
- (9) the need for a bond; and
- (10) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (11) the extent to which the activity is consistent with the matters set out in APP8 – Mana whenua environmental indicators.

EARTH-R5-DIS1

Unless provided for by EARTH-R5-PER1 or EARTH-R5-CON1 the use of *land* for *drilling* is a discretionary activity.

EFL – Environmental flows, levels and allocation

Objectives

EFL-O1 – Efficiency

The amount of *water* which may be taken is reasonable for its intended use and any *water* that is taken is used efficiently.

Policies

EFL-P1 – Environmental flows, levels and take limits for rivers, lakes, and groundwater

Set *environmental flows and levels and take limits* for *rivers, natural lakes, controlled lakes, and groundwater* that:

- (1) support the achievement of the objectives and policies in IM – Integrated management; and
- (2) support the achievement of the *environmental outcomes*, target *attribute* states, interim target *attribute* states, and alternative criteria for each *FMU* and rohe set out in chapters FMU1 to FMU5 of this plan; and
- (3) for *rivers*:
 - (a) protect, or improve flow and channel behaviour to ensure that it reflects natural flow and channel behaviour to the extent reasonably practicable; and
 - (b) do not result in drying of *river* reaches or, where a *river* has naturally drying reaches, the frequency, extent and duration of drying is not materially exacerbated by the taking of *water*; and
- (4) for *natural lakes and controlled lakes*:
 - (a) provide for *water* level fluctuations within the *natural range* of the *lake*; and
 - (b) maintain, or where appropriate improve, flows into connected *rivers, natural lakes, controlled lakes, and natural wetlands*; and
 - (c) do not result in an increase in the frequency or duration of low levels in the *lakes* or low outflows from the *lakes* compared to natural fluctuations; and
- (5) for *groundwater*:
 - (a) maintain long-term *aquifer* storage volumes, mean annual *groundwater* levels and artesian pressure (where applicable); and
 - (b) avoid *aquifer* compaction and prevent seawater intrusion into *aquifers* as a result of the taking of *water*.

EFL-P2 – Blocks for the take of *water* from *rivers*

Provide for the allocation of *water* in blocks where:

- (1) the *A Block*:

- (a) is the first block of *water* that can be taken when flows are above the A Block *minimum flow* for the *river*; and
 - (b) provides the highest level of reliability; and
- (2) the *B Blocks*:
- (a) are blocks of *water* that can be taken during periods of higher flows in the *river* when flows are above the B Block *minimum flows* for the *river*; and
 - (b) have a lower reliability than A *Block*.

EFL-P3 – A Block Minimum flows and take limits for rivers

To achieve EFL-P1 – Environmental flows, levels and take limits for rivers, lakes, and groundwater, apply the following A Block *minimum flows* and *take limits* for each catchment, reach or tributary of a *river*:

- (1) for *rivers* in Part 1 of SCHED3 – Rivers: A Block environmental flows, levels and take limits, the *minimum flows* and *take limits* set out in Part 1 SCHED3 – Rivers: A Block environmental flows, levels and take limits; and
- (2) for *rivers* in Part 2 of SCHED3– Rivers: A Block environmental flows, levels and take limits:
 - (a) *minimum flows* set out in Part 2 of SCHED3 – Rivers: A Block environmental flows, levels and take limits; and
 - (b) interim *take limits* calculated in accordance with EFL-M1 – Methodology for setting interim A Block take limits, that apply until the *take limits* in (c) take effect; and
 - (c) *take limits* that take effect from the date specified in Part 2 of SCHED3 – Rivers: A Block environmental flows, levels and take limits; and
- (3) for *rivers* in Part 3 of SCHED3 – Rivers: A Block environmental flows, levels and take limits:
 - (a) *minimum flows* set out in Part 3 of SCHED3 – Rivers: A Block environmental flows, levels and take limits; and
 - (b) interim *take limits* calculated in accordance with EFL-M1 – Methodology for setting interim A Block take limits for rivers in Part 3 of SCHED3 - Rivers: A Block environmental flows, levels and take limits; and
- (4) for *rivers* in Part 4 of SCHED3 – Rivers: A Block environmental flows, levels and take limits:
 - (a) the *minimum flows* are:
 - (i) calculated in accordance with EFL-M2 – Methodology for setting default A Block minimum flows; or
 - (ii) set as alternative *minimum flows* that meet the requirements of Policy EFL-P1 – Environmental flows, levels and take limits for rivers, lakes, and groundwater; and
 - (b) interim *take limits* calculated in accordance with EFL-M1 – Methodology for setting interim A Block take limits; and
- (5) for all other *rivers* not listed in Parts 1 to 4 of SCHED3 – Rivers: A Block environmental flows, levels and take limits:

- (a) default *minimum flows* calculated in accordance with EFL-M2 – Methodology for setting default A Block minimum flows; and
 - (b) default *take limits* calculated in accordance with EFL-M3 – Methodology for setting default A Block take limits; and
- (6) for all *rivers* listed in Parts 2, 3 and 4 of SCHED3 – Rivers: A Block environmental flows, levels and take limits, which are subject to an interim *take limit*:
- (a) no additional water is to be allocated; and
 - (b) no allocation made available as a result of the following is allocated to a new resource consent, unless it is the result of the transfer of a resource consent in accordance with Rule EFL-R14:
 - (i) replacement of a *valid resource consent*, or
 - (ii) expiry of a resource consent not affected by section 124 of the RMA; or
 - (iii) surrender of any resource consent.

EFL-P4 – B Block Minimum flows and take limits for rivers

Encourage the taking of *water* during periods of higher flows in *rivers* while achieving EFL-P1 – Environmental flows, levels and take limits for rivers, lakes, and groundwater by:

- (1) applying the following B Block *minimum flows* and *take limits*:
- (a) for *rivers* in Part 1 of SCHED4 – Rivers: B Block environmental flows, levels and take limits, the *minimum flows* and *take limits* set out in Part 1 of SCHED4 – Rivers: B Block environmental flows, levels and limits; and
 - (b) for *rivers* in Part 2 of SCHED4 – Rivers: B Block environmental flows, levels and take limits:
 - (i) interim *minimum flows* calculated in accordance with EFL-M4 – Methodology for setting interim B Block *minimum flows*; and
 - (ii) interim *take limits* calculated in accordance with EFL-M5 – Methodology for setting interim B Block take limits; and
 - (c) for all *rivers* not listed in SCHED4 – Rivers: B Block environmental flows, levels and take limits:
 - (i) B Block *minimum flows* calculated in accordance with EFL-M6 – Methodology for setting default B Block minimum flows, and take limits calculated in accordance with EFL-M7 – Methodology for setting default B Block take limits, to ensure that 75% of the flow remains in the *river* during periods of higher flows; or
 - (ii) alternative *minimum flows* and *take limits* that meet the requirements of Policy EFL-P1 – Environmental flows, levels and take limits for rivers, lakes, and groundwater; and
- (2) despite (1), taking into account existing B Block takes when determining *minimum flows* and *take limits* for a new take to ensure that all B Block takes from a *river* are subject to the same relevant *minimum flows* and *take limits*; and

- (3) requiring site specific *river flows* for high flow takes from tributaries that provide for at least 75 percent of the flow to remain in the tributary.

EFL-P5 – Application of site-specific river flows

Consider the use of *site-specific river flows* for surface water takes, in addition to the relevant *environmental flows and levels* where:

- (1) the *site-specific river flow* is required to achieve EFL-P1 – Environmental flows, levels and take limits for rivers, lakes, and groundwater; and
- (2) there are site specific *values* requiring further protection, including:
 - (a) *habitat* requirements of *indigenous freshwater species* and *threatened species*; and
 - (b) *habitat* requirements of trout and salmon, to the extent that this is consistent with (2)(a); and
 - (c) the significant and outstanding *values* of *outstanding water bodies*; and
 - (d) *values* listed in FMU1 to FMU5 (whichever is relevant); and
- (3) they are required to provide for the reliability of supply for *lawfully established* downstream takes of *water*; and
- (4) they are required for B Block takes from tributaries to ensure that 75 percent of the flow remains in the tributary in accordance with EFL-P4 – B Block Minimum flows and take limits for rivers; and
- (5) compliance with the *site-specific river flow* is able to be determined, either via metering, instream gauging or the physical design of the intake.

EFL-P6 – Management flows for rivers

Consider the use of *management flows* for surface water takes that:

- (1) indicate when and how proportional reductions in the consented rate of take will occur, so that the *minimum flow* or *minimum level* is not breached as a result of the taking of *water*; and
- (2) where practicable, prioritise first, the taking of *water* for the primary purpose of *drinking water supply*, and secondly, *renewable electricity generation*, over all other consumptive takes.

EFL-P7 – Natural lakes

Protect the health and well-being of *natural lakes* by only allowing:

- (1) small takes from *natural lakes* and their tributaries that are permitted under EFL-R1-PER1 and EFL-R2-PER1; or
- (2) *non-consumptive takes*; or
- (3) takes that comply with *environmental flows and levels* and *take limits*, where these have been set for the *natural lakes* and their tributaries in SCHED3 – Rivers: A Block environmental flows, levels and take limits or Part 1 of SCHED5 – Lakes: Environmental levels and take limits.

EFL-P8 – Controlled lakes

Maintain the health and well-being of *controlled lakes* and their connected *rivers* by:

- (1) requiring that outflows from the *lake* are *controlled in a way that achieves the environmental flows and levels* for the connected *river*; and
- (2) only allowing:
 - (a) takes that comply with the relevant *environmental flows and levels* and *take limits* for the *controlled lake* and/or any connected *river* in SCHED3 – Rivers: A Block environmental flows, levels and take limits and Part 2 of SCHED5 – Lakes: Environmental levels and take limits, unless lower *lake* levels are required for:
 - (i) the *maintenance* of existing *regionally or nationally significant infrastructure*; or
 - (ii) the *maintenance* and operation of existing *renewable electricity generation* facilities; or
 - (b) *non-consumptive takes*; or
 - (c) small takes from *controlled lakes* and their tributaries that are permitted under EFL-R1-PER1 and EFL-R2-PER1.

EFL-P9 – Off-stream artificial lakes

Manage the hydrological relationship between *off-stream artificial lakes* and *rivers, natural lakes, controlled lakes, modified watercourses, and natural wetlands* by:

- (1) ensuring that management of the *off-stream artificial lake*, including any take to fill the *off-stream artificial lake* and *discharge* from the *off-stream artificial lake*, occurs in a way that achieves the *environmental flows and levels* for a connected *natural lake, controlled lake, river, modified watercourse, or natural wetland*; and
- (2) where there is no hydraulic connection, not applying the *environmental flows and levels*.

EFL-P10 – Groundwater

To achieve EFL-P1 – Environmental flows, levels and take limits for rivers, lakes, and groundwater, apply the following *take limits* and *environmental flows and levels* for *groundwater takes*:

- (1) for *aquifers* in Part 1 of SCHED6 –Groundwater: Take limits based on *aquifer* specific information; and
- (2) for alluvial ribbon *aquifers* in Part 2 of SCHED6 – Groundwater: Take limits, *take limits, environmental flows and levels* based on the *river* that the *aquifer* is hydraulically connected to; and
- (3) for mapped *aquifers* in Part 3 of SCHED6 – Groundwater: Take limits, default *take limits* calculated in accordance with EFL-M8 – Methodology for setting default take limits for mapped aquifers; and
- (4) for mapped *aquifers* in Part 4 of SCHED6 – Groundwater: Take limits:
 - (a) interim *take limits* calculated in accordance with EFL-M9 – Methodology for setting interim take limits for mapped aquifers; and
 - (b) no additional *water* is to be allocated in the *aquifer* or zone; and

- (c) no allocation made available in the *aquifer* or zone as a result of the following is allocated to a new resource consent, unless it is the result of the transfer of a resource consent in accordance with Rule EFL-R14 - Transfers:
 - (i) renewal of a *valid resource consent*; or
 - (ii) expiry of a resource consent not affected by section 124 of the Resource Management Act 1991; or
 - (iii) surrender of any *resource consent*; and
- (5) for all other *aquifers*, a *take limit* calculated in accordance with EFL-M10 – Methodology for setting take limits for unmapped aquifers; and
- (6) to determine the volume of *water* available to take from an *aquifer*, subtract the maximum annual take from an *aquifer*, calculated using the method in APP17 – Assessing the maximum annual take of *groundwater* from the *take limit* for the *aquifer* specified in SCHED6 – Groundwater: Take limits.

EFL-P11 – Takes to storage

Provide for the storage of *water* where:

- (1) the take of *water* to storage complies with any relevant *environmental flows and levels* or *take limits*; and
- (2) for existing takes, if any *stored water* is *discharged* to a *river*, *natural lake*, *controlled lake*, *modified watercourse*, or *natural inland wetland*, then:
 - (a) the *cross mixing* of *water* is avoided or phased out in accordance with the requirements of policy EFL-P13 – Cross mixing of water; and
 - (b) the *off-stream artificial lake* is managed in accordance with EFL-P9 – Off-stream artificial lakes.

EFL-P12 – Conveyance

Require that systems to convey *water*:

- (1) minimise the interception of overland flows; and
- (2) avoid the interception of *rivers*, *springs* and *wetlands* unless the associated take of *water* is authorised by a resource consent; and
- (3) for new systems:
 - (a) losses are no greater than 10 percent of the rate of take: and
 - (b) any use of a *river* to artificially convey *water* supports the achievement of the *environmental outcomes*, target *attribute* states, interim target *attribute* states, and alternative criteria for the *river* or *FMU* or rohe that the *river* is part of, as set out in Part 3 of this plan; and
- (4) for existing systems with losses greater than 10 percent of the rate of take, information is provided about methods and timeframes for the improvement of conveyance efficiency to reduce losses to the extent practicable, which take into account protection of any existing *freshwater ecosystems* in conveyance *infrastructure*.

EFL-P13 – Cross mixing of water

Reduce the *cross mixing* of water by:

- (1) avoiding new activities that will result in the *cross mixing* of waters, including any use of a *river* to artificially convey water, unless the purpose is to benefit the health (including cultural health) and wellbeing of *freshwater* bodies and *freshwater* ecosystems; and
- (2) to the extent practicable, phasing out existing *cross mixing* of waters, including where *ivers* are used to convey water from a different *water body* in order to supply a *secondary take*, within the timeframes specified in the *long-term visions*; and
- (3) for existing or proposed *cross mixing*, taking into account:
 - (a) *freshwater* or *freshwater* ecosystem values currently supported by *cross mixing*; and
 - (b) the outcome of engagement with Kāi Tahu about the *effect* of *cross mixing* on the mauri of the *water bodies*.

EFL-P14 – Efficiency

Ensure that the amount of *water* which may be taken and used is reasonable and efficient for the intended use by:

- (1) requiring that:
 - (a) the rate and volume of *water* taken is no greater than that determined in accordance with APP18 – Reasonable and efficient water use and conveyance; and
 - (b) where the proposed use is not managed by APP18 – Reasonable and efficient water use and conveyance, information is provided to demonstrate that the rate and volume of take is reasonable and efficient for the intended *water* use, including the use of industry best practice; and
- (2) taking into account industry best practice for the application of *water*; and
- (3) requiring an *irrigation* application efficiency of no less than 80 percent.

EFL-P15 – Identification of over-allocated water bodies

Recognise that *water bodies* which are *over-allocated* in relation to *water* quantity are those that:

- (1) exceed a *take limit* set in:
 - (a) SCHED3 – Rivers: A Block environmental flows, levels and take limits; or
 - (b) SCHED5 – Lakes: Environmental levels and take limits; or
 - (c) SCHED6 – Groundwater: Take limits; or
- (2) are not achieving an *environmental flow or level* set in:
 - (a) SCHED3 – Rivers: A Block environmental flows, levels and take limits; or
 - (b) SCHED5 – Lakes: Environmental levels and take limits; or
 - (c) SCHED6 – Groundwater: Take limits;

including future *take limits* and *environmental flows or levels* which are to be phased in over time.

EFL-P16 – Over-allocation

Avoid any future *over-allocation* of *fresh water* and phase out existing *over-allocation* by:

- (1) avoiding the allocation of any additional *water* that would result in a *take limit* being exceeded; and
- (2) in all *water bodies* identified as *over-allocated*, reducing *over-allocation* in the first instance by:
 - (a) ensuring that the rate and volume of *water* allocated to replacement consents is in accordance with EFL-P19 (1); and
 - (b) unless it is the result of the transfer of a resource consent in accordance with Rule EFL-R14 – Transfers, avoiding the allocation of *water* to a new resource consent where the allocation has been made available in a *water body* as a result of the:
 - (i) replacement of a *valid resource consent*; or
 - (ii) expiry of a resource consent not affected by section 124 of the RMA; or
 - (iii) surrender of any resource consent; and
 - (c) applying catchment expiry dates to all *water* permits that are:
 - (i) in accordance with the catchment expiry dates in APP9 – Consent reviews and catchment expiry dates where applicable, or
 - (ii) determined during the consenting process where no catchment expiry date is specified in APP9 – Consent reviews and catchment expiry dates; and
- (3) where a *take limit* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED5 – Lakes: Environmental levels and take limits or SCHED6 – Groundwater: Take limits is still exceeded in a *water body* after implementing (2), at the catchment expiry date set out in accordance with (2)(c), for all consented takes included in the *take limit* for that *water body*:
 - (a) prioritise reductions for uses that are within the third priority in the hierarchy of obligations set out in LF-WAI-P1 of the PORPS 2021; and
 - (b) require reductions in accordance with a plan agreed by all consent holders in the catchment to collectively reduce the total consented rate or volume of take to be equal to or below the *take limit*; or
 - (c) if a plan is not agreed in accordance with (b), require reductions in the rate and volume of take proportional to the overall reduction needed to ensure that the total consented rate or volume of *water* taken from the *water body* does not exceed the *take limit*:
 - (i) by the timeframes specified in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED5 – Lakes: Environmental levels and take limits or SCHED6 – Groundwater: Take limits where applicable, and
 - (ii) commencing reductions after the catchment expiry date where one is specified in APP9 – Consent reviews and catchment expiry dates; and
- (4) where applicable, phasing the implementation of environmental flows and *take limits* for *rivers* according to the time frames set in SCHED3 – Rivers: A Block environmental flows, levels and take limits; and

- (5) for *rivers* in APP9 – Consent reviews and catchment expiry dates, implementing *minimum flows* by reviewing resource consents in accordance with section 128 of the RMA and the criteria in APP9 – Consent reviews and catchment expiry dates; and
- (6) where the take is for a replacement consent from a tributary or *water body* where the *take limit* has been exceeded, considering whether there are reasonable alternative *water* sources, including any *main stems, lakes* or *groundwater* where the *take limit* has not been exceeded.

EFL-P17 – Backflow prevention

Avoid the contamination of surface *water* or *groundwater* by ensuring that any backflow of *contaminants* through surface *water* intakes or *bores* is prevented.

EFL-P18 – Fish screening

When taking *water* from a *surface water body*, ensure the safe passage of *desired fish species* around, or through, any intake within or back to the source *water body*, by requiring that the intake and *point of take* be designed, operated and maintained in accordance with APP19 – Fish screening.

EFL-P19 – Replacement or substitution of resource consents to take water

Subject to EFL-P16 – Over-allocation, provide for the replacement or substitution of resource consents, provided that:

- (1) the rate and volume of take *for all surface and groundwater takes* does not exceed the lesser of:
 - (a) the rate and volume determined in accordance with APP20 – Methodology for determining actual use of a water permit; or
 - (b) the rate and volume determined in accordance with APP18 – Reasonable and efficient *water* use and conveyance; and
- (2) for *surface water*, the take of *water* is subject to the relevant *take limits* and *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and
- (3) for *groundwater*, the take is subject to:
 - (a) the relevant *take limits for groundwater* in accordance with SCHED6 – Groundwater: Take limits; and
 - (b) the relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, if required by APP21 – Determining the surface water depletion effect of a groundwater take; and
- (4) where it is proposed to substitute a resource consent to take and use *water* with a new resource consent for a different use:
 - (a) there is no change in the location of the take and the *water* is to be used on the same property or properties as the existing resource consent; and
 - (b) there is no increase in the rate or volume of take; and

- (c) the existing consent is to be surrendered upon grant of the substituted consent, which will be granted for a term not exceeding that remaining on the existing consent; and
- (d) in *over-allocated* catchments, the substituted consent does not allow an increase in actual *water* use.

EFL-P20 – Collective management

Support the collective management of the take and use of *water*, including through:

- (1) the use of *irrigation schemes*, where a single entity takes *water* and distributes it to scheme members, provided that consent applications for such takes are accompanied by a Scheme Management Plan prepared in accordance with APP22 – Scheme management plan; and
- (2) the establishment of *water* user groups to share *water*, provided that:
 - (a) the rate and volume of *water* abstracted under each consent does not exceed the maximum rate and volume of take specified in the consent; and
 - (b) all consents in the *water* user group:
 - (i) are metered in accordance with EFL-P22 – Measuring of water takes and associated *discharges*; and
 - (ii) are subject to the relevant *environmental flows and levels* set in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and
 - (c) the *water* user group is managed to ensure that all members collectively comply with the *environmental flows and levels*; and
 - (d) an agreement detailing the matters above is in place and provided to the ORC prior to the operation of the *water* user group.

EFL-P21 – Managing the effects of groundwater takes

In addition to all other policy requirements, when considering resource consent applications to take *groundwater*, decision-makers must ensure that:

- (1) the *effect* of the take on *surface water* is assessed and managed in accordance with APP21 – Determining the surface water depletion effect of a groundwater take; and
- (2) the interference *effects* do not exceed the *limit* deemed acceptable in accordance with APP23 – Determining the interference effects of a groundwater take; and
- (3) the take does not result in any:
 - (a) saltwater intrusion into the *aquifer*; or
 - (b) cross-contamination of *groundwater*; or
 - (c) *land* instability or *land* subsidence; or
 - (d) adverse *effects* on the hydrological functioning of a *natural wetland*; and
- (4) the *groundwater* take is subject to conditions specifying:
 - (a) the maximum instantaneous rate of take; and

- (b) a monthly and annual volume limit.

EFL-P22 – Measuring of water takes and associated discharges

In addition to the requirements set out in the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010:

- (1) require all consented takes where the maximum rate of take is less than 5 litres per second to demonstrate how the take will not exceed the consented limit; and
- (2) require metering that is consistent with the requirements of the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 for:
 - (a) any *discharge of water* to a *river* for the purpose of supplying a *secondary take* or maintaining *environmental flows and levels*; and
 - (b) any *secondary take*; and
 - (c) any *discharge of water* to a *river* as a result of hydroelectric *renewable electricity generation*; and
- (3) where one take point is used to take *water* for a combination of A Block, B Block or *secondary takes*, either:
 - (a) require the take of *water* from each block or *secondary take* to be metered separately; or
 - (b) allow the metering of all takes through a single meter, provided that the applicant can demonstrate how the take of *water* from each block or *secondary take* will be able to be identified within the metering record.

EFL-P23 – Community water supply

Provide for the take and use of *water* for *community water supply* where:

- (1) a *water supply* strategy has been prepared and is maintained in accordance with APP24 – Water supply strategy; and
- (2) the quality of *water* abstracted for *drinking water supply* is protected by:
 - (a) for existing registered *drinking water* supplies identified in APP14 – Drinking water supplies applying a default *drinking water protection zone* around the source of any *water* take for *drinking water supply* by a *drinking water supplier*; and
 - (b) requiring applications for resource consents to take or use *water* for a *community water supply* to include:
 - (i) an assessment of the extent to which the default *drinking water protection zone* for the *community water supply* is consistent with the Ministry for the Environment (2023) *Delineating source water risk management areas*; and
 - (ii) the delineation of a zone which reflects the level of protection required for that supply, all supporting information used to undertake the delineation process, and the results of consultation with any landowner or occupier potentially affected by the proposed zone.

EFL-P24 – Temporary takes for infrastructure

Enable the temporary take of *water* for the purposes of placing, altering or maintaining *infrastructure*, and any associated use and *discharge* of *water*, provided that:

- (1) where the take will have a material *effect* on the *water body*, it is subject to the relevant *environmental flows and levels*, in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and
- (2) the take will not affect the reliability of supply for existing users; and
- (3) the *discharge* is managed in accordance with IP-P19 – Discharges to land or water.

EFL-P25 – Non-consumptive takes

Provide for *non-consumptive takes* where:

- (1) the take and associated *discharge* will comply with the relevant *environmental flows and levels*, in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block flows, levels and take limits and SCHED5-Lakes: Environmental levels and take limits; and
- (2) for takes from *rivers, controlled lakes* and *natural lakes*, the *effects management hierarchy* is applied to the management of *effects* on the *water body* between the *point of take* and the point of *discharge* back into the *water body*.

EFL-P26 – Secondary takes

Provide for existing *secondary takes* that were *lawfully established* as at 31 October 2024 where:

- (1) the take of *water* does not exceed the rate of *water discharged* upstream to supply the *secondary take*; and
- (2) where *cross mixing* of *waters* occurs as a result of the *secondary take*, information is provided to demonstrate either:
 - (a) how the *secondary take* will be phased out by the timeframes specified in the *long-term visions*; or
 - (b) reasons why it is not practicable to phase out the *secondary take*.

EFL-P27 – Accounting for non-consumptive takes, secondary takes and temporary takes

The following takes are not required to comply with *take limits*, or be included in *take limits* when determining whether *water* is available to be taken:

- (1) *non-consumptive takes*; or
- (2) *secondary takes*; or
- (3) temporary takes authorised by permitted activity rules.

EFL-P28 – Site-to-site transfers of water takes

Provide for the site-to-site transfer of resource consents to take and use *water* where:

- (1) the transfer is occurring within the same *surface water body* or *aquifer*, and within the same *take limit*; and

- (2) the rate and volume of *water* to be transferred do not exceed the rate and volume determined in accordance with APP20 – Methodology for determining actual use of a water permit; and
- (3) the combined volume of *water* retained and transferred does not exceed the lesser of:
 - (a) the rate and volume determined in accordance with APP20 – Methodology for determining actual use of a water permit; or
 - (b) the rate and volume determined in accordance with APP18 – Reasonable and efficient *water* use and conveyance for the use of *water* prior to the transfer; and
- (4) the take and use of *water* on the transferee’s site is reasonable and efficient for the intended use in accordance with EFL-P14 – Efficiency; and
- (5) the reliability of supply for any other *lawfully established* take is not reduced; and
- (6) for the take and use of *groundwater*:
 - (a) the *bore* interference *effects* do not exceed the *limit* deemed acceptable in accordance with APP23 – Determining the interference effects of a groundwater take; and
 - (b) the stream depletion *effect* is not greater than in the proposed location than in the original location.

EFL-P29 – Lapse periods and giving effect to water permits

The lapse period for a resource consent to take and use *water* will be no greater than three years, unless a longer lapse period is justified by the consent applicant where the application is for or related to the establishment of *regionally significant infrastructure* or *nationally significant infrastructure*.

Rules

EFL-R1 – Small surface *water* takes

EFL-R1-PER1

The take and use of *surface water* from a *river*, *natural lake* or *controlled lake* for an individual’s reasonable domestic needs or the reasonable needs of a person’s animals for *drinking water* is a permitted activity if all of the following conditions are met:

- (1) the *landholding* is not subject to a resource consent to take and use *water* for the same purpose; and
- (2) the take from each *water body*, inclusive of any *water* taken pursuant to s14(3)(b) of the RMA, is no more than the rate and volume for the relevant *water body*, as set out in Table 3 below; and

Table 3 – Daily volume limits (cubic metres/m³) and rate limits (litres per second/ L/s).

Water body	7DMALF for the river	Rate	Volume per day
<i>River</i>	<100 L/s	0.5 L/s	2 m ³
	100-500L/s	2 L/s	10 m ³
	500 L/s – 10,000 L/s	5 L/s	20 m ³
	>10,000 L/s	5 L/s	25 m ³
<i>Natural lake</i>	Not applicable	0.5 L/s	2 m ³

Water body	7DMALF for the river	Rate	Volume per day
Whakatipu Waimāori / Lake Whakatipu or Lake Wānaka	Not applicable	5 L/s	25 m ³
<i>Controlled lake</i>	Not applicable	5 L/s	25 m ³

- (3) The combined volume of *water* taken under this rule and EFL-R2-PER1 does not exceed 25 cubic metres per *landholding* per day, inclusive of:
- (a) water taken from multiple *water* bodies on a *landholding*; and
 - (b) any *water* taken pursuant to s14(3)(b) of the RMA; and
- (4) the take is not from a *water body* where the *take limit* in SCHED3 – Rivers: A Block environmental flows, levels and take limits or SCHED5 – Lakes: Environmental levels and take limits has been met or exceeded, unless the take is a *lawfully established permitted take*; and
- (5) the take of *water* complies with the relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED5 – Lakes: Environmental levels and take limits and SCHED6 – Groundwater: Take limits; and
- (6) the intake is piped and ensures the safe passage for *desired fish species* around or through the intake *structure*, in accordance with APP19 – Fish screening; and
- (7) if the take is from a *river, natural lake, or controlled lake* shown on MAP[WCO] – Water conservation order layer, the take of *water* complies with the prohibitions and restrictions of any relevant Water Conservation Order; and
- (8) where the take is to storage, the *water* taken from storage is only used for an individual’s reasonable domestic needs or animal drinking *water*; and
- (9) there is no backflow to *surface water*; and
- (10) the following information is supplied in writing to ORC within ten working days of the take commencing:
- (a) the location of the take; and
 - (b) the use of the take, including the number of individuals supplied for domestic purposes and number and types of animals to be supplied; and
 - (c) how compliance with (2), (5) and (6) will be determined; and
 - (d) confirmation that no other permitted surface *water* takes are exercised on the *landholding*.

EFL-R1-RDIS1

Unless provided for by EFL-R1-PER1, the take and use of *surface water* from a *river, natural lake or controlled lake* for an individual’s reasonable domestic needs or the reasonable needs of a person’s animals for *drinking water* is a restricted discretionary activity if the following condition is met:

- (1) the take is from a *river, natural lake or controlled lake* and does not exceed the *limits* set out in EFL-R1-PER1(3).

ORC restricts its discretion to the following matters:

- (1) the actual and potential adverse environmental *effects* of not meeting the conditions of EFL-R1-PER1; and
- (2) the lapsing period and duration of the resource consent; and
- (3) review of the conditions of the resource consent; and
- (4) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (5) the actual and potential adverse environmental *effects* on *threatened freshwater-dependent species* and their *habitats*; and
- (6) the intake ensures the safe passage for *desired fish species*, in accordance with APP19 – Fish screening; and
- (7) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

EFL-R1-DIS1

Unless provided for by EFL-R1-PER1 or EFL-R1-RDIS1, the take and use of *surface water* from a *river, natural lake or controlled lake* for an individual's reasonable domestic needs or the reasonable needs of a person's animals for *drinking water* is a discretionary activity.

EFL-R2 – Small groundwater takes

EFL-R2-PER1

The take and use of *groundwater* for an individual's reasonable domestic needs or the reasonable needs of a person's animals for *drinking water* is a permitted activity if all of the following conditions are met:

- (1) the take per *landholding*, inclusive of any *water* taken pursuant to s14(3)(b) of the RMA, is no more than a rate of 3L/s and a volume of 25 cubic metres per day; and
- (2) the *landholding* is not subject to a resource consent to take and use *water* for the same purpose; and
- (3) the combined volume of *water* taken under this rule and EFL-R1-PER1 does not exceed 25 cubic metres per *landholding* per day, inclusive of any *water* taken pursuant to s14(3)(b) of the RMA; and
- (4) the take is not from an *aquifer* where the *take limit* in SCHED6 – Groundwater: Take limits has been met or exceeded, unless the take is a *lawfully established permitted take*; and
- (5) the *point of take* is not within 50 metres of a *bore* on another *landholding*; and
- (6) where the take is to storage, the *water* taken from storage is only used for an individual's reasonable domestic needs or animal drinking *water*; and
- (7) a backflow prevention device is installed at the *bore* head; and

- (8) the following information is supplied in writing to ORC within ten working days of the take commencing:
- (a) the location of the take; and
 - (b) the use of the take, including the number of individuals supplied for domestic purposes and number and types of animals to be supplied; and
 - (c) how compliance with (1) will be determined; and
 - (d) confirmation that no other permitted *groundwater* takes are exercised on the *landholding*.

EFL-R2-RDIS1

Unless provided for by EFL-R2-PER1, the take and use of *groundwater* for an individual's reasonable domestic needs or the reasonable needs of a person's animals for *drinking water* is a restricted discretionary activity if the following conditions are met:

- (1) the take is from *groundwater* and does not exceed the *limits* set out in EFL-R2-PER1(1).

ORC restricts its discretion to the following matters:

- (1) the actual and potential adverse environmental *effects* of not meeting the conditions of EFL-R2-PER1; and
- (2) the lapsing period and duration of the resource consent; and
- (3) review of the conditions of the resource consent; and
- (4) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (5) the actual and potential adverse environmental *effects* on *threatened freshwater-dependent species*, and their *habitats*.

EFL-R2-DIS1

Unless provided for by EFL-R2-PER1 or EFL-R2-RDIS1, the take and use of *groundwater* for an individual's reasonable domestic needs or the reasonable needs of a person's animals for *drinking water* is a discretionary activity.

EFL-R3 – Groundwater takes for heating or cooling

EFL-R3-PER1

The *non-consumptive take* and use of *groundwater* for heating or cooling purposes, and the associated *discharge* of that *water* to *groundwater* is a permitted activity if all of the following conditions are met:

- (1) the *point of take* is not within 50 metres of a *bore* on another *landholding*; and
- (2) the take has a low stream depletion *effect* in accordance with APP21 – Determining the surface water depletion effect of a groundwater take; and

- (3) the *discharge of water to groundwater* is to the same *aquifer* from which it was abstracted, and does not contain any *contaminants* including *hazardous substances, pests, pest agents, unwanted organisms* or *organisms of interest*; and
- (4) the *discharge* does not cause flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (5) the location of the take and associated *discharge* is supplied in writing to ORC within ten working days of the take commencing.

EFL-R3-DIS1

Unless provided for by EFL-R3-PER1, the *non-consumptive take* and use of *groundwater* for heating and cooling purposes is a discretionary activity.

EFL-R4 – Takes from artificial watercourse or off-stream artificial lake

EFL-R4-PER1

The take and use of *water* from an *artificial watercourse* or *off-stream artificial lake* is a permitted activity if the following condition is met:

- (1) where the *landholding* owner or occupier is different to the owner or manager of the *artificial watercourse* or *off-stream artificial lake*, the *landholding* owner or occupier has a written agreement with the owner or manager to take *water* from the *artificial watercourse* or *off-stream artificial lake*.

EFL-R4-DIS1

Unless provided for by EFL-R4-PER1, the take and use of *water* from an *artificial watercourse* or *off-stream artificial lake* is a discretionary activity.

EFL-R5 – Takes for aquifer testing

EFL-R5-PER1

The take of *groundwater* to carry out *aquifer testing*, and any associated *discharge* of that *water* to *water*, or onto or into *land* in circumstances where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) ORC is advised of the testing at least ten working days prior to the test occurring; and
- (2) the testing is undertaken in accordance with APP25 – Aquifer testing; and
- (3) the rate of take does not exceed 100 litres per second; and
- (4) the taking occurs on no more than five consecutive days, with no more than three tests per *bore* in any 12 month period; and
- (5) the taking must cease immediately upon notification by ORC that the pumping may be preventing access to any *community water supply* except for any supply located on the *landholding* where the test is occurring; and
- (6) the *discharge* does not contain any *hazardous substance, pest, pest agent, unwanted organism* or *organism of interest*; and

- (7) if the associated *discharge of water* is to *land*, the *discharge* is not to *contaminated land* or *potentially contaminated land*; and
- (8) if the associated *discharge of water* is to *surface water*:
 - (a) at the point and time of any *discharge to surface water*, the rate of flow in the *river* or *artificial watercourse* is at least five times the rate of the *discharge*; and
 - (b) the *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards; and
- (9) the *discharge* does not:
 - (a) result in ponding or overland flow; or
 - (b) cause flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage.

EFL-R5-DIS1

Unless provided for by EFL-R5-PER1, the take of *groundwater* to carry out *aquifer* testing, and any associated *discharge of water* to *water*, or onto or into *land* in circumstances where it may enter *water*, is a discretionary activity.

EFL-R6 – Takes for dewatering

EFL-R6-PER1

The take of *groundwater* to carry out *dewatering*, and any associated *discharge* of that *water* to *water*, or onto or into *land* in circumstances where it may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the rate of take does not exceed 40 litres per second; and
- (2) the take only continues for the time required to carry out the work, up to a maximum of 60 days in any 12 month period; and
- (3) the take does not cause any *land* instability or *land* subsidence; and
- (4) an assessment of interference *effects*, undertaken in accordance with APP23 – Determining the interference effects of a *groundwater* take, shows that the *effect* on any *community water supply* does not exceed the *limit* deemed acceptable; and
- (5) the take does not have a moderate, high or direct stream depletion *effect* on a *surface water body*, determined in accordance with APP21 – Determining the surface water depletion effect of a *groundwater* take, unless:
 - (a) the take complies with the relevant *environmental flows and levels* for the connected *surface water body* as set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits; and
 - (b) all of the *groundwater* taken is being *discharged* to the *surface water body* with which it is hydraulically connected; and
- (6) the take or *discharge* is not from, into, or onto *contaminated land* or *potentially contaminated land*; and

- (7) the *discharge* does not occur within a *drinking water protection zone*; and
- (8) if the associated *discharge* is to *water*:
 - (a) at the point and time of any *discharge* to *surface water*, the rate of flow in the *river* or *artificial watercourse* is at least five times the rate of the *discharge*; and
 - (b) the *discharge* does not occur within any *mātaimai* or *taiāpure*; and
 - (c) the *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards; and
- (9) the *discharge* does not:
 - (a) result in ponding or overland flow; or
 - (b) cause flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; and
- (10) the following information is supplied in writing to ORC at least ten working days prior to *dewatering* commencing:
 - (a) the purpose of the *dewatering*; and
 - (b) the location of the take and associated *discharge*; and
 - (c) how compliance with (1), (2), (4) and (5) has been determined; and
 - (d) how the *discharge* will be managed to comply with (8) and (9).

EFL-R6-DIS1

Unless provided for by EFL-R6-PER1, the take of *groundwater* to carry out *dewatering*, and any associated *discharge* of that *water* to *water*, or onto or into *land* in circumstances where it may enter *water*, is a discretionary activity if:

- (1) the taking does not occur over a time period longer than 60 days in any 12-month period; or
- (2) the take:
 - (a) in combination with all other consented takes included in the *take limit* for the relevant *aquifer*, does not exceed the *take limit* set in SCHED6 – Groundwater: Take limits; and
 - (b) in combination with all other consented takes included in the *take limit* for the relevant *water body*, complies with the *take limit* and *minimum flow* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits for the connected *surface water body*, where the take has a direct, high or moderate stream depletion *effect* in accordance with APP21 – Determining the surface water depletion effect of a groundwater take; and
 - (c) from an alluvial ribbon *aquifer* listed in Part2of SCHED6 – Groundwater: Take limits, complies with the relevant *environmental flows and levels* for the hydraulically connected *river* or *lake*.

EFL-R6-NC1

Unless provided for by EFL-R6-PER1 or EFL-R6-DIS1, the take of *groundwater* to carry out *dewatering*, and any associated *discharge* of *water* to *water*, or onto or into *land* in circumstances where it may enter *water*, is a non-complying activity.

EFL-R7 – Temporary takes for infrastructure

EFL-R7-PER1

The temporary take and use of *water* from a *river, natural lake* or *controlled lake* for the purposes of placing, altering or maintaining *infrastructure* is a permitted activity if all of the following conditions are met:

- (1) the take, in combination with all other consented takes included in the *take limit* for the relevant *water body*, does not equal or exceed the relevant *take limit* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits or SCHED5 – Lakes: Environmental levels and take limits, for the relevant *water body*; and
- (2) the take of *water* complies with the relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and
- (3) the take is no more than 15 litres per second and 100 cubic metres per day; and
- (4) the take does not exceed 10 percent of the flow rate at the *point of take* at any time; and
- (5) the take does not occur over a time period longer than 30 days in any 12 month period; and
- (6) the intake is piped and ensures the safe passage for *desired fish species* around or through the intake *structure* in accordance with APP19 – Fish screening; and
- (7) if the take is from a *river, natural lake, or controlled lake* shown on MAP[WCO], the take of *water* complies with the prohibitions and restrictions of any relevant Water Conservation Order; and
- (8) there is no backflow to *surface water*; and
- (9) the *water* is not taken via any permanent *infrastructure* that enables the take; and
- (10) the following information is supplied in writing to ORC at least ten working days prior to the take commencing:
 - (a) the purpose and location of the take; and
 - (b) how compliance with (3), (4) and (5) will be determined.

EFL-R7-DIS1

Unless provided for by EFL-R7-PER1, the temporary take and use of *water* from a *river, natural lake* or *controlled lake* for the purposes of placing, altering or maintaining *infrastructure* is a discretionary activity if the following condition is met:

- (1) the taking does not occur over a time period longer than 90 days in a 12-month period.

EFL-R7-NC1

Unless provided for by EFL-R7-PER1 or EFL-R7-DIS1, the temporary take and use of *water* from a *river, natural lake* or *controlled lake* for the purposes of placing, altering or maintaining *infrastructure* is a non-complying activity.

EFL-R8 – Community water supply

Advice note:

Any take managed by EFL-R8-DIS1 that is not by a *Drinking water supplier* listed in APP14 – Drinking water supplies will be limited notified to all persons within the proposed *drinking water protection zone* for the supply.

EFL-R8-CON1

The take and use of *surface water* from a *river, natural lake or controlled lake*, or *groundwater* for *community water supply* is a controlled activity if all of the following conditions are met:

- (1) the application is for the replacement of a resource consent pursuant to section 124 of the RMA; and
- (2) the take is by a *Drinking water supplier* listed in APP14 – Drinking water supplies; and
- (3) the take, in combination with all other consented takes included in the *take limit* for the relevant *water body*, does not exceed the relevant *take limit* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits or SCHED5 – Lakes: Environmental levels and take limits and SCHED6 – Groundwater: Take limits; and
- (4) the take complies with the relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and
- (5) the rate and volume of take do not exceed the rate and volume determined in accordance with APP18 – Reasonable and efficient water use and conveyance; and
- (6) the actual and potential environmental *effects* on *water* quality, *water* quantity and aquatic ecosystems; and
- (7) the extent to which the activity is consistent with the matters set out in APP8 – Mana whenua environmental indicators; and
- (8) if the take is from a *river, natural lake, or controlled lake* shown on MAP[WCO], the take of *water* complies with the prohibitions and restrictions of any relevant Water Conservation Order; and
- (9) a *water* supply strategy is prepared in accordance with APP24 – Water supply strategy; and submitted as part of the application; and
- (10) for a surface *water take* the intake ensures the safe passage for *desired fish species* around or through the intake *structure*, in accordance with APP19 – Fish screening.

ORC reserves control over the following matters:

- (1) the location, rate, volume, frequency and timing of the take; and
- (2) the efficiency of the *water* take, conveyance, storage and *water* use; and
- (3) the content of, and compliance with the *water* supply strategy; and

- (4) compliance with any relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and
- (5) the provisions of any relevant Water Conservation Order; and
- (6) for takes of *surface water*:
 - (a) how *fish* are prevented from entering the intake in accordance with APP19 – Fish screening; and
 - (b) the *effect* of the take on any other authorised takes or *diversions*; and
 - (c) the need for a *site-specific river flow* in accordance with EFL-P5 – Application of site-specific river flows; and
- (7) for takes of *groundwater*:
 - (a) the *effect* of the take on *surface water*, determined in accordance with APP21– Determining the surface water depletion effect of a groundwater take; and
 - (b) the *effect* of the take on saltwater intrusion, cross-connection of *groundwater*, and *land* instability or subsidence; and
 - (c) the *effect* of the take on any other authorised takes, determined in accordance with APP23 – Determining the interference effects of a groundwater take; and
- (8) the point and method of measurement and the method of transmitting data to ORC; and
- (9) the prevention of backflow of *water* or *contaminants*; and
- (10) the lapsing period and duration of the resource consent; and
- (11) review of the conditions of the resource consent; and
- (12) the collection, recording, monitoring, and provision of information about the exercise of the resource consent, and
- (13) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

EFL-R8-DIS1

Unless provided for by EFL-R8-CON1, the take and use of *surface water* from a *river, natural lake or controlled lake* or *groundwater* for *community water supply* is a discretionary activity if all of the following conditions are met:

- (1) the take, in combination with all other consented takes included in the *take limit* for the relevant *water body*, does not exceed the *take limit* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits, SCHED5 – Lakes: Environmental levels and take limits or SCHED6 – Groundwater: Take limits for the relevant *water body*; and
- (2) the take complies with the relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits, SCHED5 – Lakes: Environmental levels and take limits; and

- (3) the rate and volume of take do not exceed the rate and volume determined in accordance with APP18 – Reasonable and efficient water use and conveyance; and
- (4) if the take is from a *river, natural lake, or controlled lake* shown on MAP[WCO], the take of *water* complies with the prohibitions and restrictions of any relevant water conservation order; and
- (5) a *water* supply strategy is prepared in accordance with APP24 – Water supply strategy; and submitted as part of the application.

EFL-R8-NC1

Unless provided for by EFL-R8-CON1 or EFL-R8-DIS1, the take and use of surface *water* from a *river, natural lake or controlled lake* or *groundwater* for *community water supply* is a non-complying activity.

EFL-R9 – Takes for renewable electricity generation

EFL-R9-CON1

The take and use of *water* from a *river, natural lake or controlled lake* for *renewable electricity generation* is a controlled activity if all of the following conditions are met:

- (1) the application is for the replacement of a resource consent pursuant to section 124 of the RMA; and
- (2) the take is non-consumptive; or
- (3) the take:
 - (a) in combination with all other consented takes included in the *take limit* for the *water body*, does not exceed the relevant *take limit* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits, SCHED5 – Lakes: Environmental levels and take limits or SCHED6 – Groundwater: Take limits, for the relevant *water body*; and
 - (b) complies with the relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and
- (4) if the take is from a *river, natural lake, or controlled lake* shown on MAP[WCO] – Water conservation order layer (areas protected by WCO), the take of *water* complies with the prohibitions and restrictions of any relevant Water Conservation Order; and
- (5) the intake ensures the safe passage for *desired fish species* around or through the intake *structure*, in accordance with APP19 – Fish screening; and

ORC reserves control over the following matters:

- (1) the location, rate, volume, frequency and timing of the take; and
- (2) the efficiency of the *water* take, conveyance, storage and *water* use; and
- (3) compliance with any relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block

environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and

- (4) for *non-consumptive takes*, the *effects* in the *river* between the *point of take* and *discharge* back to the *river*, and the need for a *site specific river flow* in this area of the *river*; and
- (5) the provisions of any relevant water conservation order; and
- (6) how *fish* are prevented from entering the intake in accordance with APP19 – Fish screening; and
- (7) the *effect* of the take on any other authorised takes or *diversions*; and
- (8) the actual and potential environmental *effects* on *water* quality, *water* quantity and aquatic ecosystems; and
- (9) the need for a *site-specific river flow* in accordance with EFL-P5 – Application of site-specific river flows; and
- (10) the point and method of measurement and the method of transmitting data to ORC; and
- (11) the lapsing period and duration of the resource consent; and
- (12) review of the conditions of the resource consent; and
- (13) the collection, recording, monitoring, and provision of information about the exercise of the resource consent.
- (14) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

EFL-R9-DIS1

Unless provided for by rule EFL-R9-CON1, the take and use of *water* from a *river*, *natural lake* or *controlled lake* for *renewable electricity generation* is a discretionary activity if all of the following conditions are met:

- (1) either:
 - (a) the application is for the replacement of a resource consent pursuant to section 12 of the RMA; or
 - (b) the take is non-consumptive; or
 - (c) the take:
 - (i) in combination with all other consented takes included in the *take limit* for the relevant *water body*, does not exceed the relevant *take limit* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits, SCHED5 – Lakes: Environmental levels and take limits or SCHED6 – Groundwater: Take limits, for the relevant *water body*; and
 - (ii) complies with the relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits; and

- (2) if the take is from a *river, natural lake, or controlled lake* shown on MAP[WCO] – Water conservation order layer (areas protected by WCO), the take of *water* complies with the prohibitions and restrictions of any relevant water conservation order.

EFL-R9-NC1

Unless provided for by rules EFL-R9-CON1 or EFL-R9-DIS1, the take and use of *water* from a *river, natural lake or controlled lake for renewable electricity generation* is a non-complying activity.

EFL-R10 – Takes from a river or controlled lake

EFL-R10-DIS1

Unless provided for by rules, EFL-R4 – Takes from artificial watercourse or off-stream artificial lake, EFL-R6 – Temporary takes for infrastructure, EFL-R8 – Community water supply or EFL-R9 – Takes for renewable electricity generation, the take and use of *surface water* from a *river or controlled lake* is a discretionary activity if all of the following conditions are met:

- (1) the take,
- (a) is non-consumptive; or
 - (b) in combination with all other consented takes included in the *take limit* for the *water body*, does not exceed the relevant *take limits* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits, SCHED5 – Lakes: Environmental levels and take limits or SCHED6 – Groundwater: Take limits; and
- (2) the take complies with the relevant *environmental flows and levels* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits.

EFL-R10-NC1

Unless provided for by rules EFL-R4 – Takes from artificial watercourse or off-stream artificial lake, EFL-R7 – Temporary takes for infrastructure, EFL-R8 – Community water supply, EFL-R9 – Takes for renewable electricity generation, or EFL-R10-DIS1, the take and use of *surface water* from a *river or controlled lake* is a non-complying activity if one or more of the following conditions are met:

- (1) either:
- (a) the application seeks to authorise a *lawfully established permitted take*; or
 - (b) the application is for the replacement of a *valid resource consent* pursuant to section 124 of the RMA; or
 - (c) the application is for the substitution of a *valid resource consent* where it is proposed to change the use and:
 - (i) there is no change in the location of the take; and
 - (ii) the *water* is to be used on the same property or properties as that authorised by the existing consent; and
 - (iii) there is no increase in the volume or rate of take; and

- (iv) the expiry date remains the same as the consent to be substituted; and
 - (v) the existing consent is proposed to be surrendered upon the granting of the substituted consent; or
- (d) the take is non-consumptive.

EFL-R10-PR1

Unless provided for by rules EFL-R1 – Small surface water takes, EFL-R4 – Takes from artificial watercourse or off-stream artificial lake, EFL-R7 – Temporary takes for infrastructure, EFL-R8 – Community water supply, EFL-R9 – Takes for renewable electricity generation, EFL-R10-DIS1 or EFL-R10-NC1, the take and use of surface *water* from a *river, natural lake or controlled lake* is a prohibited activity.

EFL-R11 – Takes from a natural lake

EFL-R11-DIS1

Unless provided for by rules EFL-R1 – Small surface water takes, EFL-R4 – Takes from artificial watercourse or off-stream artificial lake, EFL-R7 – Temporary takes for infrastructure, EFL-R8 – Community water supply, or EFL-R9 – Takes for renewable electricity generation the take and use of surface *water* from a *natural lake* is a discretionary activity if all of the following conditions are met:

- (1) the take:
 - (a) is non-consumptive; or
 - (b) in combination with all other consented takes included in *take limits* for the *water body*, does not exceed the relevant *take limit* set out in SCHED5 – Lakes: Environmental levels and take limits; and
- (2) the take complies with the relevant *environmental flows and levels* set out in SCHED5 – Lakes: Environmental levels and take limits.

EFL-R11-PR1

Unless provided for by rules EFL-R1 – Small surface water takes, EFL-R4 – Takes from artificial watercourse or off-stream artificial lake, EFL-R7 – Temporary takes for infrastructure, EFL-R8 – Community water supply, EFL-R9 – Takes for renewable electricity generation or EFL-R11-DIS1, the take and use of surface *water* from a *natural lake* is a prohibited activity.

EFL-R12 – Secondary takes from a river, controlled lake or natural lake

EFL-R12-DIS1

The take and use of surface *water* from a *river, controlled lake or natural lake* as a *secondary take* is a discretionary activity.

EFL-R13 – Groundwater takes

EFL-R13-DIS1

Unless provided for by rules EFL-R2 – Small groundwater takes, EFL-R3 – Groundwater takes for heating or cooling, EFL-R5 – Takes for aquifer testing, EFL-R6 – Takes for dewatering, or EFL-R8 – Community water supply, the take and use of *groundwater* is a discretionary activity if all of the following conditions are met:

- (1) the take:
 - (a) is non-consumptive or;
 - (b) in combination with all other consented takes included in the *take limit* for the *aquifer*, does not exceed the *take limit* set out in SCHED6 – Groundwater: Take limits for the relevant *aquifer*; and
- (2) where the take has a direct, high or moderate stream depletion *effect* in accordance with APP21 – Determining the surface water depletion effect of a groundwater take; the take, in combination with all other consented takes included in the *take limit* for the relevant *water body*, complies with the *take limit* and *minimum flow* set out in SCHED3 – Rivers: A Block environmental flows, levels and take limits for the connected *surface water body*; and
- (3) for alluvial ribbon *aquifers* listed in Part 2 of SCHED6 – Groundwater: Take limits, the take of *water* complies with the relevant *environmental flows and levels* for the hydraulically connected *river or lake*.

EFL-R13-NC1

Unless provided for by Rules EFL-R2 – Small groundwater takes, EFL-R3 – Groundwater takes for heating or cooling, EFL-R5 – Takes for aquifer testing, EFL-R6 – Takes for dewatering, EFL-R8 – Community water supply, or EFL-R13-DIS1, the take and use of *groundwater* is a non-complying activity if the following conditions can be met:

- (1) either:
 - (a) the application seeks to authorise a *lawfully established permitted take*; or
 - (b) the application is for the replacement of a *valid resource consent* pursuant to section 124 of the RMA; or
 - (c) the application is for the substitution of a *valid resource consent* where it is proposed to change the use and:
 - (i) there is no change in the location of the take; and
 - (ii) the *water* is to be used on the same property or properties as that authorised by the existing consent; and
 - (iii) there is no increase in the volume or rate of take; and
 - (iv) the expiry date remains the same as the consent to be substituted; and
 - (v) the existing consent is proposed to be surrendered upon the granting of the substituted consent; or
 - (d) the take is *non-consumptive*.

EFL-R13-PR1

Unless provided for by Rules EFL-R2 – Small groundwater takes, EFL-R3 – Groundwater takes for heating or cooling, EFL-R5 – Takes for aquifer testing, EFL-R6 – Takes for dewatering, EFL-R8, EFL-R13-DIS1 or EFL-R13-NC1, the take and use of *groundwater* is a prohibited activity.

EFL-R14 – Transfers

EFL-R14-RDIS1

The temporary or permanent transfer, in whole or in part (other than to the new owner of the site pursuant to section 136(2)(a) of the RMA) of a resource consent to take and use surface *water* or *groundwater* is a restricted discretionary activity if all of the following conditions are met:

- (1) where the transfer is of:
 - (a) surface *water*, the transfer location is within the same surface *water body* and *take limit*;
or
 - (b) *groundwater*, the transfer location is:
 - (i) within the same *aquifer*; and
 - (ii) for *groundwater* with a high, direct or moderate stream depletion *effect* determined in accordance with APP21– Determining the surface water depletion effect of a groundwater take; the transfer location is connected to the same surface *water body*, with no increase in the rate of the stream depletion *effect*; and
- (2) the combined rate and volume of take to be transferred do not exceed the lesser of:
 - (a) the rate and volume determined in accordance with APP20 – Methodology for determining actual use of a water permit for the use of *water* prior to the transfer; or
 - (b) the rate and volume determined in accordance with APP18 – Reasonable and efficient water use and conveyance for the use of *water* prior to the transfer; and
- (3) the combined rate and volume of take for the use of *water* after transfer do not exceed the lesser of:
 - (a) the rate and volume determined in accordance with APP20 – Methodology for determining actual use of a water permit; or
 - (b) the rate and volume determined in accordance with APP18 – Reasonable and efficient water use and conveyance; and
- (4) after transfer, the take of *water* complies with the relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block environmental flows, levels and take limits and SCHED5 – Lakes: Environmental levels and take limits.

ORC restricts its discretion to the following matters:

- (1) the nature of the transfer, whether short term, long term, partial or full, and the apportioning of the maximum rate and seasonal or annual volume in the case of a partial transfer; and
- (2) the provisions of any relevant water conservation order; and
- (3) for the transferred portion:

- (a) compliance with any relevant *environmental flows and levels* in accordance with SCHED3 – Rivers: A Block environmental flows, levels and take limits, SCHED4 – Rivers: B Block flows, levels and limits and SCHED5 – Lakes; and
- (b) the actual and potential *effects* on *water* quality, *water* quantity and aquatic ecosystems; and
- (c) the extent to which the activity is consistent with the matters set out in APP8 – Mana whenua environmental indicators; and
- (d) for takes of surface *water*:
 - (i) how fish are prevented from entering the intake in accordance with APP19 – Fish screening; and
 - (ii) the *effect* of the take on any other authorised takes or *diversions*; and
 - (iii) the need for a *site-specific river flow* in accordance with EFL-P5 – Application of site-specific river flows; and
 - (iv) the *effects* on the *water body* between the current *point of take* and the transferred *point of take*; and
- (e) for takes of *groundwater*:
 - (i) the *effect* of the take on surface *water* flows, determined in accordance with APP21 – Determining the surface water depletion effect of a groundwater take; and
 - (ii) the *effect* of the take on mixing or cross-contamination of *water*, *land* instability or subsidence, and saltwater intrusion; and
 - (iii) the *effect* of the take on any other authorised takes, determined in accordance with APP23 – Determining the interference effects of a groundwater take; and
- (f) the point and method of measurement and the method of transmitting data to ORC; and
- (g) the prevention of backflow of *water* or *contaminants*; and
- (h) the lapsing period and duration of the resource consent; and
- (i) review of the conditions of the resource consent; and
- (j) the collection, recording, monitoring, and provision of information about the exercise of the resource consent.

EFL-R14-NC1

Unless provided for by EFL-R14-RDIS1, the temporary or permanent transfer, in whole or in part (other than to the new owner of the site pursuant to section 136(2)(a) of the RMA) of a resource consent to take and use surface *water* or *groundwater* is a non-complying activity.

Methods

EFL-M1 – Methodology for setting interim A block take limits

For *rivers* in Part 2 and Part 3 of SCHED3 – Rivers: A Block environmental flows, levels and take limits, set the interim A block *take limit* as:

- (1) the sum of:
 - (a) the maximum instantaneous rate of take allocated to all *valid resource consents* as at 31 October 2024; and
 - (b) all *valid resource consents* authorising a *lawfully established permitted take*;
- (2) minus any:
 - (a) reduction in allocation through the application of the *sinking lid*; and
 - (b) *non-consumptive takes*; and
 - (c) *secondary takes*; and
 - (d) *valid resource consent* to take:
 - (i) supplementary or further supplementary allocation granted under the Regional Plan: Water for Otago; or
 - (ii) B Block allocation; and
- (3) where a date is specified in SCHED3 – Rivers: A Block environmental flows, levels and take limits for a *take limit* to apply, this method no longer applies from that date.

EFL-M2 – Methodology for setting default A Block minimum flows

For *rivers* in Part 4 of SCHED3 – Rivers: A Block environmental flows, levels and take limits and *rivers* not identified in Parts 1, 2, or 3 of SCHED3 – Rivers: A Block environmental flows, levels and take limits set the A block *minimum flow* as follows:

- (1) determine the *naturalised 7DMALF* and mean flow for the catchment at whichever one of the following is relevant:
 - (a) the *river* mouth with the sea; or
 - (b) the confluence with Clutha-Mata au *main stem*; and
- (2) where the mean flow is:
 - (a) less than or equal to 5 cubic metres per second, the *minimum flow* is set as 90 percent of *naturalised 7DMALF*.
 - (b) greater than 5 cubic metres per second, the *minimum flow* is set as 80 percent of *naturalised 7DMALF*.

EFL-M3 – Methodology for setting default A Block take limits

For *rivers* not identified in Parts 1,2,3 or 4 of SCHED3– Rivers: A Block environmental flows, levels and take limits set the A block *take limit* as follows:

- (1) determine the *naturalised 7DMALF* and mean flow for the catchment at whichever one of the following is relevant:
 - (a) the *river* mouth with the sea; or
 - (b) the confluence with Clutha-Mata au *main stem*; and
- (2) where the mean flow is:

- (a) less than or equal to 5 cubic metres per second, the *take limit* is set as 20 percent of *naturalised 7DMALF*.
- (b) greater than 5 cubic metres per second the *take limit*, is set as 30 percent of *naturalised 7DMALF*.

EFL-M4 – Methodology for setting interim B Block minimum flows

For *rivers* in Part 2 of SCHED 3 – Rivers: B Block environmental flows, levels and take limits, the interim B block *minimum flows* are the existing conditions set on *all valid resource consents* to take supplementary or further supplementary allocation granted under the Regional Plan: Water for Otago at 31 October 2024.

EFL-M5 – Methodology for setting interim B Block take limits

For *rivers* in Part 2 of SCHED4 – Rivers: B Block environmental flows, levels and take limits, the interim B Block *take limit* is the sum of the maximum instantaneous rate of take allocated to all *valid resource consents* at 31 October 2024, minus any:

- (1) reduction in allocation through the application of the *sinking lid*; and
- (2) *non-consumptive takes*; and
- (3) *secondary takes*; and
- (4) *valid resource consents* to take:
 - (a) primary allocation granted under the Regional Plan: Water for Otago; or
 - (b) A block allocation.

EFL-M6 – Methodology for setting default B Block minimum flows

For *rivers* in Part 1 and Part 3 of SCHED 3 – Rivers: B Block environmental flows, levels and take limits, determine B Block *minimum flows* as follows:

- (1) set the first B block *minimum flow* as follows:
 - (a) A block *minimum flow* + (B Block set under EFL-M7(2) × 0.75); and
- (2) set each subsequent B block *minimum flow* by adding the size of the B block × 0.75 to the immediately preceding B block minimum flow.

EFL-M7 – Methodology for setting default B Block take limits

For *rivers* in Part 1 and Part 3 of SCHED 3 – Rivers: B Block environmental flows, levels and take limits, set B Block *take limits* as follows:

- (1) determine the *naturalised 7DMALF* for the catchment at whichever one of the following is relevant:
 - (a) the *river* mouth with the sea; or
 - (b) the confluence with Clutha-Mata au *main stem*; and
- (2) set the size of the first and any subsequent B block as either:

- (a) the *naturalised 7DMALF* for catchments with a *naturalised 7DMALF* below 1 cubic metres per second; or
 - (b) 1 cubic metre per second for catchments with a *naturalised 7DMALF* equal to or greater than 1 cubic metre per second; and
- (3) set the *take limit* for each B Block as 25 percent of 2(a) or 2(b) whichever is relevant.

EFL-M8 – Methodology for setting default take limits for mapped aquifers

For *aquifers* in Part 3 of SCHED6 – Groundwater: Take limits set the *take limit* as follows:

- (1) determine the *Mean Annual Recharge* of the *aquifer*; and
- (2) set the *take limit* as 35 percent of (1).

EFL-M9 – Methodology for setting interim take limits for mapped aquifers

For *aquifers* in Part 4 of SCHED6 – Groundwater: Take limits set the interim *take limit* as:

- (1) the sum of the:
 - (a) maximum annual volume of take allocated to *all valid resource consents* at 31 October 2024; and
 - (b) *all valid resource consents* authorising a *lawfully established permitted take*;
- (2) minus any:
 - (a) reduction in allocation through the application of the *sinking lid*; and
 - (b) *non-consumptive takes*; and
- (3) where a date is specified in SCHED 5 – Groundwater: Take limits for a take limit to apply, this method no longer applies from that date.

EFL-M10 – Methodology for setting take limits for unmapped aquifers

For *aquifers* not in parts 1, 2, 3 or 4 of SCHED6 – Groundwater: Take limits set the take limit as follows:

- (1) determine the estimated mean annual rainfall on the relevant *landholding*; and
- (2) set the *take limit* as 5 percent of (1).

FF – Farming and Forestry

Objectives

There are no topic-specific objectives. Refer to IO – Integrated objectives and the objectives in the Area-specific matters chapters.

Policies

FF-P1 – Avoiding or minimising adverse effects

Avoid, where reasonably practicable, or otherwise minimise any adverse environmental *effects* (including on the quality of *water* in *lakes, rivers, wetlands, groundwater* and *coastal water*) from farming and forestry activities by:

- (1) requiring the implementation of good management practices (or better) to reduce nitrogen, phosphorus, sediment or faecal *contaminant discharges*; and
- (2) ensuring activities which are potential sources of *contaminant* losses such as *feedlots, stockholding areas, sacrifice paddocks*, offal pits, and silage storage are designed, located and managed to minimise the risk of *contaminant* runoff or leaching; and
- (3) minimising *contaminant* loss by managing *cultivation* and grazing adjoining *water bodies* and in *critical source areas*; and
- (4) limiting both the area and duration of exposed soil; and
- (5) implementing *setbacks* from *rivers, lakes, drains* (excluding sub-surface *drains*), *natural inland wetlands* or the *coastal marine area* to avoid run-off and reduce *contaminant losses into water*; and
- (6) encouraging the use of riparian planting adjoining *water bodies* and artificial *wetlands* to filter and absorb *contaminants* from rainfall run-off.

FF-P2 – Riparian planting

Encourage and enable the planting of appropriate *indigenous species* in *riparian margins*.

FF-P3 – Recognising environmental actions

Recognise investment in and give credit for actions beyond good management practices when considering further obligations and timeframes to be imposed in *Freshwater Farm Plans* and resource consent conditions.

FF-P4 – Use of Freshwater Farm Plans to reduce environmental effects

Encourage continuous improvement to enhance environmental benefits and reduce adverse environmental *effects* of farming by:

- (1) supporting all farmers to have and implement a *Freshwater Farm Plan*; and
- (2) requiring farmers to adopt recognised good management practices or better for their farming sector; and

- (3) encouraging and recognising non-regulatory catchment and community scale mitigation actions.

FF-P5 – Intensification

Avoid granting *land* use consent applications for changes in *land* use that involve an increase in the intensity of the use of *land* compared to the existing use of the *land* unless the applicant demonstrates that granting the consent will not result in an increase in the contribution to *contaminant* loads in the catchment, compared with the existing contribution up until 2 September 2020.

FF-P6 – Application of the permitted baseline

When considering any application for resource consent for the use of *land* or a *discharge* from a farming activity, the ORC will consider all adverse *effects* of the proposed activity on *water* quality, whether or not this Plan permits an activity with that *effect*.

FF-P7 – Managing and operating animal effluent systems

Ensure the appropriate management and operation of *animal effluent systems* and management of the application of animal effluent to *land* by:

- (1) requiring *animal effluent systems* to be designed, constructed, and located appropriately and in accordance with good management practice; and
- (2) ensuring that all *animal effluent systems*:
 - (a) have sufficient storage capacity to ensure that the disposal of effluent to *land* does not occur under conditions that will result in a direct *discharge* of *contaminants* into *water*; and
 - (b) include contingency measures to prevent *discharges* of effluent to a *water body*, an *artificial watercourse*, or the *coastal marine area*, either directly or indirectly; and
 - (c) are operated in accordance with an operational management plan for the purpose of preventing the unauthorised *discharge* of *liquid animal effluent* or *solid animal effluent* to *water*; and
- (3) avoiding the *discharge* of *liquid animal effluent* and *solid animal effluent* to:
 - (a) *water bodies*, *artificial watercourses*, *bores* and soak holes, and the *coastal marine area*; and
 - (b) *land* in a manner that results in ponding or overland flow to *water*; and
 - (c) *land* unless the depth of *discharge* to be applied is less than the *soil water deficit*; and
- (4) requiring effluent application to be in accordance with good management practice (or better).

FF-P8 – Upgrading animal effluent storage facilities

Provide for the upgrading of existing *animal effluent storage facilities* that do not meet the standards of FF-R14-PER1 by:

- (1) granting resource consents only where consent applications contain a timebound *action plan* for upgrading the existing *animal effluent storage facility* so that it meets the standards in FF-R14-PER1 as soon as possible; and

- (2) staging implementation of performance standards based on risk in accordance with FF-R14-PER2 and APP27 – Animal effluent.

FF-P9 – Planting forestry

When compared to the land use as at 30 October 2024, manage the adverse *effects* associated with the establishment of *commercial forestry* by avoiding adverse *effects* on surface *water* yield and *groundwater* recharge in *rivers* and recharge areas of *aquifers* where the *take limit* is exceeded, or *environmental flows or levels* are not being achieved.

FF-P10 – Management of forestry activities

Manage the adverse *effects* of *commercial forestry* activities on *land* stability and *water* quality by:

- (1) requiring the implementation of sustainable *land* management and soil conservation practices to reduce erosion; and
- (2) avoiding, where practicable, and otherwise minimising adverse *effects* from *mechanical land preparation, earthworks, harvesting and vegetation clearance* on *water* quality and *freshwater* ecosystems; and
- (3) encouraging the retention or planting of *indigenous* understory vegetation within the *setbacks* to *rivers, lakes, natural inland wetlands* and the *coastal marine area*;
- (4) avoiding where practicable, and otherwise minimising *vegetation clearance* from, and *land disturbance* or *earthworks* within, the *setbacks* to *rivers, lakes, wetlands* and the *coastal marine area*; and
- (5) requiring the establishment of vegetation cover as soon as practicable following the *harvesting* of *commercial forestry*.

FF-P11 – Managing wilding conifers

Manage *wilding conifers* by requiring forest owners to:

- (1) implement measures to avoid *wilding conifers* spreading beyond the *landholding* on which *commercial forestry* is established; and
- (2) eliminate *wilding conifers*, including beyond the forestry site, at least every five years.

Rules

Advice notes:

- (1) The following farming activities are managed under the NESF in addition to the rules in this plan:
 - (a) *Feedlots*: Regulations 9, 10 and 11.
 - (b) *Stockholding areas*: Regulations 12, 13 and 14.
 - (c) *Intensive winter grazing*: Regulations 26, 26A, 26B, and 27
- (2) The Resource Management (Stock Exclusion) Regulations 2020 also manage stock exclusion, in addition to the rules of this Plan.

- (3) For all activities in or near waterways, refer also to requirements and restrictions under the ORC Flood Protection Management Bylaw 2022.

FF-R1 – Feedlots and stockholding areas for cattle

FF-R1-PER1

The use of *land* for a *feedlot* or *stockholding area* for cattle, and any incidental *discharge* onto or into *land* where it may enter *water*, is a permitted activity if the following conditions are met:

- (1) the *feedlot* or *stockholding area* is not located:
 - (a) within 50 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) within 50 metres of a *bore*; or
 - (c) above subsurface drainage (other than a leak detection system); or
 - (d) within a *critical source area*; or
 - (e) within 100 metres of any dwelling or *place of assembly* on another *landholding*, constructed or in use prior to the *feedlot* or *stockholding area* being *lawfully established*; or
 - (f) within a *drinking water protection zone*; and
- (2) if 90 percent of the cattle on the *feedlot* or *stockholding area* are less than 4 months old or weigh no more than 120kg, the base of the *feedlot* or *stockholding area* must be a minimum 400 mm depth of bark, wood chip, saw dust, post-peelings, or similar absorbent organic material; or
- (3) for cattle older or larger than in (2) above, the base of any *feedlot* or *stockholding area* must be sealed so that *water* cannot permeate at a rate greater than 10^{-9} m/s and effluent generated on the *feedlot* or *stockholding area* must be collected, stored and disposed of in accordance with Rules FF-R13 – Land for use of components of animal effluent system, FF-R14 – Land use for existing animal effluent storage facilities, FF-R15 – Land use for new animal effluent storage facilities, FF-R16 – Discharges of solid animal effluent, and FF-R17 – Discharges of liquid animal effluent; and
- (4) conditions (1) to (3) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to the holding of cattle in the *feedlot* or *stockholding area*; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans; that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by conditions (1) to (3); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *feedlots* or *stockholding areas*.

FF-R1-DIS1

The use of *land* for a *feedlot* or *stockholding area* for cattle, and any incidental *discharge* onto or into *land* where it may enter *water*, that does not meet one or more of the conditions of FF-R1-PER1 is a discretionary activity.

FF-R2 – Intensive Winter Grazing

FF-R2-PER1

The use of *land* for *intensive winter grazing*, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the activity does not occur on more than 10 ha of the area of the *landholding*; and
- (2) the *slope* of any *land* used for *intensive winter grazing* must be 10 degrees or less; and
- (3) the activity does not occur within:
 - (a) 5 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 5 metres of a *bore*; or
 - (d) a *critical source area*.

FF-R2-PER2

The use of *land* for *intensive winter grazing*, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water*, is a permitted activity if the following conditions are met:

- (1) an *intensive winter grazing* management plan is prepared in accordance with Part 3, clause (8) of APP26 – Freshwater farm plans each year and provided to ORC on request; and
- (2) the activity does not occur on more than 50 hectares or 10 percent of the area of the *landholding*, whichever is the greater area; and
- (3) the *slope* of any *land* used for *intensive winter grazing* must be 10 degrees or less; and
- (4) the activity does not occur within:
 - (a) 5 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 5 metres of a *bore*; or
 - (d) a *critical source area*; and
- (5) conditions (2) to (4) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that includes an *intensive winter grazing* management plan prepared in accordance with Part 3, clause (8) of APP26 – Freshwater farm plans; and

- (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
- (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by conditions (2) to (4); and
- (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *intensive winter grazing*.

FF-R2-DIS1

The use of *land* for *intensive winter grazing*, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water*, that does not meet one or more of the conditions of FF-R2-PER1 or FF-R2-PER2 is a discretionary activity.

FF-R3 – Sacrifice paddocks

FF-R3-PER1

The use of *land* for a *sacrifice paddock* and any incidental *discharge* onto or into *land* in circumstances where it may enter *water* is a permitted activity if the following conditions are met:

- (1) the *sacrifice paddock* must not be in forage crop or have been in forage crop within the preceding six months; and
- (2) the *slope* of any *land* used as a *sacrifice paddock* must be 10 degrees or less; and
- (3) the activity does not occur within:
 - (a) 5 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 5 metres of a *bore*; or
 - (d) a *critical source area*; and
- (4) on areas where de-vegetation occurs, vegetation is re-established as soon as practicable; and
- (5) conditions (1) to (4) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that includes a winter grazing management plan prepared in accordance with APP26 – Freshwater farm plans; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by conditions (1) to (4); and

- (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor's findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *sacrifice paddocks*.

FF-R3-DIS1

The use of *land* for a *sacrifice paddock*, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water*, that does not meet one or more of the conditions of FF-R3-PER1 is a discretionary activity.

FF-R4 – Pasture-based wintering of cattle

FF-R4-PER1

The use of *land* for *pasture-based wintering* of cattle, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water*, is a permitted activity if the following conditions are met:

- (1) the activity does not occur within:
 - (a) 5 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 5 metres of a *bore*; or
 - (d) a *critical source area*; and
- (2) on areas where de-vegetation occurs, vegetation is re-established as soon as practicable; and
- (3) conditions (1) to (2) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that includes a winter grazing management plan prepared in accordance with APP26 – Freshwater farm plans; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by conditions (1) and (2); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor's findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *pasture-based wintering of cattle*.

FF-R4-DIS1

The use of *land* for *pasture-based wintering* of cattle, and any incidental *discharge* onto or into *land* where it may enter *water*, that does not meet one or more of the conditions of Rule FF-R4-PER1 is a discretionary activity.

FF-R5 – Silage production and storage

FF-R5-PER1

The use of *land* for silage production and storage, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water*, is a permitted activity if the following conditions are met:

- (1) the base of the silage pit or stack is sealed so that leachate cannot escape the sides and cannot permeate the base at a rate greater than 10^{-9} m/s; and
- (2) leachate is captured and diluted before being applied to *land* in accordance with Rule FF-R9-PER1 or is contained within an existing *animal effluent system*; and
- (3) the silage pit or stack is securely covered to prevent rain or the overland flow of *stormwater* entering it; and
- (4) no part of the silage storage is located within:
 - (a) 50 metres up-gradient of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) 100 metres of any dwelling or *place of assembly* on another *landholding*, constructed or in use prior to the silage pit or stack being *lawfully established*; or
 - (c) a *drinking water protection zone*; or
 - (d) 50 metres of a *bore*; or
 - (e) within an area subject to a flood hazard or coastal hazard; or
 - (f) a *critical source area*; and
- (5) *livestock* are not able to graze directly from the silage storage pit or stack unless Rule FF-R1-PER1 is complied with; and
- (6) condition (4) does not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that addresses the production and storage of silage; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by condition (4); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to the production and storage of silage.

FF-R5-DIS1

The use of *land* for silage production and storage, and any incidental *discharge* onto or into *land* where it may enter *water*, that does not meet one or more of the conditions in Rule FF-R5-PER1 is a discretionary activity.

FF-R6 – Offal pits

FF-R6-PER1

The use of *land* for an offal pit, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water*, is a permitted activity if the following conditions are met:

- (1) no dead animal material originating from an *industrial or trade premise* is disposed of into the pit; and
- (2) the offal pit is not located:
 - (a) within 50 metres of the *bed* of a *river or lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) within a *drinking water protection zone*; or
 - (c) within 50 metres of a *bore*; or
 - (d) within a *critical source area*; or
 - (e) within any area or zone identified in a proposed or operative district plan for residential, *commercial or industrial* purposes; or
 - (f) within 100 metres of any dwelling or *place of assembly* on another *landholding*, constructed or in use prior to the offal pit being *lawfully established*; or
 - (g) within an area subject to a flood hazard or coastal hazard; or
 - (h) where there is less than 2 metres of soil or sand between the base of the pit and the seasonal high *water table* level; and
- (3) the offal pit is:
 - (a) sited and designed to prevent surface runoff entering the pit; and
 - (b) designed to prevent animals from gaining access to the pit; and
 - (c) not located within 7 metres of ORC controlled *flood protection and drainage assets*; and
- (4) when the pit is filled to within 500 millimetres of the original *land* surface, or is no longer used, the contents are covered with soil to a depth of at least 500 millimetres or the pit is covered with an impermeable lid; and
- (5) condition (2) does not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that addresses offal pits; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* is no greater than that allowed for by condition (2); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to offal pits.

FF-R6-DIS1

The use of *land* for an offal pit, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water* that does not meet one or more of the conditions in Rule FF-R6-PER1, is a discretionary activity.

FF-R7 – Farm refuse pits

FF-R7-PER1

Despite Rule WASTE-R1 – Landfills, the use of *land* for a farm refuse pit, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water*, is a permitted activity if the following conditions are met:

- (1) the farm refuse pit is:
 - (a) located on an area of *land* no less than 20 hectares in area; and
 - (b) sited and designed to prevent surface runoff entering the pit; and
 - (c) designed to prevent animals from gaining access to the pit; and
- (2) the volume of the farm refuse pit is less than 50 cubic metres; and
- (3) the farm refuse pit only contains refuse produced on the *landholding* where the farm refuse pit is located and does not contain:
 - (a) *agrichemicals* and their containers; or
 - (b) agricultural plastic wrap; or
 - (c) septic tank *sludge*; or
 - (d) *sludge* generated from *animal effluent systems*; or
 - (e) animal carcasses or parts of animal carcasses; or
 - (f) any *hazardous substance, pest, pest agent, unwanted organism or organism of interest*; and
- (4) the activity does not occur:
 - (a) within 50 metres of the *bed* of a *river or lake, a natural inland wetland, a modified watercourse, an artificial watercourse, or coastal water*; or
 - (b) within a *drinking water protection zone*; or
 - (c) within 50 metres of a *bore*; or
 - (d) within a *critical source area*; or
 - (e) within 100 metres of any dwelling or *place of assembly*, on another *landholding* constructed or in use prior to the farm refuse pit being *lawfully established*; or
 - (f) within any area or zone identified in a proposed or operative district plan for residential, *commercial or industrial* purposes; or
 - (g) within an area subject to a flood hazard or coastal hazard; or
 - (h) within 7 metres of ORC controlled flood protection and drainage asset; or

- (i) unless there is at least 2 metres of soil or sand between the point of *discharge* and the seasonal high *water* table level; and
- (5) no burning of *waste* is undertaken; and
- (6) when the farm refuse pit is filled to within 500 millimetres of the original *land* surface, or is no longer used, the contents are covered with soil to a depth of at least 500 millimetres or the pit is covered with an impermeable lid; and
- (7) condition (2) and (4) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that addresses farm refuse pits; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26– Freshwater farm plans, that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by conditions (2) and (4); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to farm refuse pits.

FF-R7-DIS1

The use of *land* for a farm *landfill*, and any incidental *discharge* onto or into *land* in circumstances where it may enter *water*, that does not meet one or more of the conditions in Rule FF-R7-PER1 is a discretionary activity.

FF-R8 – Agricultural waste

FF-R8-PER1

The *discharge* of *agricultural solid waste* into or onto *land* in circumstances where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) the material does not contain any *hazardous substance, pest, pest agent, unwanted organism or organism of interest*; and
- (2) the material does not include any *waste* from a human effluent treatment process; and
- (3) the application depth is less than 50 millimetres; and
- (4) the material is not *discharged*:
 - (a) onto the same area of *land* more frequently than once every two months; or
 - (b) onto *land* where *agricultural solid waste* from a previous application is still visible on the *land* surface; or
 - (c) onto *land* when the soil moisture exceeds field capacity; or
 - (d) within 20 metres of the *bed* of a *river or lake, a natural inland wetland, a modified watercourse, an artificial watercourse, or coastal water*; or
 - (e) within 20 metres of a *bore*; or

- (f) in a *critical source area*; or
 - (g) within a *drinking water protection zone*; and
- (5) the *discharge* does not:
- (a) result in ponding or overland flow; or
 - (b) cause flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (6) conditions (3) and (4) do not apply if:
- (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that addresses *agricultural solid waste*; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by conditions (3) and (4); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor's findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *agricultural solid waste*.

FF-R8-DIS1

The *discharge* of *solid agricultural waste* into or onto *land* in circumstances where a *contaminant* may enter *water* that does not meet one or more of the conditions in Rule FF-R8-PER1 is a discretionary activity.

FF-R9 – Fertiliser

Advice note:

- (1) This rule applies in addition to Regulations 33 and 34 of the NESF.

FF-R9-PER1

The *discharge* of *fertiliser* onto or into *land* in circumstances where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) other than for incidental *discharges* of windblown *fertiliser* dust, there is no direct *discharge* of *fertiliser* into a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; and
- (2) *fertiliser* is not *discharged* when the soil moisture exceeds field capacity; and
- (3) where a *water body*:
 - (a) has riparian planting from which stock is excluded, *fertiliser* may be *discharged* up to the paddock-side edge of the riparian planting but not onto the riparian planting, except for *fertiliser* required to establish the planting; or

- (b) does not have riparian planting from which stock is excluded, *fertiliser* is not *discharged* directly into or within 3 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, or a *modified watercourse*; and
- (4) the *discharge* does not occur within:
 - (a) 3 metres of a *bore*; or
 - (b) 3 metres of *coastal water*; or
 - (c) a *drinking water protection zone*; and
- (5) the *discharge* does not result in ponding or overland flow.
- (6) condition (3) does not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that addresses *fertiliser* application; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26– Freshwater farm plans, that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by condition (3); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *fertiliser* application.

FF-R9-DIS1

The *discharge* of *fertiliser* onto or into *land* in circumstances where a *contaminant* may enter *water* that does not meet one or more of the conditions in FF-R9-PER1 is a discretionary activity.

FF-R10 – Freshwater Farm Plans

FF-R10-PER1

The use of *land* for a farming activity and any incidental *discharge* where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the farm is less than:
 - (a) 20 hectares of arable or pastoral use; or
 - (b) 5 hectares of horticultural use; or
 - (c) 20 hectares of a combination of any two or more of the *land* uses described above; or
- (2) by the date specified in the Resource Management (*Freshwater Farm Plans*) Regulations 2023, or if no dates are specified, in accordance with the resolution of the ORC in accordance with APP26 - Freshwater Farm Plans, a *Freshwater Farm Plan*:
 - (a) is prepared, and certified, and compliance with it is audited, in accordance with APP26 - Freshwater Farm Plans; and

- (b) is implemented by the landholder completing the practices, actions, and mitigations specified in the *Freshwater Farm Plan* in accordance with the timeframes set out in that Plan; and
- (c) demonstrates how:
 - (i) the losses of *contaminants* are being minimised over time; and
 - (ii) adverse *effects* on *water* quality are being reduced; and
 - (iii) any high-risk activities are to be adequately mitigated.

FF-R10-DIS1

The use of *land* for a farming activity and any incidental *discharge* where a *contaminant* may enter *water* that does not comply with condition (2) of Rule FF-R10-PER1 is a discretionary activity.

FF-R11 – Controls on land use expansion

FF-R11-PER1

The use of *land* for a farming activity and any incidental *discharge* where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the area of *land* on the *landholding* that is irrigated (other than for orchards and vineyards) is no more than 10 hectares greater than the maximum area of the *land* on the *landholding* that was irrigated at any time in the 12 months prior to 2 September 2020; and
- (2) the area of *land* on the *landholding* that is *dairy farm land* is no more than 10ha greater than the area of the *land* on the *landholding* that was *dairy farm land* as at 2 September 2020; and
- (3) the area of *land* on the *landholding* that is *dairy support land* is no more than the greater of:
 - (a) the maximum area of the *land* on the *landholding* that was *dairy support land* in the period 1 July 2014 to 30 June 2019; or
 - (b) 10 percent of the area of the *landholding*; and
- (4) the area of *land* on the *landholding* in pastoral use is no more than 10ha greater than the area of *land* on the *landholding* that was in pastoral use as at 2 September 2020, where that additional area of *land* was in forestry as at 2 September 2020.

FF-R11-DIS1

The use of *land* for a farming activity and any incidental *discharge* where a *contaminant* may enter *water* that does not comply with the conditions of Rule FF-R11-PER1 is a discretionary activity.

FF-R12 – Stock exclusion

Advice note:

- (1) The Resource Management (Stock Exclusion) Regulations 2020 also apply.

FF-R12-PER1

From 1 July 2025, in addition to any other rules in this plan, the use of *land* for farming is a permitted activity if all of the following conditions are met:

- (1) access to the *bed* and banks of any *river* or *lake* by *livestock* does not cause or induce slumping, pugging, or erosion, or result in a change in the visual clarity of *water* greater than the percentage change listed in APP13 – Receiving water standards; and
- (2) on *low slope land*, all farmed cattle, pigs, and deer must:
 - (a) be excluded from open *drains* that are continually or intermittently flowing but not ephemeral; and
 - (b) not be allowed closer than 3 metres to the edge of the *bed* of *lakes* and continually flowing *rivers*.
- (3) the *setbacks* in (2) do not apply if farmed cattle, pigs, and deer:
 - (a) either:
 - (i) need to access the area in order to cross a *lake* or *river* wider than 1 metre by using a dedicated *bridge* or *culvert*; or
 - (ii) are supervised and actively driven across the *lake* or continually flowing *river* or open drain; and
 - (b) do not cross the same *lake* or continually flowing *river* or open *drain* more than twice in any month; and
- (4) until 1 November 2030, the *setbacks* in (2) do not apply in relation to the Upper Taieri Scroll Plain area identified on MAP[UTSP] – Upper Taieri Scroll Plain areas exempt from Stock Exclusion Regulations 2020. From 1 November 2030, the *setbacks* shall apply unless the Otago Regional Council certifies that a Management Plan for stock exclusion for the Upper Taieri Scroll Plain has been prepared, approved by Council, and implemented in accordance with the timing in that Management Plan; and
- (5) the *setbacks* in (2)(b) do not apply if there is an existing permanent fence in place at 1 July 2025 that does not comply with the *setbacks* in (2)(b), until the existing fence is replaced at which time the new fence must comply with the requirements in (2)(b); and
- (6) condition (2) does not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to the exclusion of farmed cattle, pigs, and deer from *water bodies*; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by condition (2); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to the exclusion of farmed cattle, pigs, and deer from *water bodies*.

FF-R12-DIS1

From 1 July 2025, the use of *land* for farming where the conditions of FF-R12-PER1 are not met is a discretionary activity.

FF-R13 – Land use for components of animal effluent system

Advice note:

- (1) FF-R13 – Land use for components of animal effluent system does not manage *discharges of liquid animal effluent or solid animal effluent to land*. *Discharges of liquid animal effluent and solid animal effluent* are managed under FF-R16 – Discharges of solid animal effluent and FF-R17 – Discharges of liquid animal effluent.

FF-R13-PER1

The use of *land* for the construction, use, and maintenance of a component of an *animal effluent system* that is not an *animal effluent storage facility* is a permitted activity if all of the following conditions are met:

- (1) for a component with a volume of less than 35,000 litres, the component does not have any visible cracks, holes, or defects that would allow effluent to leak from the component; and
- (2) for a component with a volume of 35,000 litres or above, the component is certified by a *suitably qualified person* within the last five years as having no visible cracks, holes, or defects that would allow effluent to leak from the component; and
- (3) the component (excluding conveyancing pipes) is not located:
 - (a) within 20 metres of the *bed* of a *river or lake, a natural inland wetland, a modified watercourse, artificial watercourse, or coastal water*; or
 - (b) within a *drinking water protection zone*; or
 - (c) within 20 metres of a *bore*; or
 - (d) above subsurface drainage (excluding a leak detection system); and
- (4) where the total volume of the *animal effluent system* exceeds 35,000 litres, a management plan for the purpose of preventing the unauthorised *discharge of liquid animal effluent or solid animal effluent to water* is prepared and implemented in accordance with APP27 – Animal effluent.

FF-R13-DIS1

The use of *land* for the construction, upgrade, use, or maintenance of a component of an *animal effluent system* that is not an *animal effluent storage facility* that does not meet one or more of the conditions of FF-R13-PER1 is a discretionary activity.

FF-R14 – Land use for existing animal effluent storage facilities

Advice note:

- (1) FF-R14 – Land use for existing animal effluent storage facilities does not manage *discharges of liquid animal effluent or solid animal effluent to land*. *Discharges of liquid animal effluent and solid animal effluent* are managed under FF-R16 – Discharges of solid animal effluent and FF-R17 – Discharges of liquid animal effluent.

FF-R14-PER1

The use of *land* for the use and maintenance of an *animal effluent storage facility* that was constructed prior to 25 March 2020 is a permitted activity if all of the following conditions are met:

- (1) the *animal effluent storage facility* is sized in accordance with the 90th percentile as calculated by the *Dairy Effluent Storage Calculator*, and where relevant using a conversion factor for animals other than dairy cows determined by a *suitably qualified person*; and
- (2) the animal effluent storage facility is certified by a *suitably qualified person* within the last five years as:
 - (a) having no visible cracks, holes, or defects that would allow effluent to leak from the *animal effluent storage facility*; and
 - (b) meeting the relevant pond drop test criteria in APP27 – Animal effluent (excluding above-ground tanks, bladders, and solid *animal effluent storage facilities*); and
- (3) a management plan for the purpose of preventing the unauthorised *discharge* of *liquid animal effluent* or *solid animal effluent* to *water* is prepared and implemented in accordance with APP27 – Animal effluent.
- (4) Any certifications under (1) and (2) are provided to the ORC upon written request.

FF-R14-PER2

The use of *land* for the use and maintenance of an *animal effluent storage facility* that was constructed prior to 25 March 2020 that does not comply with the conditions of FF-R14-PER1 and has 41 days or more of storage available, calculated in accordance the method in Part 1 of APP27 – Animal effluent, is a permitted activity until 4 June 2025.

FF-R14-DIS1

The use of *land* for the use and maintenance of an *animal effluent storage facility* that was constructed prior to 25 March 2020 and does not comply with the conditions of FF-R14-PER1 or is not provided for by FF-R14-PER2 is a discretionary activity.

FF-R15 – Land use for new animal effluent storage facilities

Advice note:

- (1) FF-R15 – Land use for new animal effluent storage facilities does not manage *discharges* of *liquid animal effluent* or *solid animal effluent* to *land*. *Discharges* of *liquid animal effluent* and *solid animal effluent* are managed under FF-R16 – Discharges of solid animal effluent and FF-R17 – Discharges of liquid animal effluent.

FF-R15-CON1

The use of *land* for the construction, use, and maintenance of an *animal effluent storage facility* constructed after 25 March 2020 is a controlled activity if all of the following conditions are met:

- (1) the *animal effluent storage facility* is sized in accordance with the 90th percentile as calculated by the *Dairy Effluent Storage Calculator*, and where relevant using a conversion factor for animals other than dairy cows determined by a *suitably qualified person*; and
- (2) the animal effluent storage facility is either:

- (a) fully lined with an impermeable synthetic liner and has a leak detection system that underlies the *animal effluent storage facility*; or
 - (b) concrete construction; or
 - (c) an above-ground tank; or
 - (d) sealed with a clay liner; and
- (3) the design of the *animal effluent storage facility* and any leak detection system has been certified by a Chartered Professional Engineer as being in accordance with the relevant parts of IPENZ Practice Note 21 and IPENZ Practice Note 27; and
- (4) the *animal effluent storage facility* is not located:
- (a) within 50 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) within 90 metres of any *water* supply used for human consumption; or
 - (c) within a *drinking water protection zone*; or
 - (d) within 50 metres of a *bore*; or
 - (e) above subsurface drainage (other than a leak detection system); and
- (5) a management plan for the purpose of preventing the unauthorised *discharge* of *liquid animal effluent* or *solid animal effluent* to *water* is prepared and implemented in accordance with APP27 – Animal effluent.

ORC reserves control over the following matters:

- (1) the design and construction of the *animal effluent storage facility*, including storage capacity, nature of the solid or *liquid animal effluent* and the anticipated life of the *animal effluent storage facility*; and
- (2) the *height* of embankments and the placement and orientation relative to flood flows and *stormwater* run-off; and
- (3) methods to protect the *animal effluent storage facility* from damage by animals and machinery; and
- (4) quality and content of, and implementation of, the management plan prepared in accordance with APP27 – Animal effluent; and
- (5) potential adverse *effects* of construction, maintenance, and use on *water bodies*, *drains*, *groundwater*, *bores*, *drinking water supplies*, the *coastal marine area*, stop banks, dwellings, places of assembly, and urban areas; and
- (6) location of the *animal effluent storage facility*; and
- (7) measures to avoid, remedy, or mitigate adverse *effects* on Kāi Tahu cultural and spiritual beliefs, values, and uses; and
- (8) the lapsing period and duration of the resource consent; and
- (9) review of the conditions of the resource consent; and
- (10) the need for a bond; and

- (11) the collection, recording, monitoring, and provision of information about the exercise of the resource consent.

FF-R15-DIS1

The use of *land* for the construction, use, and maintenance of an *animal effluent storage facility* constructed after 25 March 2020 that does not meet one or more of the conditions of FF-R15-CON1 is a discretionary activity.

FF-R16 – Discharges of solid animal effluent

Advice note:

- (1) FF-R16 – Discharges of solid animal effluent manages *discharges of solid animal effluent to land*. It does not regulate the *land* use for the construction, use, and maintenance of an *animal effluent system*. The construction, use, and maintenance of *animal effluent systems* is managed by FF-R13 – Land use for components of animal effluent system, FF-R14 – Land use for existing animal effluent storage facilities and FF-R15 – Land use for new animal effluent storage facilities.

FF-R16-PER1

The *discharge of solid animal effluent* (excluding any *discharge* directly from an animal to *land*) or vegetative material containing *solid animal effluent* or *liquid animal effluent*, onto or into *land* including in circumstances where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the material does not contain any *hazardous substance, pest, pest agent, unwanted organism or organism of interest*; and
- (2) the material does not include any *waste* from a human effluent treatment process; and
- (3) the material is not *discharged*:
 - (a) onto the same area of *land* more frequently than once every two months; or
 - (b) onto *land* where *solid animal effluent*, or vegetative material containing *liquid animal effluent* or *solid animal effluent*, from a previous application is still visible on the *land* surface; or
 - (c) onto *land* unless the depth of *discharge* to be applied is less than the *soil water deficit*; and
- (4) the *discharge* does not occur within:
 - (a) 20 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) 20 metres of a *bore*; or
 - (c) 20 metres of any *water* supply used for human consumption; or
 - (d) a *drinking water protection zone*; or
 - (e) 20 metres of a *landholding* boundary.

FF-R16-DIS1

The *discharge of solid animal effluent* (excluding any *discharge* directly from an animal to *land*) or vegetative material containing *solid animal effluent* or *liquid animal effluent*, onto or into *land* including in circumstances where a *contaminant* may enter *water* that does not meet one or more of the conditions of FF-R16-PER1 is a discretionary activity.

FF-R17 – Discharges of liquid animal effluent

Advice note:

- (1) FF-R17 – Discharges of liquid animal effluent manages *discharges of liquid animal effluent to land*. It does not regulate the *land* use for the construction, use, and maintenance of an *animal effluent system*. The construction, use, and maintenance of *animal effluent systems* is managed by FF-R13 – Land use for components of animal effluent system, FF-R14 – Land use for existing animal effluent storage facilities and FF-R15 – Land use for new animal effluent storage facilities.

FF-R17-PER1

The *discharge of liquid animal effluent, or water containing liquid animal effluent (excluding any discharge directly from an animal to land)*, onto or into *land* is a permitted activity providing:

- (1) the volume of the *discharge* is not more than 35 cubic metres per *landholding* in any consecutive 12 month period; and
- (2) the *discharge* is not prohibited under FF-R17-PR1; and
- (3) the *discharge* does not occur within 20 metres of the boundary of the *landholding* on which the *liquid animal effluent* is being *discharged*, or beyond that boundary; and
- (4) there is no *discharge to land* unless the depth of *discharge* to be applied is less than the *soil water deficit*.

FF-R17-PER2

The *discharge of liquid animal effluent, or water containing liquid animal effluent, from an animal effluent system* onto or into *land* is a permitted activity providing:

- (1) the *animal effluent storage facility* is permitted under FF-R14-PER2; and
- (2) the *discharge* is not prohibited under FF-R17-PR1; and
- (3) the *discharge* does not occur within 20 metres of the boundary of the *landholding* on which the *liquid animal effluent* is being *discharged*, or beyond that boundary; and
- (4) there is no *discharge to land* unless the depth of *discharge* to be applied is less than the *soil water deficit*.

FF-R17-RDIS1

The *discharge of liquid animal effluent, or water containing liquid animal effluent, from an animal effluent system* onto or into *land* is a restricted discretionary activity provided:

- (1) the *discharge* is not prohibited under FF-R17-PR1; and
- (2) the *discharge* is not permitted under FF-R17-PER1 or FF-R17-PER2.

ORC restricts its discretion to the following matters:

- (1) the extent to which the application depth rate and application uniformity is consistent with industry agreed good management practice; and
- (2) size and location of the disposal area, including separation distances from *lakes, rivers, natural inland wetlands, bores, soak holes, the coastal marine area, water supply for human consumption, and dwellings*; and
- (3) adverse *effects* on *water* quality, taking into account the nature and sensitivity of the *receiving environment*, and any measures to avoid, remedy, or mitigate these adverse *effects*; and
- (4) duration of consent and any review conditions; and
- (5) quality and content of, and compliance with, a management plan for the purpose of preventing the unauthorised *discharge* of liquid or *solid animal effluent* to water that is prepared in accordance with APP27 – Animal effluent; and
- (6) any information and monitoring requirements; and
- (7) the value of the existing investment in the *animal effluent system*; and
- (8) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

FF-R17-PR1

The *discharge of liquid or solid animal effluent* from an *animal effluent system* to any of the following is a prohibited activity:

- (1) to any *water body*; or
- (2) to any *artificial watercourse* that goes to a *water body* or the *coastal marine area*; or
- (3) to the *bed* of any *water body*; or
- (4) to any *bore*; or
- (5) to *land* within 50 metres of:
 - (a) the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) a *bore*; or
- (6) to *land* in a manner that results in ponding or overland flow to *water*; or
- (7) to *land* unless the depth of *discharge* to be applied is less than the *soil water deficit*; or
- (8) where *liquid animal effluent* is distributed through the same *infrastructure* as *water* from a *bore* with no back flow prevention installed.

FF-R18 – Afforestation

Advice note:

The NESCF applies in addition to this rule.

FF-R18-PER1

In addition to Regulation 9 of the NESCF, the *afforestation of commercial forestry*, including any associated *land* use, disturbance of the *bed* of a *lake* or *river* and *discharge* of sediment to *water*, or to *land* where it may enter *water*, is a permitted activity if:

- (1) the total area of *commercial forestry* on the landholding is not within a catchment that is listed in Parts 2, 3 or 4 of SCHED3 – Rivers: A Block environmental flows, levels and take limits; or
- (2) the total area of *commercial forestry* on the *landholding* is less than 10 ha.

FF-R18-RDIS1

The *afforestation of commercial forestry*, including any associated *land* use, disturbance of the *bed* of a *lake* or *river* and *discharge* of sediment to *water*, or to *land* where it may enter *water*, that does not comply with FF-R18-PER1 is a restricted discretionary activity.

ORC restricts its discretion to the following matters, in addition to the matters set out in Regulations 17 and 81 of the NESCF:

- (1) the content of, and compliance with, the *afforestation* plan prepared in accordance with Schedule 3 of the NESCF; and
- (2) any adverse *effects* of the activity on surface *water* yield, *groundwater* recharge and *water* levels in *lakes*, including the *effects* on other *water* users, including any potential staging of the activity to allow a better understanding of the potential effects on water yield; and
- (3) the lapsing period and duration of the resource consent; and
- (4) review of the conditions of the resource consent; and
- (5) the collection, recording, monitoring, and provision of information about the exercise of the resource consent.

FF-R19 – Harvesting

Advice note:

The NESCF applies in addition to this rule.

FF-R19-CON1

From 1 November 2026, the *harvesting of commercial forestry*, including any associated *land* use, disturbance of the *bed* of a *lake* or *river*, or *discharge* of *contaminants* or *water* to *water* or to *land* in circumstances where the *water* or a *contaminant* may enter *water*, is a controlled activity.

ORC reserves control over the following matters:

- (1) the quality and content of, and implementation of, the:
 - (a) *harvest* plan prepared in accordance with Schedule 6 of the NESCF; and
 - (b) forestry *earthworks* management plan prepared in accordance with Schedule 4 of the NESCF; and
- (2) the management of *critical source areas* and, *setbacks*, and *effects on natural inland wetlands*, *outstanding water bodies*, and *significant natural areas*; and

- (3) the management of *riparian margins*, sediment, and slash; and
- (4) timing of *replanting* or grassing as an interim measure; and
- (5) the lapsing period and duration of the resource consent; and
- (6) review of the conditions of the resource consent; and
- (7) the need for a bond; and
- (8) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (9) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

FF-R20 – All other disturbances of the bed

Advice notes:

- (1) FF-R20-PER1 applies in addition to the following NESCF regulations:
 - (a) Regulation 28(2) for *earthworks* in ephemeral flow paths; and
 - (b) Regulation 44 for *river crossings*; and
 - (c) Regulation 89 for *ancillary activities*; and
 - (d) Regulation 97 for any *bed* disturbance outside *fish* spawning seasons as defined by the Fish Spawning Indicator.

FF-R20-PER1

- (1) The disturbance of the *bed* of a *lake* or *river*, and any associated deposition of *bed substrate*, use of *land* or *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, is a permitted activity if the following conditions are met:
 - (a) the activity does not occur within:
 - (i) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (ii) a *drinking water protection zone*; or
 - (iii) any *mātaítai* or *taiāpure*; and
 - (b) the activity does not occur within or adjacent to a *nohoaka* entitlement from 1 August to 30 April (inclusive); and
 - (c) the activity does not cause flooding of any other person’s property, erosion, *land* instability, or property damage; and
 - (d) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and
 - (e) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards, 200 metres downstream of the works.

FF-R20-DIS1

The disturbance of the *bed* of a *lake* or *river*, and any associated deposition of *bed substrate*, use of *land* or *discharge of bed substrate to water* or to *land* where it may enter *water* that does not comply with FF-R20-PER1 is a discretionary activity.

FLOOD – Flood protection and drainage assets

Objectives

FLOOD-O1 – River function in relation to natural hazards

Flood protection and drainage works and flood protection and drainage assets reduce or mitigate the risk of, and the effects on communities and property from, natural hazards, including those arising from or exacerbated by climate change.

Policies

FLOOD-P1 – Links with the BED and DAM chapters

In addition to the provisions in this chapter, the following policies in the BED and DAM chapters also apply to activities managed by the FLOOD rules:

- (1) BED-P1 – Value of works in the bed; and
- (2) BED-P2 – Disturbance of the beds of lakes and rivers; and
- (3) BED-P3 – Management of activities in the bed; and
- (4) BED-P4 – Use, maintenance, alteration, replacement and placement of structures; and
- (5) BED-P5 – Placement or replacement of hard protection structures; and
- (6) BED-P6 – Restoration of lake and river extent and values; and
- (7) DAM-P4 – Managing in-stream damming and diversion activities; and
- (8) DAM-P6 – Managing off-stream dams; and
- (9) DAM-P9 – Temporary diversions.

No other policies in the BED and DAM chapter apply to activities managed by the FLOOD chapter unless expressly stated.

FLOOD-P2 – Nature-based solutions

Encourage the adoption of nature-based solutions when undertaking *flood protection and drainage works*, which, in the context of *flood protection and drainage works*, are those that:

- (1) improve the natural character, form and function and instream values of *water bodies*; and
- (2) do not result in the *loss of value* or extent of *rivers*; and
- (3) reduce the need for *hard protection structures*.

FLOOD-P3 – Management of flood protection and drainage activities

For any resource consent application for *flood protection and drainage works*, or *flood protection and drainage assets*:

- (1) applicants must demonstrate how the activities will be managed in a way that:

- (a) implements the objects of the Soil Conservation and Rivers Control Act 1941 as set out in Section 10, which are:
 - (i) the promotion of soil conservation; and
 - (ii) the prevention and mitigation of soil erosion; and
 - (iii) the prevention of damage by floods; and
 - (iv) the utilisation of lands in such a manner as will tend towards the attainment of the said objects; and
 - (b) reduces *natural hazard* risks, or reduces the impacts of *natural hazard* risks on communities; and
- (2) decision makers must:
- (a) take into consideration the social, cultural and economic benefits of *flood protection and drainage works* and *flood protection and drainage assets*; and
 - (b) provide for *flood protection and drainage works* that maintain the function and capacity of existing *flood protection and drainage assets*.

FLOOD-P4 – Management Plan

Encourage the use of a management plan prepared in accordance with APP28 – Flood protection and drainage works management plan to manage the adverse *effects* associated with *flood protection and drainage works*.

Rules

Advice notes:

- (1) The placement, use, alteration, extension, or reconstruction of *culverts* and *passive flap gates* in, on, over, or under the *bed* of any *river* are permitted under regulations 70, 71 and 74 of the NESF. The disturbance of the *bed* of a *river* associated with placing a *culvert* or *passive flap gates* in, on, over or under the *bed* of any *river* is not covered under the NESF and is managed by BED-R7-PER1 and BED-R7-DIS1.
- (2) Where an activity includes the placement of a *culvert*, *weir*, *flap gate*, *dam* or *ford* in, on, over, or under the *bed* of any *river* or connected area, the NESF sets out information requirements in regulations 62 to 68 that must be provided to ORC within 20 working days of the activity being finished.
- (3) Work affecting archaeological sites is subject to an authority process under the Heritage New Zealand Pouhere Taonga Act 2014. If any activity could modify, damage or destroy any archaeological site(s), an authority (consent) from Heritage New Zealand must be obtained for the work to proceed lawfully.
- (4) Any person constructing a *structure* likely to impede *fish* passage (including *culverts*, *fords*, *dams* or *diversion structures*) will need to comply with the requirements of the Freshwater Fisheries Regulations 1983, administered by the Department of Conservation.
- (5) For all activities in or near waterways, refer also to requirements and restrictions under the ORC Flood Protection Management Bylaw 2022.

- (6) The use of *land* for *earthworks* outside the *bed* of a *lake* or *river* is managed in the EARTH chapter.
- (7) *Flood protection and drainage works* may include gravel extraction, *drain maintenance* and in-stream *damming*. These activities are managed by rules BED-R16 – Maintenance of drains and modified water bodies, BED-R17 – Gravel extraction, DAM-R2 – Temporary in-stream dams and weirs, DAM-R3 – Other in-stream dams and weirs and DAM-R4 – Use of existing in-stream dams and weirs and are not managed by FLOOD-R1 – Use of flood protection and drainage assets or FLOOD-R2 – Flood protection and drainage works.

FLOOD-R1 – Use of flood protection and drainage assets

FLOOD-R1-PER1

The use of any *flood protection and drainage assets*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land*, discharge of *bed substrate* to *water* or to *land* where it may enter *water*, *off-stream damming* of *water* and *diversion* of *water*, is a permitted activity if all of the following conditions are met:

- (1) the asset is maintained in a good and safe condition; and
- (2) if the asset is identified in an *action plan* as a *structure* requiring remediation to provide for *fish* passage, the remediation has been completed by the date specified in the *action plan*; and
- (3) where the activity includes the *off-stream damming* of *water*, the *off-stream dam* is managed in accordance with the Building (Dam Safety) Regulations 2022 if it is a *classifiable dam*.

FLOOD-R1-DIS1

Unless provided for by FLOOD-R1-PER1, the use of any *flood protection and drainage assets*, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land*, discharge of *bed substrate* to *water* or to *land* where it may enter *water*, *off-stream damming* of *water* and *diversion* of *water*, is a discretionary activity.

FLOOD-R2 – Flood protection and drainage works

FLOOD-R2-PER1

Flood protection and drainage works, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land*, discharge of *bed substrate* to *water* or to *land* where it may enter *water*, *off-stream damming* of *water* and *diversion* of *water*, are a permitted activity if all of the following conditions are met:

- (1) the works are limited to:
 - (a) the introduction or planting of vegetation in or on the *bed* of a *lake* or *river*, or *riparian margin*; and
 - (b) *vegetation clearance* (excluding via application of *agr chemicals*) from the *bed* of a *lake* or *river*, or *riparian margin*; and
 - (c) the *maintenance*, alteration or replacement of a *structure* in the *bed*, provided the works do not increase the footprint of the *structure* in the *bed*; and
 - (d) the deposition of *bed substrate*; and

- (e) the movement of *bed substrate* within the *bed*; and
 - (f) the disturbance of the *bed* of a *lake* or *river*; and
 - (g) the *off-stream damming* of *water*; and
 - (h) *diversion* of *water*, including the *diversion* of *floodwaters*; and
 - (i) the use of land; and
 - (j) the *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*; and
- (2) the works are for the purpose of:
- (a) maintaining, altering or replacing existing *flood protection and drainage assets*; or
 - (b) maintaining the flow carrying capacity of *rivers* and overland flow paths; and
- (3) the works do not include the installation or placement of a new permanent *structure*; and
- (4) at least 10 working days prior to works, the relevant iwi authority, relevant regional Fish and Game Council and the Department of Conservation are given notice of the proposed works; and
- (5) the alteration or replacement works do not:
- (a) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (b) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (c) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (d) result in flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; or
 - (e) frustrate the use of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure* that is not a *flood protection and drainage asset*, unless ORC has a written agreement with the owner or operator of the *structure*; and
- (6) the *diversion* of *water* does not:
- (a) occur within:
 - (i) an area where the *diversion* of *water* is prohibited in MAP[WCO] – Water conservation order layer (areas protected by WCO); or
 - (ii) the *Waitaki Catchment*; and
 - (b) does not reduce the level of any *lake* or the downstream flow in any *river* below an environmental level or flow identified in the EFL chapter; and
- (7) any *discharge* associated with the *diversion* of *floodwaters* is within or from the same catchment in which the *water* would naturally flow; and
- (8) where the activity includes the *off-stream damming* of *water*, the *off-stream dam* is managed in accordance with the Building (Dam Safety) Regulations 2022 if it is a *classifiable dam*; and
- (9) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied; and

- (10) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards 200 metres downstream of the works; and
- (11) there is no fuel storage or placement of any *hazardous substance* on any part of the *bed* of the *lake* or *river*; and
- (12) any plant, equipment, or machinery associated with the activity is removed from the *bed* on completion of the activity; and
- (13) the site is left tidy on completion of the activity, including removal of any debris associated with the activity.

FLOOD-R2-CON1

Unless provided for by FLOOD-R2-PER1, *flood protection and drainage works*, not including the activities managed by FLOOD-R1 – Use of flood protection and drainage assets, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land*, *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*, *off-stream damming* of *water* and *diversion* of *water*, are a controlled activity if all of the following conditions are met:

- (1) the works are limited to:
 - (a) the introduction or planting of vegetation in or on the *bed* of a *lake* or *river*, or *riparian margin*; and
 - (b) *vegetation clearance* (excluding via application of *agrichemicals*) from the *bed* of a *lake* or *river*, or *riparian margin*; and
 - (c) the *maintenance*, alteration or replacement of a *structure* in the *bed*; and
 - (d) the deposition of *bed substrate*; and
 - (e) the movement of *bed substrate* within the *bed*; and
 - (f) the disturbance of the *bed* of a *lake* or *river*; and
 - (g) the *off-stream damming* of *water*; and
 - (h) *diversion* of *water*; and
 - (i) the use of *land*; and
 - (j) the *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*; and
- (2) the works do not include the installation or placement of a new *hard protection structure*; and
- (3) the works are undertaken in accordance with a management plan prepared in accordance with APP28 – Flood protection and drainage works management plan; and
- (4) the works do not:
 - (a) disturb the roosting or nesting of *indigenous* birds and bats; or
 - (b) frustrate or prevent the exercise of any lawful take of *water* by any other person; or
 - (c) disturb the spawning *habitat* of *desired fish species* during their spawning seasons; or
 - (d) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or

- (e) frustrate the use or integrity of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure* that is not a *flood protection and drainage asset*, unless ORC has a written agreement with the owner or operator of the *structure*; and
- (5) where the activity includes the *off-stream damming of water*, the *off-stream dam* is managed in accordance with the Building (Dam Safety) Regulations 2022 if it is a *classifiable dam*.

ORC reserves control over the following matters:

- (1) quality and content of, and implementation of, the management plan prepared in accordance with APP28 – Flood protection and drainage works management plan; and
- (2) the lapsing period and duration of the resource consent; and
- (3) review of the conditions of the resource consent; and
- (4) the need for a bond; and
- (5) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (6) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

Pursuant to section 95A of the RMA an application for resource consent under this rule will be processed and considered without public notification.

FLOOD-R2-DIS1

Unless provided for by FLOOD-R2-PER1 or FLOOD-R2-CON1, *flood protection and drainage works*, not including the activities managed by FLOOD-R1 – Use of flood protection and drainage assets, and any associated disturbance of the *bed*, deposition of *bed substrate*, use of *land*, *discharge of bed substrate* to *water* or to *land* where it may enter *water*, *off-stream damming of water* and *diversion of water*, are a discretionary activity.

OTH – Other discharges

Objectives

There are no topic-specific objectives. Refer to IO – Integrated objectives and the objectives in the Area-specific matters chapters.

Policies

OTH-P1 – Approved substances

Discharges of hazardous substances to water, or onto or into land in circumstances where a contaminant may enter water, only occur if:

- (1) the substance is approved under HSNO for the type of use proposed and application occurs in accordance with that approval; and
- (2) application methods will minimise any spray drift, including by considering:
 - (a) type of spray equipment used; and
 - (b) spray volume and droplet size; and
 - (c) direction of spraying and *height* of release above the ground; and
 - (d) weather conditions; and
 - (e) separation distances from *water bodies, artificial watercourses, public infrastructure, drinking water supplies, and stormwater networks*; and
- (3) there are contingency measures in place to prevent accidental *discharges to water*; and
- (4) for *hazardous substances used to control pests, pest agents, organisms of interest or unwanted organisms*, adverse *effects* on non-target organisms are avoided as far as practicable.

OTH-P2 – Unapproved substances

Activities involving the use, storage or *discharge of hazardous substances* that are not approved for application onto *land* or into *water* under HSNO will:

- (1) as a first priority, avoid the *discharge* (including accidental spillage) of *hazardous substances* onto *land*, into *water*, or into a reticulated *stormwater network*; and
- (2) as a second priority, ensure that after implementing (1), where there is a residual risk of a *discharge of hazardous substances* (including any accidental spillage), it is contained on-site.

OTH-P3 – Major hazard facilities

Provide for new and existing *major hazard facilities* while ensuring that:

- (1) new *major hazard facilities* are not located where they may pose a risk to the health and well-being of *water bodies*, and coastal and *freshwater* ecosystems; and
- (2) all *major hazard facilities* implement measures to prevent the unauthorised *discharge of contaminants* onto or into *land* in circumstances where a *contaminant* may enter *water*, or to

water including through a management plan prepared in accordance with APP29 – Management plan (major hazard facilities).

OTH-P4 – New or extensions to operating cemeteries

Avoid the creation of new *cemeteries*, and extensions to *cemeteries* that were *lawfully established* as at 31 October 2024, on:

- (1) land where the *natural hazard*, erosion, or flooding risk has been assessed as significant; or
- (2) land with *groundwater* less than 3 metres below the ground surface.

OTH-P5 – Decision-making on resource consent applications for cemeteries

Provide for the appropriate disposal of human remains while managing any adverse *effects* from the creation of a new cemetery or extension of an existing cemetery, so it does not pose an unacceptable risk to the *environment* (including people) by:

- (1) assessing any adverse *effects* on surface *water*, *groundwater*, and the *coastal marine area* and, if required, monitoring *contaminant* levels and environmental risks; and
- (2) protecting the quality of *drinking water supplies*.

Rules

Advice note:

- (1) Users of this plan should consult the Resource Management (National Environmental Standards for Storing Tyres Outdoors) Regulations 2021 for further regulations for the storage of tyres outdoors.

OTH-R1 – Agrichemical discharges to land

Advice note:

- (1) Any *discharge* of an *agrchemical* containing *Bacillus thuringiensis var. kurstaki* that complies with the Resource Management (Exemption) Regulations 1996 is exempt from any *discharge* controls under the RMA and this regional plan.

OTH-R1-PER1

The *discharge* of an *agrchemical* onto or into *land* in circumstances where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the *agrchemical* is approved for use under HSNO, and its use and *discharge* is in accordance with all the conditions of the approval; and
- (2) the *discharge* is undertaken in accordance with any manufacturers' directions and the following sections of NZS8409:2021 Management of Agrichemicals:
 - (a) Part 4: Storage and supply of *agrchemicals*; and
 - (b) Section 5.2 of Part 5: Safe use of plant protection products; and
 - (c) Part 6: Disposal of *agrchemicals* and containers; and
- (3) the *discharge*:

- (a) does not occur within a *drinking water protection zone*; or
 - (b) does not occur within 20 metres of a *bore*; or
 - (c) does not occur within 5 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, or *coastal water*, unless:
 - (i) the *discharge* is for the primary purpose of managing *pests*, *pest agents*, *unwanted organisms*, or *organisms of interest*; or
 - (ii) the *discharge* is undertaken using a *targeted application method*; and
- (4) conditions (3)(b) or (c) do not apply if:
- (a) the *discharge* is undertaken in accordance with a *Freshwater Farm Plan* that includes measures to manage any adverse *effects* of *agrichemicals* to land; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* is no greater than that allowed for by conditions (3)(b) or (c); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *discharges* of *agrichemicals* to land; and
- (5) no mixing or diluting of *agrichemicals*, occurs within:
- (a) a *drinking water protection zone*; or
 - (b) 20 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, *coastal water* or a *bore*; or
 - (c) 5 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, *coastal water* or a *bore*; if
 - (i) the mixing or dilution takes place within a sealed, banded system that will contain a volume of at least 110 percent of the largest spray tank to be filled; or
 - (ii) the mixing or dilution is for a backpack; or
 - (iii) the *water* used for mixing or dilution is being abstracted from a *water body*, a backflow prevention system is in place to prevent the *agrichemical* from flowing back into the source *water*; and
- (6) mixing or diluting of *agrichemicals* occurs on level ground; and
- (7) if undertaking aerial application, pilots of aircraft (including drones and unmanned aerial vehicles) hold the following rating in accordance with the Civil Aviation Rule Part 61 Pilot Licences and Ratings:
- (a) Subpart P Pilot Chemical Rating.

OTH-R1-DIS1

Unless provided for by OTH-R1-PER1, the *discharge* of an *agrichemical* onto or into *land* in circumstances where a *contaminant* may enter *water*, is a discretionary activity.

OTH-R2 – Agrichemical discharges to water

OTH-R2-PER1

The *discharge* of an *agrchemical* onto or into surface *water* is a permitted activity if all of the following conditions are met:

- (1) the *agrchemical* is:
 - (a) approved under HSNO; and
 - (b) not classified as hazardous to the aquatic environment; and
 - (c) used and *discharged* in accordance with all conditions of the approval; and
- (2) any *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards; and
- (3) the *discharge* does not occur within:
 - (a) any *mātaimai* or *taiāpure*; or
 - (b) a *drinking water protection zone*; and
- (4) the *discharge* is undertaken in accordance with any manufacturers' directions and the following sections of NZS8409:2021 Management of Agrichemicals:
 - (a) Part 4: Storage and supply of agrichemicals; and
 - (b) Section 5.2 of Part 5: Safe use of plant protection products; and
 - (c) Part 6: Disposal of agrichemicals and containers.
- (5) no mixing or diluting of *agrchemicals*, occurs within:
 - (a) a *drinking water protection zone*; or
 - (b) 20 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, *coastal water* or a *bore*; or
 - (c) 5 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, *coastal water* or a *bore*; if
 - (i) the mixing or dilution takes place within a sealed, banded system that will contain a volume of at least 110 percent of the largest spray tank to be filled; or
 - (ii) the mixing or dilution is for a backpack; or
 - (iii) the *water* used for mixing or dilution is being abstracted from a *water body*, a backflow prevention system is in place to prevent the *agrchemical* from flowing back into the source *water*; or
- (6) mixing or diluting of *agrchemicals* occurs on level ground; and
- (7) if undertaking aerial application, pilots of aircraft (including drones and unmanned aerial vehicles), hold the following ratings in accordance with the Civil Aviation Rule Part 61 Pilot Licences and Ratings:
 - (a) Subpart P Pilot Chemical Rating; and

- (8) if the *discharge* is for the primary purpose of managing *pests, pest agents, unwanted organisms, or organisms of interest*, (1)(b) does not apply.

OTH-R2-DIS1

Unless provided for by OTH-R2-PER1, the *discharge* of an *agrchemical* to *water* is a discretionary activity.

OTH-R3 – Vertebrate toxic agents

Advice note:

- (1) Any *discharge* of the *vertebrate toxic agents* brodifacoum, rotenone or sodium fluoroacetate that complies with the Resource Management (Exemption) Regulations 2017 is exempt from any *discharge* controls under the RMA and this regional plan.

OTH-R3-PER1

The *discharge* of a *vertebrate toxic agent* onto or into *land* in circumstances where a *contaminant* may enter *water*, or to *water*, is a permitted activity if all of the following conditions are met:

- (1) the *vertebrate toxic agent* is approved under HSNO and not classified as hazardous to the aquatic environment, and used and *discharged* in accordance with all conditions of the approval; and
- (2) the *discharge* is not within a *drinking water protection zone*; and
- (3) the *discharge* is undertaken in accordance with the manufacturers' directions; and
- (4) if the *discharge* is to *water*, it complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards; and
- (5) the operator must give written notice to the ORC with the following information least 10 working days prior to commencement of the proposed *discharge*, outlining:
 - (a) the objectives of the proposed use of the *vertebrate toxic agent*; and
 - (b) the *vertebrate toxic agent*, pre-feed, or repellent to be used; and
 - (c) the bait, delivery method, application rate, or lures to be used; and
 - (d) a map showing the boundaries of each proposed *discharge* area; and
 - (e) the location of any warning *signs* for each proposed *discharge* area; and
 - (f) the period during which the proposed *discharge* will occur; and
 - (g) the name and contact details of:
 - (i) the operator; and
 - (ii) if the operator is acting for another person, that other person; and
- (6) the operator must ensure that the *discharge* complies with the information in the notice of the proposed *discharge* as outlined in (5); and
- (7) the operator must give written notice to the ORC with the following information no later than 20 working days after the *discharge* ends:

- (a) a map showing the boundaries of each *discharge* area; and
- (b) the period during which the *discharge* occurred in each *discharge* area;
- (c) the bait, delivery method, application rate, or lures used.

OTH-R3-DIS1

Unless provided for by OTH-R3-PER1, the *discharge* of a *vertebrate toxic agent* onto or into land in circumstances where a *contaminant* may enter *water*, or to *water*, is a discretionary activity.

OTH-R4 – Dust suppressants

OTH-R4-PER1

The *discharge* of a dust suppressant onto or into *land* in circumstances where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the dust suppressant is either:
 - (a) *water*; or
 - (b) a substance that is not a *hazardous substance*; or
 - (c) a substance that is not *waste oil*; or
 - (d) approved under HSNO and not classified as hazardous to the aquatic environment, and used and *discharged* in accordance with all conditions of the approval; and
- (2) the *discharge* does not contain any *pest*, *pest agent*, *unwanted organism* or *organism of interest*; and
- (3) the *discharge* does not occur within:
 - (a) 5 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, or *coastal water*, or
 - (b) a *drinking water protection zone*; or
 - (c) 20 metres of a *bore*; and
- (4) the *discharge* is not to *contaminated land* or *potentially contaminated land*; and
- (5) the *discharge* is undertaken in accordance with any manufacturers' directions; and
- (6) the *discharge* does not:
 - (a) result in ponding or overland flow; or
 - (b) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (7) if the *discharge* enters *water*, it complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards.

OTH-R4-DIS1

Unless provided for by OTH-R4-PER1, the *discharge* of a dust suppressant to *water*, or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a discretionary activity.

OTH-R5 – Tracer dye

OTH-R5-CON1

The *discharge* of tracer dye to *water* for investigative purposes is a controlled activity if the following conditions are met:

- (1) the tracer dye is either:
 - (a) not a *hazardous substance*; or
 - (b) is approved under HSNO for the type of use proposed and the application or *discharge* occurs in accordance with all conditions of the approval; and
- (2) the discharge does not contain any *pest, pest agent, unwanted organism* or *organism of interest*; and
- (3) the *discharge* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards; and
- (4) the *discharge* does not occur within:
 - (a) any *mātaitai* or *taiāpure*; or
 - (b) a *drinking water protection zone*.

ORC reserves control over the following matters:

- (1) the volume, type, and concentration of the tracer dye; and
- (2) the timing, duration, and method of the *discharge*; and
- (3) any requirements for notification of the *discharge* occurring; and
- (4) the lapsing period and duration of the resource consent; and
- (5) review of the conditions of the resource consent; and
- (6) the need for a bond; and
- (7) the collection, recording, monitoring, and provision of information about the exercise of the resource consent.

OTH-R5-DIS2

Unless provided for by OTH-R5-CON1, the *discharge* of tracer dye to *water* is a discretionary activity.

OTH-R6 – Discharges of swimming and spa pool water

OTH-R6-PER1

The *discharge* of swimming and spa pool water onto or into *land* in circumstances where it may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the *water* has not been treated with any chemicals in the 14 days prior to *discharge*; and
- (2) the *discharge* does not contain:
 - (a) any *hazardous substance, pest, pest agent, unwanted organism* or *organism of interest*;
or

- (b) any disinfectant or antiseptic; or
 - (c) any residual flocculant, except for aluminium at acid-soluble aluminium concentrations less than 0.1 milligrams per litre; or
 - (d) salts in excess of a concentration of 3500 milligrams per litre; or
 - (e) any residual chlorine or bromine above detection levels; and
- (3) the *discharge* does not occur within:
- (a) 20 metres of the *bed of a river or lake, a natural inland wetland, a modified watercourse, or coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 20 metres of a *bore*; and
- (4) the *discharge* is not onto or into *land*:
- (a) that is *contaminated land or potentially contaminated land*; or
 - (b) where the seasonal high-water table is:
 - (i) less than 600 millimetres from the ground surface, except in locations where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management; or
 - (ii) less than 2 metres from the ground surface where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management.
- (5) any filter backwash *water* does not enter a reticulated *stormwater network*; and
- (6) prior to being *discharged*, the temperature of the pool *water* is ambient; and
- (7) the *discharge* does not:
- (a) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (b) result in ponding or overland flow.

OTH-R6-DIS1

Unless provided for by OTH-R6-PER1, the *discharge* of swimming pool or spa pool *water* into *water*, or onto or into *land* in circumstances where it may enter *water* is a discretionary activity.

OTH-R7 – Discharges from water treatment and filter backwash

OTH-R7-PER1

The *discharge* of *water* or *contaminants* from the purging of instruments used in *water* treatment, the use of portable potable *water* treatment units, or filter backwash onto or into *land* in circumstances where it may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the volume *discharged* does not exceed 3 cubic metres per day; and
- (2) the *discharge* does not contain any *hazardous substance, pest, pest agent, unwanted organism or organism of interest*; and

- (3) the concentration of chlorine does not exceed 2 milligrams per litre; and
- (4) the pH of the *discharge* is between 6 and 8; and
- (5) any residual flocculant, except for aluminium at acid-soluble aluminium concentrations less than 0.1 mg/l; and
- (6) the *discharge* does not occur within:
 - (a) 20 metres of the *bed of a river or lake, a natural inland wetland, a modified watercourse, an artificial watercourse, or coastal water, or*
 - (b) *a drinking water protection zone; or*
 - (c) 20 metres of a *bore; and*
- (7) the *discharge* is not onto or into *land*:
 - (a) that is *contaminated land or potentially contaminated land; or*
 - (b) where the seasonal high-water table is:
 - (i) less than 600 millimetres from the ground surface, except in locations where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management; or
 - (ii) less than 2 metres from the ground surface where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management.
- (8) the *discharge* does not:
 - (a) enter a *stormwater network; or*
 - (b) result in ponding or overland flow; or
 - (c) cause or exacerbate flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage.

OTH-R7-DIS1

Unless provided for by OTH-R7-PER1, the *discharge of water or contaminants* from the purging of instruments used in *water* treatment, the use of portable potable *water* treatment units, or filter backwash to *water*, or onto or into *land* in circumstances where it may enter *water*, is a discretionary activity.

OTH-R8 – Discharges from emergency firefighting and training

OTH-R8-PER1

The *discharge of contaminants or water to land* in circumstances where a *contaminant* or *water* may enter *water*, as a result of firefighting and training activities undertaken by Fire and Emergency New Zealand, Dunedin Airport, or New Zealand Defence Force, is a permitted activity if all of the following conditions are met:

- (1) the person undertaking the *discharge* activity is an on-duty employee or volunteer of one of the aforementioned organisations; and

- (2) the *discharge* does not contain any *hazardous substance, pest, pest agent, unwanted organism or organism of interest*; and
- (3) for training activities, the *discharge* does not occur for more than two continuous hours within a 24-hour period; and
- (4) for training activities, the *discharge* is not onto the same area of *land* more frequently than once every three months; and
- (5) for training activities, the *discharge* does not occur within:
 - (a) 20 metres of the *bed* of a *river* or *lake*, a *natural wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*, or
 - (b) a *drinking water protection zone*; or
 - (c) 20 metres of a *bore*; and
- (6) for training activities, the *discharge* is not to *contaminated land* or *potentially contaminated land*; and
- (7) for training activities, the *discharge* does not:
 - (a) cause flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; or
 - (b) result in ponding or overland flow; and
- (8) each organisation maintains a regional register with details of location and dates of the *discharges to land* for fire training activities and those records are made available to ORC upon request.

OTH-R8-RDIS1

Unless provided for by OTH-R8-PER1, the *discharge of contaminants or water to water*, or onto or into *land* in circumstances where a *contaminant* or *water* may enter *water* as a result of fire training activities, is a restricted discretionary activity.

ORC restricts its discretion to the following matters:

- (1) the volume, type, and concentration of the substance to be *discharged*; and
- (2) the timing, duration, and method of the *discharge*; and
- (3) any requirements for notification of the *discharge* occurring; and
- (4) the lapsing period and duration of the resource consent; and
- (5) review of the conditions of the resource consent; and
- (6) the need for a bond; and
- (7) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (8) the extent to which the activity is consistent with the matters set out in APP8 – Mana whenua environmental indicators.

OTH-R9 – Discharges of water used for holding live organisms

OTH-R9-PER1

The *discharge of water* and any associated *contaminants* which has been used for the purpose of holding live organisms to *water*, or onto or into *land* in circumstances where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *discharge* does not contain any *hazardous substance, pest, pest agent, unwanted organism or organism of interest*; and
- (2) the *discharge* will not:
 - (a) introduce organisms to a *water body* or part of a *water body* where the organism is not already present; or
 - (b) increase the population of an *undesirable fish species*; and
- (3) if the *discharge* is to *water*:
 - (a) it does not occur within:
 - (i) any *mātaítai* or *taiāpure*; or
 - (ii) a *drinking water protection zone*; or
 - (iii) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; and
 - (b) it complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards; and
- (4) if the *discharge* is to *land*, it does not occur within:
 - (a) 20 metres of the *bed of a river or lake, a natural inland wetland, a modified watercourse, an artificial watercourse, or coastal water*, or
 - (b) a *drinking water protection zone*; or
 - (c) 20 metres of a *bore*; and
- (5) if the *discharge* is to *land*, it is not to *contaminated land or potentially contaminated land*; and
- (6) the *discharge* does not:
 - (a) result in ponding or overland flow; or
 - (b) cause flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage.

OTH-R9-DIS1

Unless provided for by OTH-R9-PER1, the *discharge of water* and any associated *contaminants* which has been used for the purpose of holding live organisms to *water*, or onto or into *land* in circumstances where it may enter *water*, is a discretionary activity.

OTH-R10 – Cemeteries

OTH-R10-PER1

The use of *land* for a *cemetery* that is closed or was *lawfully established* as at 31 October 2024, and any associated *discharge of water or contaminants to water*, or onto or into *land* in circumstances where they may enter *water*, is a permitted activity.

OTH-R10-PER2

The use of *land* for a new *cemetery* or part of a *cemetery* that was not *lawfully established* as at 31 October 2024 and any associated *discharge of contaminants* into or onto *land* in circumstances where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the activity does not occur within:
 - (a) 100 metres of the *bed of a river or lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*, or
 - (b) a *drinking water protection zone*; or
 - (c) 50 metres of a *bore*; and
- (2) the activity does not occur:
 - (a) within an area subject to a flood hazard, coastal hazard, or storm surges; or
 - (b) on *contaminated land* or *potentially contaminated land*; or
 - (c) on *land* that is less than 3 metres above *groundwater*; and
- (3) the *discharge* does not:
 - (a) result in ponding or overland flow; or
 - (b) cause flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage.

OTH-R10-DIS1

Unless provided for by OTH-R10-PER2, the use of *land* for a new *cemetery*, or a part of a *cemetery*, that was not *lawfully established* as at 31 October 2024 and any associated *discharge of contaminants* into or onto *land* in circumstances where a *contaminant* may enter *water*, or to *water*, is a discretionary activity.

OTH-R11 – Major hazard facilities

OTH-R11-CON1

The use of *land* for a *major hazard facility* is a controlled activity if all of the following conditions are met:

- (1) the *major hazard facility* is classified as a lower tier *major hazard facility*; and
- (2) the *major hazard facility* is not within:
 - (a) 100 metres of the *bed of a river or lake*, a *natural wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*, or

- (b) a *drinking water protection zone*; or
 - (c) 50 metres of a *bore* used for *drinking water supply*; and
- (3) a management plan for the purpose of preventing the unauthorised *discharge of contaminants* onto or into *land* in circumstances where it may enter *water*, or to *water*, is prepared and implemented in accordance with APP29 – Management plan (major hazard facilities).

ORC reserves control over the following matters:

- (1) the location of the *major hazard facility*, including in relation to *water bodies* and *coastal water*; and
- (2) quality, content, and implementation of the management plan prepared in accordance with APP29– Management plan (major hazard facilities); and
- (3) the lapsing period and duration of the resource consent; and
- (4) review of the conditions of the resource consent; and
- (5) the need for a bond; and
- (6) the collection, recording, monitoring, and provision of information about the exercise of the resource consent; and
- (7) the extent to which the activity is consistent with the matters set out in APP8 – Mana whenua environmental indicators.

OTH-R11-DIS1

Unless provided for by OTH-R11-CON1, the use of *land* for a *major hazard facility* is a discretionary activity.

OTH-R12 – Discharges not managed elsewhere

OTH-R12-PER1

Unless provided for by any other rule in this Plan, the *discharge* of any *contaminant* or *water* to *water*, or onto or into *land* in circumstances where it may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) the *discharge* does not:
 - (a) contain any *hazardous substance, pest, pest agent, unwanted organism, or organism of interest*; or
 - (b) introduce live aquatic life to a *water body* or part of a *water body* where the *species* is not already present; or
 - (c) increase or spread the population of an *undesirable fish species*; or
 - (d) alter the natural course of any *water body* or its *bed*; or
 - (e) change the *water* level range or hydrological function of any *lake, river, natural wetland or groundwater*; or
 - (f) cause flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or

- (g) occur onto *land* outside of the *landholding*; and
 - (h) result in ponding or overland flow; and
- (2) the *discharge* is not:
- (a) to or from *contaminated land* or potentially *contaminated land*; or
 - (b) directly into *groundwater*; and
- (3) if the *discharge* is to *surface water*, it:
- (a) complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards; and
 - (b) does not occur within a *drinking water protection zone*, *mātaimai*, or *taiāpure*; and
- (4) if the *discharge* is to *land*, it does not occur within:
- (a) 20 metres of the *bed* of a *river* or *lake*, a *natural wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*, or
 - (b) a *drinking water protection zone*; or
 - (c) 20 metres of a *bore*.

OTH-R12-DIS1

Unless provided for by OTH-R12-PER1 or prohibited by OTH-R12-PR1 and OTH-R12-PR2, the *discharge* of any *contaminant* or *water* to *water*, or onto or into *land* in circumstances where it may enter *water*, is a discretionary activity.

OTH-R12-PR1

Unless otherwise provided for by any other rule in this plan, the *discharge* of any *contaminant* or *water* to *water*, or onto or into *land* in circumstances where a *contaminant* may enter *water*, that produces a conspicuous oil or grease film, scum, or foam is a prohibited activity.

OTH-R12-PR2

Unless otherwise provided for by any other rule in this plan, the *discharge* of any hydrocarbon (or oil), to *water*, or onto or into *land*, in circumstances where a *contaminant* may enter *water*, is a prohibited activity.

SW – Stormwater

Objectives

There are no topic-specific objectives. Refer to IO – Integrated objectives and the objectives in the Area-specific matters chapters.

Policies

SW-P1 – Discharges from stormwater networks

Manage *discharges* from *stormwater networks* on a comprehensive basis where contributing catchments are aggregated and *discharges* from the *stormwater network* are authorised by a single *discharge* permit.

SW-P2 – Consent framework for stormwater networks

Provide for the ongoing operation of a *stormwater network* through an interim consent in accordance with SW-P3 – Interim consent framework for stormwater networks that provides for:

- (1) the collection of information to inform a comprehensive *stormwater discharge* consent in accordance with SW-P4 – Comprehensive consent framework for stormwater networks, and
- (2) the development of a *Stormwater* management plan in accordance with SW-P5 – Stormwater Management Plans.

SW-P3 – Interim consent framework for stormwater networks

Manage the adverse *effects* of *discharges* from *stormwater networks* authorised by a controlled activity consent granted under Rule SW-R1-CON1 or during the development of a *stormwater* management plan by:

- (1) implementing a monitoring programme that:
 - (a) selects suitable representative sites for ongoing monitoring of receiving *environments*; and
 - (b) identifies any adverse *effects* arising from the quality and quantity of *stormwater discharged* from the *stormwater network*, beyond the zone of *reasonable mixing* on:
 - (i) *primary contact sites*, if there are any *discharges* from the *stormwater network* that may affect a *primary contact site*; and
 - (ii) *wetlands*, if there are any *discharges* from the *stormwater network* that may affect a *wetland*; and
 - (iii) water quality and quantity in the *receiving environment*; and
 - (c) is proportionate to the scale of the *stormwater discharges* and level of risk, taking into account the sensitivity of the *receiving environment* to those *discharges*; and
- (2) developing a prioritised programme of progressive improvements within the *stormwater network* to inform the *Stormwater* management plan required by SW-P5 – Stormwater Management Plans; and

- (3) managing any adverse *effects* arising from the *discharge* of *stormwater* from the *stormwater network* beyond the zone of *reasonable mixing* detected via monitoring undertaken in accordance with SW-P2 – Consent framework for stormwater networks, by:
 - (a) implementing mitigation as soon as practicable after the adverse *effect* is identified; and
 - (b) identifying longer term options to mitigate the adverse *effect*; and
- (4) only granting consents under Rule SW-R1-CON1 for a maximum duration of five years; and
- (5) requiring conditions on resource consents issued under Rule SW-R1-CON1 to set out a timeframe for the development of a *Stormwater* management plan in accordance with SW-P5 – Stormwater Management Plans.

SW-P4 – Comprehensive consent framework for stormwater networks

Minimise the adverse *effects* of *stormwater discharges* from *stormwater networks* by:

- (1) requiring all *stormwater* to be *discharged* to an *available stormwater network*, unless alternative treatment and disposal options will result in the same or improved outcomes for *fresh water*; and
- (2) for new *stormwater networks*, or extensions to existing *stormwater networks*, ensuring the separation of *wastewater* and *stormwater*; and
- (3) for new *stormwater networks*, or extensions to existing *stormwater networks*, utilising good practice guidelines for *stormwater* treatment and attenuation systems, including *green infrastructure* wherever practicable, to contribute to the achievement of the target *attribute* states and interim target *attribute* states set out in the Area-specific matters chapters within timeframes specified in a *Stormwater* management plan; and
- (4) for existing *stormwater networks*, requiring progressive improvements to *stormwater* treatment and disposal, including development of *green infrastructure* wherever practicable, to contribute to the achievement of the target *attribute* states and interim target *attribute* states set out in the Area-specific matters chapters within timeframes specified in a *Stormwater* management plan; and
- (5) requiring *stormwater networks* to have sufficient capacity to prevent *discharges* causing or contributing to flooding, erosion, *land* instability or property damage.

SW-P5 – Stormwater Management Plans

Require all *stormwater networks* to be managed in accordance with a *Stormwater* Management Plan that:

- (1) is prepared in accordance with APP30 – Stormwater management plans; and
- (2) describes how the *stormwater network* will be managed in accordance with good practice guidelines for managing *stormwater*; and
- (3) reflects the scale and significance of *water* quality and quantity improvements required to achieve the *environmental outcomes*, interim target *attribute* states and target *attribute* states set for each *FMU* and/or *rohe*; and
- (4) is provided with any resource consent application lodged under Rule SW-R2-DIS1.

SW-P6 – Stormwater discharges not from a stormwater network

Minimise the adverse *effects* of *stormwater discharges* not from a *stormwater network* on *land* and *water* by:

- (1) implementing all practicable measures to reduce *contaminants* at source which could become entrained in *stormwater* and subsequently *discharged* to *land* or *water*; and
- (2) requiring all *stormwater* to be *discharged* into an *available stormwater network*, unless alternative treatment and disposal options will result in the same or improved outcomes for *fresh water*; and
- (3) using good practice guidelines for determining appropriate *stormwater* treatment and attenuation systems, including *green infrastructure* wherever practicable; and
- (4) ensuring the *discharge* of *stormwater* does not cause flooding, erosion or *land* instability to any other person's property; and
- (5) monitoring and maintaining treatment and attenuation systems in accordance with good practice guidelines for managing *stormwater* to ensure their ongoing operation is effective.

Rules

SW-R1 – Stormwater network discharges

SW-R1-CON1

The *discharge* of *stormwater* from a *stormwater network* to *water*, or onto or into *land* in circumstances where a *contaminant* may enter *water*, is a controlled activity if all of the following conditions are met:

- (1) an application for resource consent is lodged prior to 30 December 2026; and
- (2) the consent duration sought is no more than five years; and
- (3) the *discharge* has not previously been authorised under this rule.

ORC reserves control over the following matters:

- (1) the actual and potential environmental *effects* on *water* quality, *water* quantity, and aquatic ecosystems; and
- (2) the actual and potential *effects* of the *discharge* on the quality and safety of human and animal *drinking water*; and
- (3) requirements to monitor and report on the quality of *stormwater discharges* to *water* or onto or into *land* in circumstances where a *contaminant* may enter *water*; and
- (4) the timeframe for developing a *Stormwater* management plan in accordance with SW-P5 – Stormwater Management Plans; and
- (5) the benefits of *stormwater networks* for the community and the environment; and
- (6) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators.

SW-R1-RDIS1

Unless provided for by SW-R1-CON1, the *discharge of stormwater from a stormwater network to water, or onto or into land* in circumstances where a *contaminant* may enter *water*, is a restricted discretionary activity.

ORC restricts its discretion to the following matters:

- (1) the actual and potential environmental *effects* on *water* quality, *water* quantity, and aquatic ecosystems; and
- (2) the actual and potential *effects* of the *discharge* on the quality and safety of human and animal drinking *water*; and
- (3) the contents, adequacy and implementation of the *Stormwater* Management Plan prepared in accordance with APP30 – Stormwater management plans; and
- (4) the benefits of *stormwater networks* for the community and the environment; and
- (5) the extent to which the activity is consistent with the matters set out in APP8 – Mana whenua environmental indicators.

SW-R2 – Stormwater discharges not from a stormwater network

SW-R2-PER1

The *discharge of stormwater not from a stormwater network to water, or onto or into land* in circumstances where a *contaminant* may enter *water*, is a permitted activity if all of the following conditions are met:

- (1) unless the *discharge* was *lawfully established* as at 31 October 2024, the *discharge* does not occur where there is an *available stormwater network*; and
- (2) the *discharge* is not:
 - (a) from *land* used or proposed to be used for residential purposes consisting of more than five *landholdings*; or
 - (b) from *land* used as an *industrial or trade premises*; or
 - (c) from, into or onto *contaminated land* or *potentially contaminated land*; or
 - (d) to a *scheduled drain* where the *discharge* did not occur prior to 31 October 2024; and
- (3) the *discharge* does not occur within:
 - (a) any *mātaimai* or *taiāpure*; or
 - (b) a *drinking water protection zone*; and
- (4) the *discharge* does not cause *stormwater* from up to and including the 24 hour 10 percent Annual Exceedance Probability rainfall event to enter any other property; and
- (5) any *discharge* to *water* complies with the standards for visual clarity, turbidity, suspended solids and change in sediment cover set out in APP13 – Receiving water standards.

SW-R2-DIS1

Unless provided for by SW-R2-PER1 the *discharge* of *stormwater* not from a *stormwater network* to *water*, or onto or into *land* in circumstances where a *contaminant* may enter *water* is a discretionary activity.

WASTE – Waste and landfills

Advice notes:

- (1) The provisions in this chapter do not apply to farm refuse pits or offal pits, which are managed under the FF – Farming and Forestry chapter.
- (2) Rules for *discharges* from *closed landfills* are located in the CL – Contaminated Land chapter.

Objectives

WASTE-O1 – Location of waste deposition and processing sites

Landfills, cleanfill areas, and organic waste and green waste deposition and processing sites are located to avoid risks from *natural hazards*, including where these risks may arise from the *effects of climate change*.

Policies

WASTE-P1 – New cleanfill areas and organic waste sites

Ensure new *cleanfill areas, and green waste and organic waste* sites, are located to avoid contamination of *drinking water supplies* and *water bodies* by avoiding:

- (1) *lakes, rivers, aquifers, wetlands, estuaries, bores, and the coastal marine area*; and
- (2) areas that are subject to a flood hazard, a coastal hazard, or storm surges.

WASTE-P2 – New and operating landfills

Avoid significant adverse *effects of discharges* and otherwise minimise the adverse *effects of discharges* from new *landfills* and operating *landfills* on the environment, by requiring that:

- (1) the siting, design, construction, operation, and management of new *landfills* is in accordance with the Waste Management Institute New Zealand's Technical Guidelines for Disposal to Land (September 2023); and
- (2) new *landfills* are not located in an area subject to a flood hazard, a coastal hazard, or storm surges; and
- (3) the siting and class of any *landfill* within 13km of any airport (but not its ancillary *commercial activities*) used for regular air transport services by aeroplanes capable of carrying more than 30 passengers does not increase the existing risk of bird strike; and
- (4) the operation and management of operating *landfills* is in accordance with the Waste Management Institute New Zealand's Technical Guidelines for Disposal to Land (September 2023) to the extent that the Guidelines are applicable; and
- (5) the quantity and composition of *waste* being deposited is monitored, recorded, and reported to ORC upon request; and
- (6) a site-specific management plan is prepared and implemented in accordance with the Waste Management Institute New Zealand's Technical Guidelines for Disposal to Land (September 2023) that includes (but is not limited to):

- (a) methods for leachate management, collection, treatment, and disposal; and
- (b) methods for *stormwater* capture and control from both off-site and on-site sources; and
- (c) methods to minimise contamination of the *receiving environment*; and
- (d) controls to manage *hazardous substances* and avoid any *discharge of hazardous substances* or the leaching of *contaminants* from *hazardous substances*; and
- (e) methods to ensure that any *discharge* at and from *landfills* within 13km of any airport (but not its ancillary *commercial activities*) used for regular air transport services by aeroplanes capable of carrying more than 30 passengers do not increase the existing risk of bird strike.

WASTE-P3 – Cleanfill areas

Avoid significant adverse *effects* of *discharges* and otherwise minimise the adverse *effects* of *discharges* from new and existing *cleanfill areas* by requiring that:

- (1) the operation and management is in accordance with the Waste Management Institute New Zealand’s Technical Guidelines for Disposal to Land (September 2023); and
- (2) the quantity and composition of material deposited is monitored, recorded, and reported to the ORC upon request.

WASTE-P4 – Organic waste and green waste

Adverse *effects* from the *discharge of contaminants* from *organic waste* and *green waste* are avoided, by requiring:

- (1) leachate management; and
- (2) *stormwater* management; and
- (3) any other methods to avoid contamination of the *receiving environment*; and
- (4) monitoring and reporting of impacts to *receiving environments*; and
- (5) that *organic waste* and *green waste* sites are not located on *land* subject to a flood hazard, a coastal hazard, or storm surges.

WASTE-P5 – Improved information on background contaminant concentrations

Where site-specific information is available that better identifies background *contaminant* concentration levels in accordance with the identification criteria set out in APP12 – Background contaminant concentration levels, that information must be taken into account when determining an application for resource consent.

Rules

Advice note:

- (1) Users of this plan should consult the Resource Management (National Environmental Standards for Storing Tyres Outdoors) Regulations 2021 for further regulations for the storage of tyres outdoors which apply in addition to this plan.

WASTE-R1 – Landfills

WASTE-R1-DIS1

Unless provided for by CL-R3 – Closed landfills, WASTE-R3 – Green waste, FF-R6 – Offal pits, or FF-R7 – Farm refuse pits, the use of *land* for a *landfill* and the associated *discharge* of *contaminants* to *water* or onto or into *land*, including in circumstances where a *contaminant* may enter *water* is a discretionary activity.

WASTE-R2 – Cleanfill areas

WASTE-R2-PER1

The use of *land* for an existing or new *cleanfill area* and the associated *discharge* of *water* or *contaminants* onto or into *land* in circumstances where *water* or a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the deposition does not cause the background *contaminant* concentration levels set out in APP12 – Background contaminant concentration levels to be exceeded; and
- (2) the activity does not occur within:
 - (a) 20 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, or *coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 20 metres of a *bore*; or
 - (d) an area subject to a flood hazard or coastal hazard; or
 - (e) a *critical source area*; and
- (3) the *discharge* does not contain any *pest*, *pest agent*, *unwanted organism* or *organism of interest*; and
- (4) the *discharge* is not to *contaminated land* or *potentially contaminated land*; and
- (5) the activity does not:
 - (a) result in ponding or overland flow; or
 - (b) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (6) the siting, design, construction, operation, and management of a new *cleanfill area* is in accordance with the Waste Management Institute New Zealand's Technical Guidelines for Disposal to Land (September 2023); and
- (7) a site management plan for a *cleanfill area* is prepared in accordance with section 7.2 of the Waste Management Institute New Zealand's Technical Guidelines for Disposal to Land (September 2023), implemented, and submitted to ORC no later than 10 working days before the activity begins that includes:
 - (a) methods for *stormwater* and sediment control; and
 - (b) methods to avoid contamination of the receiving environment; and

- (8) the quantity and composition of *cleanfill material* being deposited at a *cleanfill area* is monitored, recorded, and reported to the ORC upon request.

WASTE-R2-DIS1

Unless provided for by WASTE-R2-PER1, the use of *land* for an existing or new *cleanfill area* and the associated *discharge* of *water* or *contaminants* to *water* or onto or into *land* in circumstances where *water* or a *contaminant* may enter *water* is a discretionary activity.

WASTE-R3 – Green waste

WASTE-R3-PER1

The use of *land* for the deposition or processing of *green waste* and any associated *discharge* of *contaminants* onto or into *land* in circumstances where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the activity does not occur within:
 - (a) 20 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, or *coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 20 metres of a *bore*; or
 - (d) 20 metres of any dwelling or *place of assembly* on another *landholding*, constructed or in use prior to the *green waste* site being *lawfully established*; or
 - (e) a *critical source area*; or
 - (f) an area subject to a flood hazard or a coastal hazard; and
- (2) stock cannot access the *green waste* deposition or processing area; and
- (3) there is no overland flow of *stormwater* into the *green waste* deposition or processing area; and
- (4) the activity does not:
 - (a) result in ponding or overland flow; or
 - (b) cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; or
 - (c) result in the *discharge* of leachate to any *water body*, or *coastal water*; and
- (5) the *discharge* is not onto or into *land*:
 - (a) that is *contaminated land* or *potentially contaminated land*; or
 - (b) where the seasonal high-water table is:
 - (i) less than 600 millimetres from the ground surface, except in locations where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management; or

- (ii) less than 2 metres from the ground surface where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management.

WASTE-R3-DIS1

Unless provided for by WASTE-R3-PER1, the use of *land* for the deposition or processing of *green waste* and any associated *discharge* of *contaminants* to *water*, or onto or into land in circumstances where a *contaminant* may enter *water*, is a discretionary activity.

WASTE-R4 – Organic waste composting

WASTE-R4-PER1

The use of *land* for the temporary storage or deposition of *organic waste* for the purposes of processing as mulch or compost, and any associated *discharge* of *water* or *contaminants* onto or into *land* in circumstances where *water* or a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the total volume of *organic waste* at any one time does not exceed 20 cubic metres; and
- (2) the activity does not occur within:
 - (a) 5 metres of the *bed* of a *river* or *lake*, a *natural wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) 20 metres of any dwelling or *place of assembly* on another *landholding*, constructed or in use prior to the composting site being *lawfully established*; and
- (3) the activity does not:
 - (a) cause or exacerbate contamination, sedimentation, or damage any other person's property; or
 - (b) result in the *discharge* of leachate to any *water body*, or *coastal water*; and
- (4) the *discharge* is not onto or into *land*:
 - (a) that is *contaminated land* or *potentially contaminated land*; or
 - (b) where the seasonal high-water table is:
 - (i) less than 600 millimetres from the ground surface, except in locations where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management; or
 - (ii) less than 2 metres from the ground surface where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management.

WASTE-R4-PER2

Unless provided for by WASTE-R4-PER1, the use of *land* for the temporary storage or deposition of *organic waste* for the purposes of processing as mulch or compost, and any associated *discharge* of *water* or *contaminants* onto or into *land* in circumstances where *water* or a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) no part of the activity is located within:
 - (a) 50 metres up-gradient of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or coastal water; or
 - (b) 100 metres of any dwelling or *place of assembly* on another *landholding*, constructed or in use prior to the composting site being *lawfully established*; or
 - (c) a *drinking water protection zone*; or
 - (d) 50 metres of a *bore*; or
 - (e) within an area prone to flooding; or
 - (f) a *critical source area*; or
 - (g) an area subject to a flood hazard or coastal hazard; and
- (2) stock cannot access the *organic waste* processing or storage area; and
- (3) there is no overland flow of *stormwater* into the *organic waste* processing area; and
- (4) the activity does not:
 - (a) result in ponding or overland flow; or
 - (b) cause or exacerbate contamination, sedimentation, or damage any other person's property; or
 - (c) result in the *discharge* of leachate to any *water body*, or *coastal water*; and
- (5) monitoring and recording of *organic waste* input material weight and composition, and any *leachate* produced is completed, and those records are made available to ORC upon request if:
 - (a) *organic waste* input per *landholding* in any consecutive 12-month period exceeds 20 cubic metres; or
 - (b) over 50 percent of the *organic waste* input is not from the *landholding* itself; and
- (6) the composting activity is undertaken in accordance with NZS4454:2005 Appendix K: Best Practice Guidelines for Composting Systems; and
- (7) the base of the composting area is sealed so that leachate cannot escape the sides and cannot permeate the base at a rate greater than 10^{-9} m/s; and
- (8) leachate is captured and diluted before being applied to *land* in accordance with Rule FF-R8-PER1.

WASTE-R4-DIS1

Unless provided for by WASTE-R4-PER1 or WASTE-R4-PER2, the use of *land* for the processing of *organic waste* and any associated *discharge* of *water* or *contaminants* onto or into *land* in circumstances where *water* or a *contaminant* may enter *water*, is a discretionary activity.

WW – Wastewater

Objectives

WW-O1 – Wastewater

Adverse impacts of *wastewater discharges* are managed to protect human health and sustain the health and quality of fresh *water*, soil, and Kāi Tahu values.

Policies

WW-P1 – Existing reticulated wastewater systems

Reduce the adverse *effects* of *discharges* from existing *reticulated systems*, including extensions to those systems, by:

- (1) phasing out existing *discharges to water* to the extent practicable; and
- (2) requiring the progressive upgrading of existing systems; and
- (3) requiring the operator of a *reticulated wastewater system* to implement measures to:
 - (a) progressively reduce the frequency and volume of wet weather overflows; and
 - (b) minimise the likelihood of dry weather overflows occurring; and
 - (c) progressively eliminate cross connections with *stormwater network*; and
 - (d) record *wastewater contaminant* loads and volumes and report them to ORC; and
- (4) requiring systems to be operated, maintained, and monitored in accordance with best practice standards.

WW-P2 – New reticulated wastewater systems

Avoid in the first instance, and otherwise minimise, adverse *effects* of *discharges* from new *reticulated wastewater systems* by:

- (1) requiring *discharges to land*, unless adverse *effects* associated with a *discharge to land* are greater than a *discharge to water*; and
- (2) requiring one or more of the following:
 - (a) land-based treatment; or
 - (b) a designed treatment system prior to *discharge*; or
 - (c) a *wetland* constructed to treat contaminants, and
- (3) requiring the operator of a *reticulated wastewater system* to:
 - (a) implement methods to minimise the likelihood of wet and dry weather overflows occurring from *reticulated wastewater systems*; and
 - (b) measure *wastewater* contaminant loads and volumes and report them to ORC; and
- (4) requiring systems to be designed, operated, maintained, and monitored in accordance with best practice standards.

WW-P3 – Biosolids

Manage the adverse *effects* on *water* quality and soil health from the reuse of *biosolids* by:

- (1) ensuring the *biosolids* are not applied:
 - (a) onto *land* used for grazing of stock, food production or residential activities; or
 - (b) onto *land* within or adjoining a residential zone or other lawful, existing activity likely to result in reverse sensitivity *effects*; or
 - (c) within a *drinking water protection zone*; and
- (2) ensuring the application will not cause:
 - (a) contaminated run-off or leachate to enter a *river, lake, natural inland wetland, modified watercourse, artificial watercourse, drinking water protection zone* or *groundwater*; or
 - (b) a risk to public health from concentrations of nutrients, heavy metals, pathogens, emerging *contaminants*, or synthetic organic chemicals; or
 - (c) adverse *effects* on a *drinking water supply*, or *irrigation supply*; or
 - (d) degraded soil health; and
- (3) requiring monitoring, recording and reporting including the recording of dry solids content and *contaminant* levels, application, volume, location, frequency and the total nitrogen mass-load applied per hectare per annum.

WW-P4 – Onsite wastewater treatment systems

Manage *discharges* from *onsite wastewater treatment systems* into *land* by:

- (1) requiring new *on-site wastewater treatment systems* and *land application systems* to be designed and installed in accordance with New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management; and
- (2) requiring all systems to be operated, inspected, and maintained, in accordance with New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management; and
- (3) requiring at least *secondary treatment* whereby *wastewater* quality is equal to or better than 20 grams per cubic metre 5-day biological oxygen demand and 30 grams per cubic metre suspended solids if the *land application system* is located within a *drinking water protection zone*; and
- (4) only providing for *primary treatment* if there is low risk of adverse *effects* on the *environment* and human health; and
- (5) phasing out *discharges* of *wastewater* from existing *on-site wastewater treatment systems* via *deep soakage* and *spray irrigation* by requiring the installation of *land application systems*; and
- (6) ensuring the *discharge* undergoes *land* treatment before entering *groundwater*, the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, a *bore*, or *coastal water*; and
- (7) collecting records of the location and design of each system when it is installed, or any upgrade is undertaken.

WW-P5 – Cumulative effects of onsite wastewater treatment systems

Manage the cumulative *effects of discharges* from *onsite wastewater treatment systems* including by:

- (1) promoting new *reticulated wastewater systems* that service multiple households and adopt advanced *wastewater* treatment technology; and
- (2) only granting resource consents where:
 - (a) there is no *available reticulated wastewater system*; and
 - (b) the site is not within or adjacent to an area that has a *reticulated wastewater system* unless the *wastewater* service provider supports an on-site solution; and
- (3) for locations where development capacity is *plan-enabled*, requiring consideration of a communal *wastewater* system that will support connection to a future *reticulated wastewater system*.

WW-P6 – Pit toilets, composting toilets and greywater disposal systems

Enable the use of *pit toilets*, *composting toilets* and *greywater* disposal systems while managing the risk of adverse *effects* to *water* quality or soil health by:

- (1) requiring that *composting toilets* are operated according to the manufacturer's instructions; and
- (2) ensuring *waste* from *composting toilets* is disposed of away from surface *water*, *drinking water protection zones* and food crops in a manner that avoids health risks; and
- (3) ensuring *pit toilets* are located away from surface *water* and *drinking water protection zones* to avoid contamination; and
- (4) requiring *discharge* of *greywater* to *land* rather than *water*.

WW-P7 – Industrial and trade waste

Adverse *effects* on *land* and *water* from *discharges* of *industrial and trade waste* are minimised by:

- (1) ensuring *discharges* of *industrial and trade waste* from existing activities are *discharged* into an *available reticulated wastewater system* or to *land*, unless alternative treatment and disposal methods will result in improved outcomes for *fresh water*; and
- (2) ensuring *discharges* of *industrial and trade waste discharges* from existing activities to *water* meet the receiving *water* standards in APP13 – Receiving water standards by 31 October 2029; and
- (3) avoiding *industrial and trade waste discharges* in *drinking water protection zones*; and
- (4) requiring *discharges* of *industrial and trade waste* from new activities to be to *land* unless adverse *effects* associated with a *discharge* to *land* are greater than a *discharge* to *water*; and
- (5) ensuring that *discharges* containing *industrial and trade waste* are treated to a degree which lowers the risk of *groundwater* contamination; and
- (6) ensuring that *discharges* containing *industrial and trade waste* are assimilated into the soils that they are applied to; and
- (7) enabling the reuse of *industrial and trade waste* if the adverse *effects* are less than minor; and

- (8) requiring storage and treatment facilities to be operated, maintained, and monitored in accordance with best practice standards; and
- (9) requiring monitoring, recording and reporting.

Rules

WW-R1 – Reticulated wastewater systems

WW-R1-DIS1

The *discharge* of *wastewater* or *sewage* from a *reticulated wastewater system* onto or into *land* including in circumstances where a *contaminant* may enter *water* is a discretionary activity.

WW-R1-NC1

The *discharge* of *wastewater* or *sewage* from a *reticulated wastewater system* to *water* is a non-complying activity.

WW-R2 – Biosolids

WW-R2-RDIS1

The *discharge* of *biosolids* onto or into *land* including in circumstances where a *contaminant* may enter *water* is a restricted discretionary activity.

ORC restricts its discretion to the following matters:

- (1) the treatment and quality of the *biosolids*; and
- (2) the application methods used; and
- (3) the compatibility with *land* uses on the application site and any *effects* on adjacent land; and
- (4) the extent to which the activity is consistent with the matters in APP8 – Mana whenua environmental indicators; and
- (5) the soil type and moisture capacity of the soil; and
- (6) the rate and management of application; and
- (7) the storage and handling of *biosolids*; and
- (8) the distance between the application site and any property boundary, the *bed* of a *lake* or *river*, a *modified watercourse*, an *artificial watercourse*, a *natural inland wetland*, the *coastal marine area*, or *bore*; and
- (9) any actual or potential adverse *effects* on:
 - (a) *drinking water supplies*; and
 - (b) *irrigation supplies*; and
 - (c) *threatened freshwater-dependent species* and their *habitats*; and
- (10) monitoring, recording and reporting requirements including the recording of dry solids content and *contaminant* levels, application, volume, location, frequency and the total nitrogen mass-load applied per hectare per annum.

WW-R3 – Onsite wastewater treatment systems

WW-R3-PER1

The *discharge of wastewater or sewage* from an *on-site wastewater treatment system* that was *lawfully established* as at 31 October 2024 onto or into *land* including in circumstances where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the volume of the *discharge* has not increased as a result of an extension to the *building*, addition of *buildings*, or a change of use of the *building* since the system was established; and
- (2) there is no *available reticulated wastewater system*; or
- (3) if there is an *available reticulated wastewater system*, no *discharge* occurs from 31 October 2029; and
- (4) the *discharge* does not contain any *sludge, hazardous substance, pest, pest agent, unwanted organism, organism of interest* or chemical toilet waste; and
- (5) the *discharge* is not via a *spray irrigation system* or *deep soakage*; and
- (6) the *on-site wastewater treatment system* and *land application system* is operated and maintained in accordance with the system's design specifications or, if there is no design specification for maintenance, operated and maintained in accordance with Section 6.3 of the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management; and
- (7) the *discharge* does not occur within:
 - (a) 50 metres of the *bed of a river or lake, a natural inland wetland, a modified watercourse, or coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 100 metres of a *bore*; or
 - (d) 2 metres from the seasonal high-water table in locations where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZ 1547:2012 Onsite Domestic Wastewater Management; or
 - (e) 600 millimetres from the seasonal high-water table in locations where soils are classified as Category 2-6 in accordance with the New Zealand Standard AS/NZ 1547:2012 Onsite Domestic Wastewater Management; and
- (8) the *discharge* does not result in ponding or overland flow; and
- (9) the *discharge* does not cause or exacerbate flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (10) records of each maintenance action are retained and made available to ORC upon request; and
- (11) the location and type of system is registered with ORC before 31 October 2027.

WW-R3-PER2

The *discharge of wastewater or sewage* from an *on-site wastewater treatment system* installed, modified, or upgraded after 31 October 2024 onto or into *land* including in circumstances where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the volume of the *discharge* does not exceed 2000 litres per day; and
- (2) there is no *available reticulated wastewater system*; and
- (3) the *discharge* is located on a site with an area equal to, or greater than 2 hectares; and
- (4) where a new *onsite wastewater treatment system* is being installed there is no existing *onsite wastewater treatment system* located on the property; and
- (5) the *on-site wastewater treatment system* provides *secondary treatment*; and
- (6) the *discharge* is not via a *spray irrigation system* or *deep soakage*; and
- (7) the *discharge* does not contain any *hazardous substance, pest, pest agent, unwanted organism, organism of interest* or chemical toilet waste; and
- (8) the *discharge* does not occur within:
 - (a) 50 metres of the *bed of a river or lake, a natural inland wetland, a modified watercourse, or coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 100 metres of a *bore*; or
 - (d) 2 metres from the seasonal high-water table in locations where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZ 1547:2012 Onsite Domestic Wastewater Management; or
 - (e) 600 millimetres from the seasonal high-water table in locations where soils are classified as Category 2-6 in accordance with the New Zealand Standard AS/NZ 1547:2012 Onsite Domestic Wastewater Management; and
- (9) the *discharge* is not onto or into *land*:
 - (a) that is *contaminated land or potentially contaminated land*; or
 - (b) with a *slope* greater than:
 - (i) 30 degrees for sub surface drip *irrigation* disposal systems; or
 - (ii) 10 degrees for all other disposal systems; and
- (10) the *discharge* does not result in ponding or overland flow; and
- (11) the *discharge* does not cause flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and
- (12) the *on-site wastewater treatment system* and *land application system* is designed, installed operated, and maintained in accordance with Sections 5 and 6 of the New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management; and
- (13) a copy of the design plan of the *on-site wastewater treatment system* and *land application system* is submitted to ORC at least 20 working days prior to the installation; and
- (14) records of each maintenance action are retained and made available for inspection by ORC upon request.

WW-R3-DIS1

Unless provided for by WW-R3-PER1 or WW-R3-PER2, the *discharge of wastewater or sewage* from an *on-site wastewater treatment system* onto or into *land* including in circumstances where a *contaminant* may enter *water* is a discretionary activity.

WW-R4 – Pit toilets

WW-R4-PER1

The *discharge of sewage* from a *pit toilet* that was *lawfully established* as at 31 October 2024 into *land* including in circumstances where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) there is no *available reticulated wastewater system*, or if there is an *available reticulated wastewater system*, no *discharge* occurs after 5 years of an *available reticulated wastewater system* being installed; and
- (2) the *discharge* does not contain any *hazardous substance, pest, pest agent, unwanted organism or organism of interest*; and
- (3) the *discharge* does not occur within:
 - (a) 50 metres of the *bed of a river or lake, a natural inland wetland, a modified watercourse, an artificial watercourse, or coastal water*, or
 - (b) a *drinking water protection zone*; or
 - (c) 100 metres of a *bore*; or
 - (d) 2 metres from the seasonal high-water table in locations where soils are classified as Category 1 in accordance with the New Zealand Standard AS/NZ 1547:2012 Onsite Domestic Wastewater Management; and
 - (e) 600 millimetres from the seasonal high-water table in locations where soils are classified as Category 2-6 in accordance with the New Zealand Standard AS/NZ 1547:2012 Onsite Domestic Wastewater Management; and
- (4) the *pit toilet structure*, operation and maintenance ensure there is no *discharge of sewage* above ground; and
- (5) the *discharge* does not cause flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage.

WW-R4-PER2

The *discharge of sewage* from a *pit toilet* installed after 31 October 2024 into *land* including in circumstances where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) all of the conditions listed in WW-R4-PER1; and
- (2) the *pit toilet* is not located on a *landholding* with an area of less than 20 hectares; and
- (3) a record of the location, design, and operation and maintenance plan is submitted to ORC at least 20 working days prior to the installation.

WW-R4-DIS1

Unless provided for by WW-R4-PER1 or WW-R4-PER2, the *discharge* of sewage from a *pit toilet* into *land* including in circumstances where a *contaminant* may enter *water* is a discretionary activity.

WW-R5 – Composting toilets

WW-R5-PER1

The *discharge* of aerobically composted material from a *composting toilet* onto or into *land* including in circumstances where a *contaminant* may enter *water* is a permitted activity if all of the following conditions are met:

- (1) the material has been subject to aerobic decomposition for at least 12 months from the last addition of raw excrement; and
- (2) the material is worked into the soil immediately following the *discharge*; and
- (3) the *discharge* does not contain any *hazardous substance, pest, pest agent, unwanted organism, or organism of interest*; and
- (4) the *discharge* does not occur within:
 - (a) 50 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, a *bore*, or *coastal water*; or
 - (b) a *drinking water protection zone*; and
- (5) the *discharge* does not occur on *land* that is used for growing food crops for human consumption or grazing stock; and
- (6) the *discharge* does not cause contamination, sedimentation, or damage to any other person's property.

WW-R5-DIS1

Unless provided for by WW-R5-PER1 the *discharge* of aerobically composted material from a *composting toilet* onto or into *land* including in circumstances where a *contaminant* may enter *water* is a discretionary activity.

WW-R6 – Greywater

WW-R6-PER1

The *discharge* of *greywater* onto or into *land* including in circumstances where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) the *discharge* does not contain any *hazardous substance, pest, pest agent, unwanted organism or organism of interest*; and
- (2) the *discharge* does not occur within:
 - (a) 50 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, or *coastal water*, or
 - (b) a *drinking water protection zone*; or

- (c) 100 metres of a *bore*; and
- (3) the *discharge* is not to *contaminated land* or *potentially contaminated land*; and
- (4) if the *discharge* is located over an unconfined or semi-confined *aquifer* and the highest *groundwater* level is less than 2 metres from the ground surface, there must be at least 600 millimetres of soil or sand between the point of *discharge* and the seasonal high *water table*; and
- (5) the *discharge* does not result in ponding or overland flow; and
- (6) the *discharge* does not cause flooding, erosion, *land* instability, sedimentation, or property damage of any other person's property; and
- (7) if the *discharge* is from a system that is authorised for use under the Building Act 2004;
 - (a) the *discharge* is via a *land application system* located beneath the ground surface; and
 - (b) the *discharge* as far as practicable, is evenly distributed; and
 - (c) the *discharge* does not exceed an application rate of 15 millimetres per day; and
 - (d) the system filters the *greywater* prior to *discharge* and does not store *greywater* for more than 12 hours; and
 - (e) the design and location of a new *land application system* is provided to ORC within 20 working days of installation, or
 - (f) the design and location of an existing *land application system* is provided to ORC by 31 October 2026.

WW-R6-DIS1

Unless provided for by WW-R6-PER1 the *discharge* of *greywater* to *water* or onto or into *land* including in circumstances where a *contaminant* may enter *water* is a discretionary activity.

WW-R7 – Industrial and trade waste

WW-R7-PER1

The *discharge* of *industrial and trade waste* into or onto *land* including in circumstances where a *contaminant* may enter *water* from an activity that was *lawfully established* as at 31 October 2024, is a permitted activity if all of the following conditions are met:

- (1) the volume of the *discharge* does not exceed 5 cubic metres per day; and
- (2) the *discharge* is at a rate not exceeding 5 millimetres per day; and
- (3) the *discharge* does not contain any *hazardous substance*, *pest*, *pest agent*, *unwanted organism* or *organism of interest*; and
- (4) the *discharge* does not occur within:
 - (a) 50 metres of the *bed* of a *river* or *lake*, a *natural inland wetland*, a *modified watercourse*, an *artificial watercourse*, or *coastal water*; or
 - (b) a *drinking water protection zone*; or
 - (c) 100 metres of a *bore*; or

- (d) any area or zone identified in a proposed or operative district plan for residential, educational, recreational, or commercial purposes; and
- (5) the *discharge* is not:
 - (a) onto or into *land* over an unconfined or semi-confined *aquifer*, where the *land* has less than 1 metre depth of soil; or
 - (b) onto or into *contaminated land* or *potentially contaminated land*; and
- (6) the *discharge* does not result in erosion, *land* instability, sedimentation, ponding or overland flow; and
- (7) the *discharge* does not cause or exacerbate flooding or damage to any other person's property; and
- (8) the location and type of system is registered with ORC before 31 October 2027, and information relating to *discharge* volume, rate, location, method, and quality is recorded and those records are supplied to ORC annually.

WW-R7-DIS1

Unless provided for by WW-R7-PER1, the *discharge* of *industrial and trade waste* onto or into *land* including in circumstances where a *contaminant* may enter *water* is a discretionary activity.

WW-R7-NC1

The *discharge* of *industrial and trade waste* onto or into *water* is a non-complying activity.

WET – Wetlands

Advice note:

- (1) ORC is progressing with the mapping of different categories of *wetlands* in Otago. Although this mapping may not be complete or definitive about whether *land* is a *natural inland wetland* or a *natural wetland*, it is a useful reference in areas where that mapping has been completed.

Objectives

WET-O1 – Protecting wetlands

Otago's *wetlands* are protected, and their *restoration* is provided for and promoted, so that:

- (1) the ethic of stewardship is enabled; and
- (2) *mahika kai* and *wāhi tūpuna values* are sustained and enhanced now and for future generations; and
- (3) there is no net decrease, and preferably an increase, in the extent and diversity of *indigenous* ecosystem types and *habitats* in *wetlands*; and
- (4) their ecosystems and natural functions are healthy and resilient to the *effects of climate change*; and
- (5) there is no reduction in the extent of *wetlands* and, where *degraded*, over time there is an improvement in *wetland* ecosystem health, *water* quality, and the extent of *wetlands*; and
- (6) connections to other *water bodies* are maintained or restored, and their value for flood attenuation and *water* storage capacity is supported; and
- (7) peoples' connections with *wetlands* are supported; and
- (8) the establishment of new *wetlands* is not inadvertently discouraged through restrictive plan provisions.

Policies

WET-P1 – Time staged improvements in wetland health and protections

The extent and health of *wetlands* are improved over time, adopting a time-staged approach of:

- (1) initially protecting *natural inland wetlands*, *coastal wetlands* and other *natural wetlands* from destructive activities, along with enabling provisions for the *restoration* and creation of *wetlands*; and then
- (2) once mapping required under the NPSFM is complete, providing additional protection of all *wetlands*, including further stock exclusion, and protections for a wider range of *wetlands*.

WET-P2 – Restoration of natural wetlands

Natural wetlands are restored and protected by, over time:

- (1) increasing the extent and quality of *habitat* for *wetland* vegetation and *indigenous* fauna; and

- (2) maintaining, and improving where *degraded*, the hydrological integrity and functioning of *natural wetlands*; and
- (3) controlling *pest species, pest agents, unwanted organisms, organisms of interest and vegetation clearance*; and
- (4) excluding all heavy *livestock*, such as cattle, buffalo, pigs, deer, horses or like species; and goats.

WET-P3 – Protection of wetlands

The loss of extent of *wetlands* is avoided, their *values* are protected, and their *restoration* is promoted, except where:

- (1) the loss of extent or *loss of value* arises from any of the following:
 - (a) the customary harvest of food or resources undertaken in accordance with tikaka Māori; or
 - (b) *wetland maintenance, restoration, or biosecurity*; or
 - (c) scientific research; or
 - (d) the sustainable harvest of sphagnum moss; or
 - (e) the construction or *maintenance of wetland utility structures*; or
 - (f) the *maintenance* or operation of *specified infrastructure or other infrastructure*; or
 - (g) *natural hazard works*; or
- (2) ORC is satisfied that:
 - (a) the activity is necessary for the purpose of the construction or upgrade of *specified infrastructure*; and
 - (b) the *specified infrastructure* will provide significant national or regional benefits; and
 - (c) there is a *functional need* for the *specified infrastructure* in that location; and
 - (d) the *effects* of the activity are managed through applying the *effects management hierarchy*; or
- (3) ORC is satisfied that:
 - (a) the activity is necessary for the purpose of urban development that contributes to a *well-functioning urban environment*; and
 - (b) the urban development will provide significant national, regional or district benefits; and
 - (c) the activity occurs on *land* identified for urban development in operative provisions of a regional or district plan; and
 - (d) the activity does not occur on *land* that is zoned in a district plan as general rural, rural production, or rural lifestyle; and
 - (e) there is either no practicable alternative location for the activity within the area of the development, or every other practicable location in the area of the development would have equal or greater adverse *effects* on a *wetland*; and

- (f) the *effects* of the activity are managed through applying *effects management hierarchy*;
or
- (4) ORC is satisfied that:
 - (a) the activity is necessary for the purpose of *quarrying activities*; and
 - (b) the extraction of the aggregate will provide significant national or regional benefits; and
 - (c) there is a *functional need* for the activity to be done in that location; and
 - (d) the *effects* of the activity are managed through applying the *effects management hierarchy*; or
- (5) ORC is satisfied that:
 - (a) the activity is necessary for the purpose of:
 - (i) the extraction of *minerals* (other than coal) and *ancillary activities*; or
 - (ii) the extraction of coal and *ancillary activities* as part of the operation or extension of an existing coal mine; and
 - (b) the extraction of the *mineral* will provide significant national or regional benefits; and
 - (c) there is a *functional need* for the activity to be done in that location; and
 - (d) the *effects* of the activity are managed through applying the *effects management hierarchy*; or
- (6) ORC is satisfied that:
 - (a) the activity is necessary for the purpose of constructing or operating a new or existing *landfill or cleanfill area*; and
 - (b) the *landfill or cleanfill area*:
 - (i) will provide significant national or regional benefits; or
 - (ii) is required to support urban development as referred to in (3); or
 - (iii) is required to support the extraction of aggregates as referred to in (4); or
 - (iv) is required to support the extraction of *minerals* as referred to in (5); and
 - (c) there is either no practicable alternative location in the region, or every other practicable alternative location in the region would have equal or greater adverse *effects* on a *wetland*; and
 - (d) the *effects* of the activity are managed through applying the *effects management hierarchy*.

WET-P4 – Applications relating to wetlands

Consent must not be granted for activities undertaken for one of the purposes listed in WET-P3 (1) to (6), excluding WET-P3 (1)(a), that would result (directly or indirectly) in the loss of extent or *loss of values* of a *wetland* unless:

- (1) the applicant has demonstrated how each step of the *effects management hierarchy* will be applied to any loss of extent or *loss of values* of the *wetland* (including cumulative *effects* and

loss of potential value), particularly (without limitation) in relation to the values of: ecosystem health, *indigenous biodiversity*, hydrological functioning, *Māori freshwater values*, and *amenity values*; and

- (2) if *aquatic offsetting* or *aquatic compensation* is applied, the applicant has complied with principles 1 to 6 in APP10 – Principles for aquatic offsetting and APP11 – Principles for aquatic compensation, and has had regard to the remaining principles in APP10 and APP11, as appropriate, and
- (3) there are methods or measures that will ensure that the *aquatic offsetting* or *aquatic compensation* will be maintained and managed over time to achieve the conservation outcomes; and
- (4) any consent granted is subject to:
 - (a) conditions that apply the *effects management hierarchy*; and
 - (b) a condition requiring monitoring of the *wetland* at a scale commensurate with the risk of the loss of extent or values of the *wetland*; and
 - (c) conditions that specify how the requirements in (3) will be achieved.

WET-P5 – Protection of other natural wetlands

Recognise the value of *natural wetlands* that are not *natural inland wetlands* by:

- (1) restricting activities that are likely to result in loss of extent and condition of these *wetlands*; and
- (2) acknowledging their vulnerability in the interim period until the mapping of *natural wetlands* is completed; and
- (3) utilising their potential for *wetland restoration* and their role in the protection of the integrity of *natural inland wetlands*; and
- (4) acknowledging their contribution to improved *water* quality, hydrological functioning, *mahika kai* and ecosystem health; and
- (5) applying an additional level of protection to *wetlands* that are contiguous with coastal wetlands and estuaries.

WET-P6 – Constructed wetlands

Enable the construction, use and maintenance of constructed *wetlands* provided that the activity does not result in:

- (1) adverse *effects* on the health and well-being of any *water body* or *indigenous* ecosystem; or
- (2) any risk to *specified infrastructure* or the health or safety of people or communities.

Rules

Advice notes:

- (1) Some activities relating to *natural inland wetlands* are managed under Part 3, subpart 1 of the NESF.

- (2) The following rules apply in addition to any requirements of the Resource Management (Stock Exclusion) Regulations 2020.
- (3) ORC is progressing with the mapping of different categories of *wetlands* in Otago. While this mapping may not be complete or definitive about whether *land* is a *natural inland wetland* or a *natural wetland*, it is a useful reference in areas where that mapping has been completed.

WET-R1 – Grazing in wetlands

WET-R1-PER1

In addition to the requirements of the Resource Management (Stock Exclusion) Regulations 2020, the use of *land* within a *wetland* for the grazing of *livestock* is a permitted activity if it complies with all of the following conditions:

- (1) *Livestock* is excluded from any *wetland* in accordance with the timeframes set out in Table 4; and

Table 4 – Livestock excluded from wetlands

	<i>Low Slope Land</i>	Land other than <i>Low Slope Land</i>
From notification of this Plan	<i>Drinking Water Protection Zones</i> wholly or partly within any <i>wetland</i> Any <i>natural wetland</i> in the <i>coastal marine area</i> and any <i>natural inland wetland</i> that is contiguous with a <i>wetland</i> in the <i>coastal marine area</i> or an estuary	<i>Drinking Water Protection Zones</i> wholly or partly within any <i>wetland</i> Any <i>natural wetland</i> in the <i>coastal marine area</i> and any <i>natural inland wetland</i> that is contiguous with a <i>wetland</i> in the <i>coastal marine area</i> or an estuary
From 1 July 2025	Other than in the Upper Taieri Scroll Plain area identified on MAP[UTSP] – Upper Taieri Scroll Plain areas exempt from Stock Exclusion Regulations 2020, any <i>natural inland wetland</i> that is both in the <i>habitat</i> of a <i>threatened freshwater-dependent species</i> described in APP6 – Threatened freshwater-dependent species and within the area identified in MAP[TS] – Threatened species habitat Other than in the Upper Taieri Scroll Plan area identified on MAP[UTSP] – Upper Taieri Scroll Plain areas exempt from Stock Exclusion Regulations 2020, any <i>natural inland wetland</i> where the <i>livestock</i> is heavy <i>livestock</i> , such as cattle, buffalo, pigs, deer, horses (or like <i>species</i>), or goats	Other than in the Upper Taieri Scroll Plain area identified on MAP[UTSP] – Upper Taieri Scroll Plain areas exempt from Stock Exclusion Regulations 2020, any <i>natural inland wetland</i> that is both in the <i>habitat</i> of a <i>threatened freshwater-dependent species</i> described in APP6 – Threatened freshwater-dependent species and within the area identified in MAP[TS] – Threatened Fish species habitat
From 1 November 2030	Any <i>natural inland wetland</i> (all <i>livestock</i>) Any <i>natural wetland</i> where the <i>livestock</i> is heavy <i>livestock</i> , such as cattle, buffalo, pigs, deer, horses (or like <i>species</i>), or goats	Any <i>natural inland wetland</i> where the <i>livestock</i> is heavy <i>livestock</i> , such as cattle, buffalo, pigs, deer, horses (or like <i>species</i>) or goats For the Upper Taieri Scroll Plain area identified on MAP[UTSP] – Upper

	<i>Low Slope Land</i>	Land other than <i>Low Slope Land</i>
	For the Upper Taiari Scroll Plain area identified on MAP[UTSP] – Upper Taiari Scroll Plain areas exempt from Stock Exclusion Regulations 2020, the <i>setbacks</i> shall not apply if the Otago Regional Council has certified that a Management Plan for stock exclusion for the Upper Taiari Scroll Plain has been prepared, approved by Council, and implemented in accordance with the timing in that Management Plan.	Taiari Scroll Plains areas exempt from Stock Exclusion Regulations 2020, the <i>setbacks</i> shall not apply if the Otago Regional Council has certified that a Management Plan for stock exclusion for the Upper Taiari Scroll Plain has been prepared, approved by Council, and implemented in accordance with the timing in that Management Plan.

- (2) condition (1) does not apply if:
- (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that addresses the exclusion of *livestock* from *wetlands*; and
 - (b) the *Freshwater Farm Plan* includes a requirement that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* of the activity is no greater than that allowed for by condition (1); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to the exclusion of *livestock* from *wetlands*.

WET-R1-DIS1

In addition to the requirements of the Resource Management (Stock Exclusion) Regulations 2020, and unless provided for by WET-R1-PER1, the use of *land* within a *wetland* for the grazing of *livestock* is a discretionary activity.

WET-R2 – Vehicle Access

WET-R2-PER1

Unless provided for in Part 3, subpart 1 of the NESF, the use of *land* in a *natural inland wetland* for the purpose of the entry into, or passage across, the *natural inland wetland* by any wheeled or tracked vehicle or machine, is a permitted activity if all of the following conditions are met:

- (1) entry into the *natural inland wetland* is demonstrated as being necessary for the purpose of crossing the *wetland*; and
- (2) the activity does not occur within:
 - (a) the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (b) any *mātaimai* or *taiāpure*; or
 - (c) a *drinking water protection zone*; or

- (d) a *natural inland wetland* that is contiguous with a wetland in the *coastal marine area* or an estuary; and
- (3) the activity does not:
 - (a) disturb the roosting or nesting of *indigenous* birds or bats; or
 - (b) cause ruts or vegetation removal within the *natural inland wetland*.

WET-R2-DIS1

Unless provided for in Part 3, subpart 1 of the NESF or by WET-R2-PER1, the use of *land* in a *natural inland wetland* for the purpose of the entry into, or passage across, the *natural inland wetland* by any wheeled or tracked vehicle or machine, is a discretionary activity.

WET-R3 – Natural wetlands pre-2030

WET-R3-PER1

Until 1 November 2030, the use of *land* within a *natural wetland* that has not been classified as a *natural inland wetland* is a permitted activity provided that the activity does not include the following:

- (1) *cultivation*; or
- (2) installing new sub-surface or open *drains* in the *natural wetland*; or
- (3) *earthworks* or *land disturbance*, other than for the installation of a fence or utility lines and pipes; or
- (4) herbicide spraying, unless it is undertaken using a *targeted application method*.

WET-R3-DIS1

Until 1 November 2030, the use of *land* within a *natural wetland* that has not been classified as a *natural inland wetland*, that does not comply with WET-R3-PER1 is a discretionary activity.

WET-R4 – Natural wetlands post-2030

WET R4-PER1

From 1 November 2030, the use of *land* within a *natural wetland* is a permitted activity provided that the activity complies with the permitted activity requirements in Part 3, Sub-part 1 of the NESF, modified to the extent that every reference in those Regulations to a “natural inland wetland” is replaced with “natural wetland”.

WET-R4-DIS1

From 1 November 2030, the use of *land* within a *natural wetland*, that does not comply with WET-R4-PER1 is a discretionary activity.

WET-R5 – Constructed wetlands

WET-R5-PER1

Despite any other rule in this plan, the construction, use and maintenance of a constructed *wetland*, including the associated take, use, *damming*, or *diversion* of *water*, use and disturbance of the *bed*, or

of *land*, and *discharge of water or contaminants* from the constructed *wetland* to *land* or to *water*, is a permitted activity if all of the following conditions are met:

- (1) unless included as an action in a *Freshwater Farm Plan*, ORC is provided with the following information at least 10 working days prior to the activity commencing:
 - (a) a description of the activity, including:
 - (i) the purpose of the activity; and
 - (ii) the size; and
 - (iii) any *water* take and *discharge* proposed; and
 - (b) the physical address, legal description of, and map showing the location of the proposed constructed *wetland*; and
 - (c) a statement of when the construction will start and when it is expected to end; and
 - (d) the contact details of the landholder/s and person/s responsible for the construction of the proposed constructed *wetland*; and
- (2) the activity does not:
 - (a) occur within the *habitat* of a *threatened freshwater-dependent species* described in APP6 – Threatened freshwater-dependent species that is located within the area identified in MAP[TS] – Threatened species habitat; or
 - (b) disturb the roosting or nesting of *indigenous* birds or bats; or
 - (c) impede the passage of desirable *fish* species; or
 - (d) frustrate the use or integrity of any *nationally significant infrastructure, regionally significant infrastructure* or other *lawfully established structure*; or
 - (d) cause flooding of any other person’s property, erosion, *land* instability, sedimentation, or property damage; or
 - (e) occur within a *natural inland wetland*; or
 - (f) occur within, take *water* from, *discharge water* to, or *damming* or *diversion* of, an outstanding waterbody shown on MAP[OWB] – Outstanding water bodies or listed in SCHED1 – Outstanding water bodies; or
 - (g) occur within the *bed* of a *river* that is greater than Order 2, using the methods outlined in the River Environment Classification System, National Institute of Water and Atmospheric Research, Version 1; and
- (3) there is no taking of *water* from the constructed *wetland*, unless the taking of *water* is *non-consumptive*; and
- (4) the taking of *water* for the constructed *wetland* is *non-consumptive*; and
- (5) any *water discharged* to or returned to a *river* or *lake* is of no lesser *water* quality than the receiving *water*; and
- (6) *livestock* are excluded from the constructed *wetland*; and
- (7) any *diversion* of *water* within the *bed* of a *lake* or *river*:

- (a) does not occur within:
 - (i) an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO), or if it does occur within an area identified in MAP[WCO] the *diversion of water* is not restricted or prohibited by a Water Conservation Order; or
 - (ii) the *Waitaki catchment*; or
 - (iii) a *mātaitai* or *taiāpure*; or
 - (iv) a *drinking water protection zone*; and
- (8) the placement and use of any *in-stream dam* or *weir*:
 - (a) only occurs:
 - (i) in a *river* that flows continuously for no more than 3 months in any consecutive 12-month period; or
 - (ii) for no longer than a total of 30 days in any consecutive 12-month period; and
 - (b) is not a *classifiable dam*; and
 - (c) does not occur within:
 - (i) an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO), or if it does occur within an area identified in MAP[WCO] the *damming of water* is not restricted or prohibited by a Water Conservation Order; or
 - (ii) Lake Wānaka or the Upper Clutha River Mata-au between its source to its confluence with the Cardrona River/Ōrau, as identified on MAP[DAM] – Water bodies where long-term damming is prohibited and SCHED2 – Water bodies where long-term damming is prohibited, other than for the duration of an emergency as declared by the Guardians of Lake Wānaka under the Lake Wānaka Preservation Act 1973; or
 - (iii) the *Waitaki catchment*; or
 - (iv) any *mātaitai* or *taiāpure*; or
 - (v) a *drinking water protection zone*; and
 - (d) for a *weir* located in, on, over, or under the *bed* of any *river*, the placement and use of the *weir* meets the permitted activity conditions of regulation 72(2) of the NESF; and
- (9) if the activity disturbs an archaeological site, the accidental discovery protocol set out in APP15 – Accidental discovery protocol must be applied.

WET-R5-DIS1

The construction, use, and maintenance of a constructed *wetland*, including the associated take, use, *damming*, or *diversion of water*, use and disturbance of the *bed*, or of *land*, and *discharge of water* or *contaminants* from the constructed *wetland* to *land* or to *water*, is a discretionary activity provided that:

- (1) the activity is not permitted under WET-R5-PER1; and
- (2) the activity is not prohibited under WET-R5-PR1.

WET-R5-PR1

The construction, use, and maintenance of a constructed *wetland*, including the associated take, use, *damming*, or *diversion of water*, use and disturbance of the *bed*, or of *land* and *discharge of water* or *contaminants* from the constructed *wetland* to *land* or to *water*, is a prohibited activity if any of the following conditions are met:

- (1) the placement and use of any *in-stream dam* or *weir*:
 - (a) occurs within:
 - (i) an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO) and where the *damming of water* is prohibited by a Water Conservation Order; or
 - (ii) Lake Wānaka or the Upper Clutha River/Mata-au between its source to its confluence with the Cardrona River/Ōrau, as identified on MAP[DAM] - Water bodies where long-term damming is prohibited and SCHED2 - Water bodies where long-term damming is prohibited, other than for the duration of an emergency as declared by the Guardians of Lake Wānaka under the Lake Wānaka Preservation Act 1973; or
 - (b) is for longer than a total of 30 days in any consecutive 12-month period and occurs within:
 - (i) the Poumāhaka River, including its tributaries, from its sources to its confluence with the Clutha River/Mata-Au, as identified on MAP[DAM] - Water bodies where long-term damming is prohibited and SCHED2 - Water bodies where long-term damming is prohibited; or
 - (ii) the Waipahī River, including its tributaries, from its sources to its confluence with the Poumāhaka River, as identified on MAP[DAM] - Water bodies where long-term damming is prohibited and SCHED2 - Water bodies where long-term damming is prohibited; or
 - (iii) the Lower Clutha River/Mata-Au from its confluence with the Poumāhaka River to the sea at the mouths of the Matau and Koau Branches, as identified on MAP[DAM] - Water bodies where long-term damming is prohibited and SCHED2 - Water bodies where long-term damming is prohibited; or
- (2) any *diversion of water* within the *bed* of a *lake* or *river*:
 - (a) occurs within an area identified in MAP[WCO] – Water conservation order layer (areas protected by WCO) and where the *diversion of water* is prohibited by a water conservation order.

Area-specific matters

Introduction

The Otago region has diverse *freshwater* resources. To manage these resources at an appropriate spatial scale, the region has been divided into five *Freshwater Management Units (FMU)*. Due to the size of its catchment and the differences in the areas it flows through, the Clutha Mata-Au *FMU* has been further divided into five *rohe* which means "area" in te reo.

Values, environmental outcomes and attributes

A range of values have been identified within each *FMU* and are specified in Table 5 below. Ecosystem health, human contact, *threatened species*, and *mahika kai* are compulsory values in accordance with the NPSFM, and others were identified through engagement with *mana whenua* and communities in each *FMU*, including the *Māori freshwater values* of *mahika kai*, taoka species, and wāhi tupuna. For each value identified in an *FMU*, an *environmental outcome* has been developed and included as an objective within the relevant *FMU* chapter.

In order to measure whether the *environmental outcomes* have been achieved, either *attributes* or alternative criteria have been identified for each value. *Attributes* are a measurable characteristic (which may be numeric, narrative, or both) that can be used to assess the extent to which a particular value is provided for. Some *attributes* are compulsory and set out in the NPSFM. Others have been developed by ORC. For every *attribute* identified, a *baseline state* (the 'starting point') and a target *attribute* state (the 'future state') have been set. In some cases, there are also interim target *attribute* states set. Some *attributes* are relevant for multiple values. Table 5 below shows which *attributes* are relevant to each value.

For some values, *attributes* cannot be set or are insufficient to assess a value. In these cases, alternative criteria have been developed which assist with assessing whether the *environmental outcome* of the value is being achieved. Table 6 below shows alternative criteria that apply to each value where *attributes* cannot be identified for a value, or if *attributes* are insufficient to assess a value.

Table 5 – Attributes that apply to each value

Attribute	Attribute unit	Water body	Compulsory values				Other values							
			Ecosystem health	Human contact	Threatened species	Mahika kai	Natural form and character	Taoka species	Wahi tipuna	Animal drinking water	Drinking water supply	Fishing	Cultivation, and production of food, beverages, and fibre	Hydro-electric power generation
Ammonia	Milligrams ammoniacal-nitrogen per litre (mg NH ₄ -N/L)	Rivers, lakes												
Nitrate	Milligrams nitrate-nitrogen per litre (mg NO ₃ – N/L)	Rivers												
Dissolved reactive phosphorus	Milligrams per litre (mg/L)	Rivers												
Periphyton	Milligrams chlorophyll- <i>a</i> per square metre (mg chl- <i>a</i> /m ²)	Rivers												
Dissolved oxygen*	Milligrams per litre (mg/L)	Rivers												
Suspended fine sediment	Visual clarity (metres)	Rivers												
Deposited fine sediment*	percent fine sediment cover	Rivers												
<i>E.coli</i>	Number of <i>E.coli</i> per hundred millilitres (<i>E.coli</i> /100ml)	Rivers, lakes												
<i>E.coli</i> (primary contact sites)		Rivers												
Macroinvertebrates	Macroinvertebrate Community Index (MCI) score	Wadeable rivers												
	Macroinvertebrate Average Score Per Metric (ASPM)	Wadeable rivers												
	Quantitative Macroinvertebrate Community Index (QMCI) score	Wadeable rivers												
Ecosystem metabolism*	Grams of dissolved oxygen per square metre per day (gO ₂ m ⁻² d ⁻¹)	Rivers												
Fish	Fish Index of Biotic Integrity (F-IBI)	Wadeable rivers												
Phytoplankton (chlorophyll- <i>a</i>)	Milligrams chlorophyll- <i>a</i> per cubic metre (mg chl- <i>a</i> /m ³)	Lakes												
Total nitrogen	Milligrams per cubic metre (mg/m ³)	Lakes												
Total phosphorus	Milligrams per cubic metre (mg/m ³)	Lakes												
Cyanobacteria*	Cubic millimetres per litre (biovolume mm ³ /L)	Lakes, lake-fed rivers												
Lake-bottom dissolved oxygen*	Milligrams per litre (mg/L)	Lakes												
Mid-hypolimnetic dissolved oxygen*	Milligrams per litre (mg/L)	Lakes												
Submerged plants (natives)*	Native Condition Index (Lake Submerged Plant)	Lakes												
Submerged plants (invasive)*	Invasive Impact Index (Lake Submerged Plant)	Lakes												

*There is insufficient data to identify the *baseline state* in respect of this *attribute*. However, sites will be used for monitoring. In the absence of sufficient data to identify the *baseline state*, no *baseline state* has been identified for monitoring sites.

Table 6 – Alternative criteria that apply to each value

Alternative criteria	Water body	Compulsory values				Other values								
		Ecosystem health	Human contact	Threatened species	Mahika kai	Natural form and character	Taoka species	Wāhi tūpuna	Animal drinking water	Drinking water supply	Fishing	Irrigation, cultivation, and production of food and beverages	Hydro-electric power generation	Commercial and industrial use
The national and/or regional conservation category or status of <i>indigenous species</i> is improved.	All													
Riverflows demonstrate natural variations in flow patterns, including floods and freshes.	Rivers													
Lake levels demonstrate natural <i>water</i> level fluctuations and seasonal variability, and maintain flows into connected <i>water</i> bodies.	Lakes Wetlands													
No decrease in mean annual <i>groundwater</i> levels.	Aquifers													
The extent to which <i>structures</i> in the <i>bed</i> allow for the passage of migratory <i>indigenous species</i> and natural flow connections to continue is improved.	All													
There is no new <i>cross mixing of water</i> , and the scale and extent of existing occurrences is reduced.	All													
Barriers to flow and upstream or downstream passage for <i>indigenous fish</i> are reduced.	All													
There is an increase in the extent of vegetated <i>riparian margins</i> that support the integrity and functioning of the <i>water body</i> .	All													
Structures in the <i>bed</i> do not impede access to and along <i>water bodies</i> for <i>mahika kai</i> practices, to exercise <i>kaitiakitaka</i> and to monitor the health of the wai.	All													
Populations of <i>mahika kai species</i> are abundant enough to support cultural take.	All													
Community <i>drinking water</i> supplier are compliant with meeting <i>drinking water</i> standards	All													
Water quality and quantity is suitable to meet the <i>drinking water</i> needs of stock and domestic animals, including whether it is palatable and safe.	All													
There is no decrease in hydro-electricity generation output.	All													
Water quantity and quality is suitable for the <i>cultivation</i> and production of food, beverages, and fibre	All													
Water quantity and quality is suitable for commercial and industrial use.	All													

FMU1 – Clutha Mata-au freshwater management unit

Overview

The Clutha Mata-au *FMU* is around 21,000 square kilometres and is the largest in the Otago region covering the entire Clutha Mata-au catchment. The *main stem* of the Clutha Mata-au River runs from north to south covering approximately 250 kilometres, from headwaters in rugged, steep terrain along the eastern boundary of the Southern Alps, through alluvial plains and lowlands, to the sea. The Clutha Mata-au *catchment* contains approximately 24 natural and artificial *lakes* and is fed by the large *rivers* of the Cardrona/Ōrau, Lindis, Shotover/Kimiākau, Nevis/Te Papapuni, Fraser, Manuherehia, Teviot, Poumāhaka, Waitāhuna, and Te Waiwhero. 75 percent of the mean annual flow is derived from the outflows of Lakes Hāwea, Wānaka, and Whakatipu Waimāori/Lake Wakatipu. The Clutha Mata-au *FMU* contains the nationally significant Clutha hydro-electricity generation scheme. *Land* use is varied across the *FMU* and includes agriculture, conservation, forestry, and urban development.

Part of the upper reaches of the Mataura River, which are subject to the Water Conservation (Mataura River) Order 1997 are located within the Clutha Mata-au *FMU*.

The *FMU* has been divided into five sub areas called “rohe”. These are:

- CAT1 – Upper Lakes rohe
- CAT2 – Dunstan rohe
- CAT3 – Manuherehia rohe
- CAT4 – Roxburgh rohe
- CAT5 – Lower Clutha rohe

Objectives

FMU1-O1 – Clutha Mata-au ecosystem health

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

FMU1-O2 – Clutha Mata-au human contact

Water bodies are clean and safe for *human contact activities* and support the health of people and their connections with *water bodies*.

FMU1-O3 – Clutha Mata-au threatened species (habitat)

The *habitats* of *threatened species* are protected and restored, to the extent practicable, to support the *recovery* of *threatened species*.

FMU1-O4 – Clutha Mata-au threatened species (recovery)

Threatened species are *recovering* throughout their range to be resilient, viable, and functioning.

FMU1-O5 – Clutha Mata-au mahika kai (condition)

Populations of *mahika kai species* values by Kai Tahu are self-sustaining and plentiful enough to support cultural take.

FMU1-O6 – Clutha Mata-au mahika kai (access, harvest, and use)

Mana whenua can safely access, harvest and use *mahika kai* resources now and in the future.

FMU1-O7 – Clutha Mata-au natural form and character

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*.

FMU1-O8 – Clutha Mata-au drinking water supply (source water)

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

FMU1-O9 – Clutha Mata-au animal drinking water

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

FMU1-O10 – Clutha Mata-au wāhi tūpuna

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.

FMU1-O11 – Clutha Mata-au taoka species

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

FMU1-O12 – Clutha Mata-au fishing

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.

FMU1-O13 – Clutha Mata-au cultivation, and production of food, beverages and fibre

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.

FMU1-O14 – Clutha Mata-au commercial and industrial use

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

FMU1-O15 – Clutha Mata-au hydro-electricity generation

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.

Policies

FMU1-P1 – Lake Wānaka

In the Upper Lakes and Dunstan rohe, resource consent must not be granted for any use of the *bed* of Lake Wānaka managed under section 13 of the RMA, or any take, use, *damming*, or *diversion of water* from Lake Wānaka managed under section 14 of the RMA, without first:

- (1) seeking and considering the advice of the Guardians of Lake Wānaka on the proposed activity; and
- (2) having regard to the purposes listed in section 4 of the Lake Wānaka Preservation Act 1973.

FMU1-P2 – Discharges from in-stream dams in Clutha Mata-au mainstem

In addition to the environmental flows, levels and *take limits* set in Part 1 of SCHED3 – Rivers: A Block environmental flows, levels and take limits for the Clutha Mata-au *FMU*:

- (1) require that the following minimum *discharges* are maintained in the Clutha Mata-au mainstem:
 - (a) 120,000 L/s downstream of the Clyde Dam, as measured at Clyde site (at or near NZTM Northing 4988454; NSTM Easting 1311281), other than between 1 hour after sunset and 1 hour before sunrise, provided that the level downstream of the Clyde Dam, as measured at Clyde site gauging station does not fall below 130.30 above datum; and
 - (b) 10,000 L/s below the Hāwea Dam, as measured in the Hāwea River at the Camphill Bridge site (at or near NZTM Northing 5049022; NSTM Easting 1302363); and
 - (c) 250,000 L/s in the Lower Clutha Mata-au River below the Roxburgh Dam, as measured at the Clutha Mata-au River at Roxburgh site (at or near NZTM Northing 4956223; NZTM Easting 1311407) except when the combined flow of the *rivers* in Table 7 are less than 250,000 L/s, the minimum *discharge* below the Roxburgh Dam as measured at the Clutha River/Mata-au at Roxburgh site (No 75220) must not be less than that combined flow; and
 - (d) allow exemptions to the minimum *discharge* requirements in (1)(a)(b) and (c) where appropriate to allow activities below the *dam* to occur, including *infrastructure* maintenance or to enable the undertaking of any consented activities in the *river* downstream of *dams*.

Table 7 – Combined flow of rivers for the purpose of 1(c).

River	Location
Clutha at Cardrona plus 10,000 L/s, less the Hawea River flow as measured at the Camp Hill site	Clutha at or near NZTM Northing 5044887 NZTM Easting 1298823 Hawea at or near NZTM Northing 5049022; NZTM Easting 1302363
Kawarau at Chards Road	Kawarau at or near NZTM Northing 5008034; NZTM Easting 1274429);
Nevis at Wentworth	Nevis at or near NZTM Northing 5002191; NZTM Easting 1287447);
Manuherekia at Ophir	Manuherekia at or near NZTM Northing 4999082; NZTM Easting 1331884)

Rules

FMU1-R1 – Maintenance of the Clutha Hydroelectricity Scheme

FMU1-R1-CON1

The maintenance of the *Clutha hydro-electric generation scheme* is a controlled activity if all of the following conditions are met:

- (1) the maintenance works are limited to one or more of the following:
 - (a) the alteration or replacement of *lawfully established structures*;
 - (b) the introduction or planting of vegetation in or on the *bed* of a *lake, river* or *riparian margin*;
 - (c) *vegetation clearance* (excluding via application of *agr chemicals*) from the *bed* of a *lake, river*;
 - (d) the disturbance of the *bed* of a *lake* or *river*;
 - (e) the deposition of *bed substrate*;
 - (f) the use of *land*;
 - (g) the *discharge* of *bed substrate* to *water* or to *land* where it may enter *water*;
- (2) the works are demonstrated as being necessary to maintain the function and integrity of the *Clutha hydro-electric generation scheme*; and
- (3) the works are undertaken by, or on behalf of the operator of the *Clutha hydro-electric generation scheme*.

In considering any resource consent under this rule, ORC will reserve its control to the following:

- (1) measures to avoid, remedy, or mitigate adverse *effects* on:
 - (a) *water* quality; and
 - (b) the exercise of lawful takes of *water* by any other person and the use of any *lawfully established structure*; and
 - (c) the passage of *desired fish species*; and
 - (d) the *habitats* of *indigenous freshwater fish* and *threatened species* and the roosting and nesting of *indigenous* birds and bats; and
 - (e) the spawning *habitats* of *desired fish species* during their spawning seasons; and
 - (f) any *drinking water supply*; and
 - (g) the significant and outstanding values of any *outstanding water body* listed in SCHED1 – Outstanding water bodies; and
- (2) measures to:
 - (a) prevent flooding of any other person's property, erosion, *land* instability, sedimentation, or property damage; and

- (b) leave the site tidy including removal of any debris associated with the activity, on completion of the activity; and
- (3) the application of the accidental discovery protocol set out in APP15 – Accidental discovery protocol if the activity disturbs an archaeological site; and
- (4) the extent to which the activity is consistent with the matters set out in APP8 – Mana whenua environmental indicators; and
- (5) the lapsing period and duration of the resource consent; and
- (6) review of the conditions of the resource consent; and
- (7) the need for a bond; and
- (8) the collection, recording, monitoring, and provision of information about the exercise of the resource consent.

FMU1-R1-DIS1

Unless provided for by FMU1-R1-CON1, the maintenance of the *Clutha hydro-electric generation scheme*, not including the take, use or *damming of water* is a discretionary activity.

Method

FMU1-M1 – Monitoring Site Review

ORC may from time to time undertake a review of the target *attribute* state monitoring sites provided in the *FMU* chapters to determine which sites are required for effective and efficient monitoring of the *environmental outcomes* of the plan.

CAT1 – Upper Lakes rohe

Overview

The Upper Lakes rohe encompasses Lakes Wakatipu/Whakatipu Waimāori, Wānaka and Hāwea and all their tributaries. The rohe is approximately 7,000 square kilometres. The boundaries of the rohe are those shown on MAP1 of the PORPS 2021. Catchments within this rohe include the Greenstone, Dart/Te Awa Whakatipu and Rees/Puahiri/Puahere Rivers, the Makarore and Mātakitaki and Hunter Rivers along with several smaller tributaries to the *lakes*, including Bullock Creek, Minaret Burn, Timaru River and the Von and Lochy/Te Awamāeroero Rivers. The *lakes'* upper catchments have very high natural values, extending into Mt Aspiring/Tititea National Park.

Land use is largely dominated by conservation estate and sheep and beef dry stock farming, with some mixed drystock farming which includes deer, sheep and beef. Urban *land* use occurs on less than 1 percent of this rohe. The urban settlements at Queenstown and Wānaka are surrounded by low density urban-rural *land* use. The resident population has been increasing at a high rate since the early 2000s, and this growth is expected to continue.

Table 8 – Sites for CAT1 Upper Lakes rohe

Site	Map/information location
Monitoring sites	Dart/Te Awa Whakatipu at The Hillocks Mātakitaki at West Wānaka 12 Mile Creek at Glenorchy Queenstown Road 25 Mile Creek at Glenorchy Queenstown Road Bullock Creek at Dunmore Street Footbridge Greenstone at Greenstone Station Road Motatapu at Wānaka Mt Aspiring Road Precipice Creek at Glenorchy Paradise Road The Neck Creek at Meads Road Turner Creek at Kinloch Road Lake Hāwea North Open Water 10m Lake Hāwea South Open Water 10m Whakatipu Waimāori/Lake Wakatipu at Frankton Arm 10m Whakatipu Waimāori/Lake Wakatipu at Queenstown Bay 10m Whakatipu Waimāori/ Lake Wakatipu North Open Water 10m Whakatipu Waimāori/ Lake Wakatipu Open Water 10m Lake Wānaka at Glendu Bay 10m Lake Wānaka at Roy's Bay 10m Lake Wānaka North Open Water 10m Lake Wānaka Open Water 10m
Primary contact sites	Lake Hāwea at Holiday Park Whakatipu Waimāori/Lake Wakatipu at Frankton Bay
Locations of <i>habitats of threatened species</i>	See APP6 – Threatened freshwater-dependent species and MAP[TS] – Threatened species habitat
<i>Outstanding water bodies</i>	See SCHED1 – Outstanding water bodies

Objectives

CAT1-O1 – Upper Lakes rohe environmental outcomes

The *environmental outcomes* for the Upper Lakes rohe are those set out in FMU1-O1 to FMU1-O15.

Policies

CAT1-P1 – Upper Lakes rohe target attribute states

To achieve the *environmental outcomes* set out in FMU1-O1 to FMU1-O15:

- (1) any interim target *attribute* states are achieved by the dates specified in Table 9 to Table 19;
and
- (2) all target *attribute* states set out in Table 9 to Table 19 are achieved by the date specified in the relevant *long term vision*.

Advice note:

In the following tables, *baseline states* are based on state of *environment* monitoring in the 1 September 2012 to 30 August 2017 period. Where a target *attribute* state is followed by an asterisk *, the target *attribute* state is the site class target for that *attribute*. A site class target is the target *attribute* state that applies to a wider area using *river* network modelling rather than a site-specific target. This is because no *baseline state* has been identified for this specific monitoring site for this *attribute*. Where a target *attribute* state is followed by two asterisks **, the target *attribute* state is set at the band for this site based on monitoring data from 2017-2022. This occurs when the site class target would be below what the 2017-2022 data indicates for this site.

Table 9 – Ammonia target attribute states (rivers) for Upper Lakes rohe

Site	Ammonia (mg NH ₄ -N/L)			
	Baseline (median)	2030 Target (median)	Baseline (95 th)	2030 Target (95 th)
Dart/Te Awa Whakatipu at The Hillocks	A	A	A	A
Turner Creek at Kinloch Road		A*		A*
Precipice Creek at Glenorchy Paradise Road		A*		A*
Greenstone at Greenstone Station Road		A*		A*
25 Mile Creek at Glenorchy Queenstown Road		A*		A*
12 Mile Creek at Glenorchy Queenstown Road		A*		A*
Motatapu at Wānaka Mt Aspiring Road		A*		A*
Mātakitaki at West Wānaka	A	A	A	A
Bullock Creek at Dunmore Street Footbridge		A*		A*
The Neck Creek at Meads Road		A*		A*
Target Attribute States for River Management Classes				
Mountain		A		A
Hill		A		A
Low-elevation		A		A

*Target set using the *river* management class, see advice note above for explanation

Table 10 – Nitrate target attribute states (rivers) for Upper Lakes rohe

Site	Nitrate (mg NO ₃ – N/L)			
	Baseline (median)	2030 Target (median)	Baseline (95 th)	2030 Target (95 th)
Dart/Te Awa Whakatipu at The Hillocks	A	A	A	A
Turner Creek at Kinloch Road		A*		A*
Precipice Creek at Glenorchy Paradise Road		A*		A*
Greenstone at Greenstone Station Road		A*		A*
25 Mile Creek at Glenorchy Queenstown Road		A*		A*
12 Mile Creek at Glenorchy Queenstown Road		A*		A*
Motatapu at Wānaka Mt Aspiring Road		A*		A*
Mātakitaki at West Wānaka	A	A	A	A
Bullock Creek at Dunmore Street Footbridge		A*		A*
The Neck Creek at Meads Road		A*		A*
Target Attribute States for River Management Classes				
Mountain		A		A
Hill		A		A
Low-elevation		A		A

*Target set using the *river* management class, see advice note above for explanation

Table 11 – Suspended fine sediment target attribute states (rivers) for Upper Lakes rohe

Site	Suspended fine sediment (Visual clarity)	
	Baseline (median)	2030 Target (median)
Dart/Te Awa Whakatipu at The Hillocks		D**
Turner Creek at Kinloch Road		A*
Precipice Creek at Glenorchy Paradise Road		A*
Greenstone at Greenstone Station Road		A*
25 Mile Creek at Glenorchy Queenstown Road		A*
12 Mile Creek at Glenorchy Queenstown Road		A*
Motatapu at Wānaka Mt Aspiring Road		A*
Mātakitaki at West Wānaka		D**
Bullock Creek at Dunmore Street Footbridge		A**
The Neck Creek at Meads Road		A*
Target Attribute States for River Management Classes		
Mountain		A
Hill		A
Low-elevation		B

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 12 – E.coli target attribute states (rivers) for Upper Lakes rohe

Site	E.coli (E.coli/100ml)							
	Baseline (median)	2030 Target (median)	Baseline (95 th)	2030 Target (95 th)	Baseline (g260)	2030 Target (g260)	Baseline (g540)	2030 Target (g540)
Dart/Te Awa Whakatipu at The Hillocks		A**		A**		A**		A**
Turner Creek at Kinloch Road		A*		A*		A*		A*
Precipice Creek at Glenorchy Paradise Road		A*		A*		A*		A*
Greenstone at Greenstone Station Road		A*		A*		A*		A*
25 Mile Creek at Glenorchy Queenstown Road		A*		A*		A*		A*
12 Mile Creek at Glenorchy Queenstown Road		A*		A*		A*		A*
Motatapu at Wānaka Mt Aspiring Road		A*		A*		A*		A*
Mātakitaki at West Wānaka	A	A	C	A	A	A	B	A
Bullock Creek at Dunmore Street Footbridge		B*		B*		B*		B*
The Neck Creek at Meads Road		A*		A*		A*		A*
Target Attribute States for River Management Classes								
Mountain		A		A		A		A
Hill		B		B		B		B
Low-elevation		B		B		B		B

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 13 – Dissolved reactive phosphorus target attribute states (rivers) for Upper Lakes rohe

Site	Dissolved Reactive Phosphorus (mg/L)			
	Baseline (median)	2030 Target (median)	Baseline (95 th)	2030 Target (95 th)
Dart/Te Awa Whakatipu at The Hillocks	A	A	A	A
Turner Creek at Kinloch Road		A*		A*
Precipice Creek at Glenorchy Paradise Road		A*		A*
Greenstone at Greenstone Station Road		A*		A*
25 Mile Creek at Glenorchy Queenstown Road		A*		A*
12 Mile Creek at Glenorchy Queenstown Road		A*		A*
Motatapu at Wānaka Mt Aspiring Road		A*		A*
Mātakitaki at West Wānaka	A	A	A	A
Bullock Creek at Dunmore Street Footbridge		A*		A*
The Neck Creek at Meads Road		A*		A*
Target Attribute States for River Management Classes				
Mountain		A		A
Hill		A		A
Low-elevation		A		A

*Target set using the *river* management class, see advice note above for explanation

Table 14 – Periphyton (Biomass), Periphyton (TNTP) target attribute states (rivers) for Upper Lakes rohe

Site	Periphyton Biomass		Periphyton (Total Nitrogen Total Phosphorus)			
	Baseline	2030 Target	Total Nitrogen baseline	2030 Total nitrogen target	Total Phosphorus baseline	2030 Total phosphorus target
Dart/Te Awa Whakatipu at The Hillocks	A	A	B	B	B	B
Turner Creek at Kinloch Road	B	B		B*		B*
Precipice Creek at Glenorchy Paradise Road	A	A		B*		B*
Greenstone at Greenstone Station Road	A	A		B*		B*
25 Mile Creek at Glenorchy Queenstown Road	A	A		B*		B*
12 Mile Creek at Glenorchy Queenstown Road	A	A		B*		B*
Motatapu at Wānaka Mt Aspiring Road	B	B		B*		B*
Mātakitaki at West Wānaka	A	A	B	B	B	B
Bullock Creek at Dunmore Street Footbridge	D	C		C*		C*
The Neck Creek at Meads Road	A	A		B*		B*
Target Attribute States for River Management Classes						
Mountain		B		B		B
Hill		B		B		B
Low-elevation		C		C		C

*Target set using the *river* management class, see advice note above for explanation

Table 15 – Macroinvertebrates and Fish IBI target attribute states (rivers) for Upper Lakes rohe

Site	Macroinvertebrates MCI score, Average Score per Metric (ASPM)				Fish IBI	
	Baseline (MCI)	2030 Target (MCI)	Baseline (ASPM)	2030 Target (ASPM)	Baseline	2030 Target
Dart/Te Awa Whakatipu at The Hillocks		B*		B*		
Turner Creek at Kinloch Road		B*		B*		
Precipice Creek at Glenorchy Paradise Road		B*		B*		
Greenstone at Greenstone Station Road		B*		B*		
25 Mile Creek at Glenorchy Queenstown Road		B*		B*	B	B
12 Mile Creek at Glenorchy Queenstown Road		B*		B*	B	B
Motatapu at Wānaka Mt Aspiring Road		B*		B*		
Mātakitaki at West Wānaka		B*		B*		
Bullock Creek at Dunmore Street Footbridge		B*		B*		
The Neck Creek at Meads Road		B*		B*		
Target Attribute States for River Management Classes						
Mountain		B		B		
Hill		B		B		
Low-elevation		B		B		

*Target set using the *river* management class, see advice note above for explanation

Table 16 – E.coli target attribute states (lakes) for Upper Lakes rohe

Site	E.coli (E.coli/100ml)							
	Baseline (median)	2030 Target (median)	Baseline (95th)	2030 Target (95th)	Baseline (g260)	2030 Target (g260)	Baseline (g540)	2030 Target (g540)
Whakatipu Waimāori/Lake Wakatipu North Open Water 10m	A	A	A	A	A	A	A	A
Whakatipu Waimāori/Lake Wakatipu Open Water 10m	A	A	A	A	A	A	A	A
Whakatipu Waimāori/Lake Wakatipu at Queenstown Bay 10m	A	A	A	A	A	A	A	A
Whakatipu Waimāori/Lake Wakatipu at Frankton Arm 10m	A	A	A	A	A	A	A	A
Lake Wānaka North Open Water 10m	A	A	A	A	A	A	A	A
Lake Wānaka Open Water 10m	A	A	A	A	A	A	A	A
Lake Wānaka at Glendu Bay 10m	A	A	A	A	A	A	A	A
Lake Wānaka at Roy's Bay 10m	A	A	A	A	A	A	A	A
Lake Hāwea North Open Water 10m	A	A	A	A	A	A	A	A
Lake Hāwea South Open Water 10m	A	A	A	A	A	A	A	A

Table 17 – Phytoplankton, Total Nitrogen, Total Phosphorus target attribute states (lakes) for Upper Lakes rohe

Site	Phytoplankton (mg chl-a/ m ³)				Total Nitrogen (mg/m ³)		Total Phosphorus (mg/m ³)	
	Baseline (median)	2030 Target (median)	Baseline (annual max)	2030 Target (annual max)	Baseline	2030 Target	Baseline	2030 Target
Whakatipu Waimāori/Lake Wakatipu North Open Water 10m	A	A	A	A	A	A	A	A
Whakatipu Waimāori/Lake Wakatipu/ Open Water 10m	A	A	A	A	A	A	A	A
Whakatipu Waimāori/Lake Wakatipu/ at Queenstown Bay 10m	A	A	A	A	A	A	A	A
Whakatipu Waimāori/Lake Wakatipu/ at Frankton Arm 10m	A	A	A	A	A	A	A	A
Lake Wānaka North Open Water 10m	A	A	A	A	A	A	A	A
Lake Wānaka Open Water 10m	A	A	A	A	A	A	A	A
Lake Wānaka at Glendu Bay 10m	A	A	A	A	A	A	A	A
Lake Wānaka at Roy's Bay 10m	A	A	A	A	A	A	A	A
Lake Hāwea North Open Water 10m	A	A	A	A	A	A	A	A
Lake Hāwea South Open Water 10m	A	A	A	A	A	A	A	A

Table 18 – Ammonia target attribute states (lakes) for Upper Lakes rohe

Site	Ammonia (mg NH ₄ -N/L)			
	Baseline (median)	2030 Target (median)	95 th Baseline	2030 95 th TAS
Whakatipu Waimāori/Lake Wakatipu North Open Water 10m	A	A	A	A
Whakatipu Waimāori/Lake Wakatipu Open Water 10m	A	A	A	A
Whakatipu Waimāori/Lake Wakatipu at Queenstown Bay 10m	A	A	A	A
Whakatipu Waimāori/Lake Wakatipu at Frankton Arm 10m	A	A	A	A
Lake Wānaka North Open Water 10m	A	A	A	A
Lake Wānaka Open Water 10m	A	A	A	A
Lake Wānaka at Glendu Bay 10m	A	A	A	A
Lake Wānaka at Roy's Bay 10m	A	A	A	A
Lake Hāwea North Open Water 10m	A	A	A	A
Lake Hāwea South Open Water 10m	A	A	A	A

Table 19 – E.coli Primary Contact Sites for Upper Lakes rohe

Site	E. coli primary contact sites (E.coli/100ml)		
	Baseline 95th percentile	Interim TAS	2030 Target 95th percentile
Whakatipu Waimāori/Lake Wakatipu at Frankton Bay	C	B	A
Lake Hāwea at Holiday Park	A	A	A

CAT2 – Dunstan rohe

Overview

The Dunstan rohe spans the area between the outlets of Lakes Wānaka, Whakatipu Waimāori/Wakatipu and Hāwea down to Clyde Dam and includes the Kawarau, Nevis/Te Papapuni, Shotover/Kimiākau, Upper Clutha/Mata-au, Hāwea, Cardrona/Ōrau, Arrow, and Lindis Rivers. The boundaries of the rohe are those shown on MAP1 of the PORPS 2021. Many smaller tributaries of the Clutha/Mata-au are also included such as the Lowburn, Amisfield Burn, Bannock Burn and Luggate Creek. Outflows of Lakes Wānaka and Whakatipu Waimāori/Lake Wakatipu are unregulated whereas the outflow of Lake Hāwea is controlled by the Hāwea Dam. This rohe also includes Te Wairere/Lake Dunstan, a run of *river* hydro-electricity reservoir created by the Clyde Dam.

Diverse landforms include the rugged Kawarau gorge, tracts of *indigenous* bush in the remote Shotover/Kimiākau catchment, extensive agriculture, fruit-growing, and viticulture areas. The main urban settlements of this rohe are Cromwell and Arrowtown.

Table 20 – Sites for Dunstan rohe

Site	Map/information location
Monitoring sites	Bannockburn at Te Wairere/Lake Dunstan Cardrona/Ōrau at Mt Barker Clutha/Mata-au @ Luggate Br Hāwea at Camphill Bridge Kawarau @ Chards Rd Arrow at Morven Ferry Road Lindis at Ardgour Road Lindis at Lindis Peak Luggate Creek at SH6 Bridge Mill Creek at Fish Trap Nevis/Te Papapuni at Wentworth Station Shotover/Kimiākau @ Bowens Peak Lindis at Lindis Crossing Te Wairere/Lake Dunstan at Clyde Dam 10m* Te Wairere/Lake Dunstan at Cromwell Boat Club 10m* Te Wairere/Lake Dunstan at Dead Mans Point Waiwhakaata at Mid Lake 10m
Primary contact sites	Waiwhakaata at Mill Creek Shallows
Locations of <i>habitats</i> of <i>threatened species</i>	See APP6 – Threatened freshwater-dependent species and MAP[TS] – Threatened species habitat
Outstanding water bodies	See SCHED1 – Outstanding water bodies

Objectives

CAT2-O1 – Dunstan rohe environmental outcomes

The *environmental outcomes* for the Dunstan rohe are those set out in FMU1-O1 to FMU1-O15.

Policies

CAT2-P1 – Dunstan rohe target attribute states

To achieve the *environmental outcomes* set out in FMU1-O1 to FMU1-O15:

- (1) any interim target *attribute* states are achieved by the dates specified in Table 21 to Table 31; and
- (2) all target attribute states set out in Table 21 to

Table 31 are achieved by the date specified in the relevant *long term vision*.

Advice note:

In the following tables, *baseline states* are based on state of *environment* monitoring in the 1 September 2012 to 30 August 2017 period. Where a target *attribute* state is followed by an asterisk *, the target *attribute* state is the site class target for that *attribute*. A site class target is the target *attribute* state that applies to a wider area using *river* network monitoring rather than a site-specific target. This is proposed as no *baseline state* has been identified for this specific monitoring site for this *attribute*. Where a target *attribute* state is followed by two asterisks **, the target *attribute* state is set at the band for this site based on monitoring data from 2017-2022. This occurs when the site class target would be below what the 2017-2022 data indicates for this site.

Table 21 – Ammonia target attribute states (rivers) for Dunstan rohe

Site	Ammonia (mg NH4-N/L)					
	Baseline (median)	2034 Interim target (median)	2045 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2045 Target (95 th)
Shotover/Kimiākau @ Bowens Peak	A	Maintain	A	A	Maintain	A
Mill Creek at Fish Trap	A	n/a	A	A	n/a	A
Kawarau @ Chards Rd	A	Maintain	A	A	Maintain	A
Arrow at Morven Ferry Road		n/a	A*		n/a	A*
Nevis/Te Papapuni at Wentworth Station	A	Maintain	A	A	Maintain	A
Bannockburn at Te Wairere/Lake Dunstan	A	n/a	A	A	n/a	A
Hāwea at Camphill Bridge	A	n/a	A	A	n/a	A
Cardrona/Ōrau at Mt Barker	A	Maintain	A	A	Maintain	A
Clutha/Mata-au @ Luggate Br	A	Maintain	A	A	Maintain	A
Luggate Creek at SH6 Bridge	A	Maintain trend	A	A	Maintain	A
Lindis at Lindis Peak	A	n/a	A	A	n/a	A
Lindis at Ardgour Road	A	Maintain	A	A	Maintain	A
Lindis at Lindis Crossing						
Target Attribute States for River Management Classes						
Mountain	n/a	n/a	A	n/a	n/a	A
Hill	n/a	n/a	A	n/a	n/a	A

Low-elevation	n/a	n/a	A	n/a	n/a	A
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*Target set using the *river* management class, see advice note above for explanation

Table 22 – Nitrate target attribute states (rivers) for Dunstan rohe

Site	Nitrate (mg NO3 – N/L)					
	Baseline (median)	2034 Interim target (median)	2045 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2045 Target (95 th)
Shotover/Kimiākau @ Bowens Peak	A	Maintain	A	A	Maintain	A
Mill Creek at Fish Trap	A	Improving trend	A	A	Improving trend	A
Kawarau @ Chards Rd	A	Improving trend	A	A	Improving trend	A
Arrow at Morven Ferry Road			A*			A*
Nevis/Te Papapuni at Wentworth Station	A	Maintain	A	A	Maintain	A
Bannockburn at Te Wairere/Lake Dunstan	A	Maintain	A	A	Maintain	A
Hāwea at Camphill Bridge	A	n/a	A	A	n/a	A
Cardrona/Ōrau at Mt Barker	A	Improving trend	A	A	Improving trend	A
Clutha/Mata-au @ Luggate Br	A	Improving trend	A	A	Improving trend	A
Luggate Creek at SH6 Bridge	A	Improving trend	A	A	Improving trend	A
Lindis at Lindis Peak	A	Improving trend	A	A	Improving trend	A
Lindis at Ardgour Road	A	Maintain	A	A	Maintain	A
Lindis at Lindis Crossing						
Target Attribute States for River Management Classes						
Mountain	n/a	n/a	A	n/a	n/a	A
Hill	n/a	n/a	A	n/a	n/a	A
Low-elevation	n/a	n/a	A	n/a	n/a	A

*Target set using the *river* management class, see advice note above for explanation

Table 23 – Suspended fine sediment target attribute states (rivers) for Dunstan rohe

Site	Suspended fine sediment (visual clarity)			
	Baseline (median)	1 st Interim target (median)	2 nd Interim target (median)	2045 Target (median)
Shotover/Kimiākau @ Bowens Peak	D	maintain	maintain	D**
Mill Creek at Fish Trap	D	Improving trend by 2031	C and improving trend by 2038	B
Kawarau @ Chards Rd	D	maintain	maintain	D**
Arrow at Morven Ferry Road		n/a	n/a	B*
Nevis/Te Papapuni at Wentworth Station		n/a	n/a	A*
Bannockburn at Te Wairere/Te Wairere		n/a	n/a	A**
Hāwea at Camphill Bridge	A	n/a	n/a	A
Cardrona/Ōrau at Mt Barker	C	Improving trend by 2034	n/a	B
Clutha/Mata-au @ Luggate Br	D	Improving trend by 2031	C and improving trend by 2038	B
Luggate Creek at SH6 Bridge	A	Improving trend by 2034	n/a	A
Lindis at Lindis Peak	D	Improving trend by 2034	C and improving trend by 2038	B
Lindis at Ardgour Road	C	Improving trend by 2034	n/a	B
Lindis at Lindis Crossing				
Target Attribute States for River Management Classes				
Mountain	n/a	n/a	n/a	A
Hill	n/a	n/a	n/a	B
Low-elevation	n/a	n/a	n/a	B

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 24 – E. coli target attribute states (rivers) for Dunstan rohe

Site	E.coli (E.coli/100ml)													
	Baseline (median)	1 st Interim target (median)	2 nd Interim target	2045 Target (median)	Baseline (95 th)	1 st Interim target (95 th)	2 nd Interim target (95 th)	2045 Target (95 th)	Baseline (g260)	2034 Interim Target (g260)	2045 Target (g260)	Baseline (g540)	2034 Interim Target (g540)	2045 Target (g540)
Shotover/Kimiākau @ Bowens Peak	A	2034 maintain	n/a	A	B	2034 maintain	n/a	B	A	maintain	A	B	maintain	B
Mill Creek at Fish Trap	D	Improving trend by 2031	C and improving trend by 2038	B	D	2034 maintain	n/a	B	C	Improving trend	B	C	maintain	B
Kawarau @ Chards Rd	D	Improving trend by 2031	C and improving trend by 2038	B	D	Improving trend by 2031	C and improving trend by 2038	B	B	maintain	B	C	Improving trend	B
Arrow at Morven Ferry Road		n/a	n/a	A**		n/a	n/a	A**		n/a	A**		n/a	B*
Nevis/Te Papapuni at Wentworth Station		n/a	n/a	A**		n/a	n/a	A**		n/a	A**		n/a	B*
Bannockburn at Te Wairere/Te Wairere		n/a	n/a	A**		n/a	n/a	A**		n/a	A**		n/a	B*
Hāwea at Camphill Bridge	A	n/a	n/a	A	A	n/a	n/a	A	A	n/a	A	A	n/a	A
Cardrona/Ōrau at Mt Barker	A	Improving trend by 2034	n/a	A	B	n/a	n/a	B	A	Improving trend	A	A	Improving trend	A
Clutha/Mata-au @ Luggate Br	A	2034 maintain	n/a	A	B	2034 maintain	n/a	B	A	maintain	A	B	maintain	B
Luggate Creek at SH6 Bridge	A	Improving trend by 2034	n/a	A	B	n/a	n/a	B	A	Improving trend	A	B	Improving trend	A
Lindis at Lindis Peak	A	Improving trend by 2034	n/a	A	A	Improving trend by 2034	n/a	A	A	Improving trend	A	A	Improving trend	A
Lindis at Ardgour Road	A	Improving trend by 2034	n/a	A	A	Improving trend by 2034	n/a	A	A	Improving trend	A	A	Improving trend	A
Lindis at Lindis Crossing														
Target Attribute States for River Management Classes														
Mountain	n/a	n/a	n/a	B	n/a	n/a	n/a	B	n/a	n/a	B			B
Hill	n/a	n/a	n/a	B	n/a	n/a	n/a	B	n/a		B			B
Low-elevation	n/a	n/a	n/a	C	n/a	n/a	n/a	C	n/a		C			C

**Target has been set using current state, see advice note above for explanation

Table 25 – Dissolved reactive phosphorus target attribute states (rivers) for Dunstan rohe

Site	Dissolved Reactive Phosphorus (mg/L)					
	Baseline (median)	2034 Interim target (median)	2045 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2045 Target (95 th)
Shotover/Kimiākau @ Bowens Peak	A	maintain	A	A	maintain	A
Mill Creek at Fish Trap	A	maintain	A	A	maintain	A
Kawarau @ Chards Rd	A	maintain	A	A	maintain	A
Arrow at Morven Ferry Road		n/a	A**		n/a	A**
Nevis/Te Papapuni at Wentworth Station	A	maintain	A	A	maintain	A
Bannockburn at Te Wairere/Lake Dunstan	A	maintain	A	A	maintain	A
Hāwea at Camphill Bridge	A	n/a	A	A	n/a	A
Cardrona/Ōrau at Mt Barker	A	maintain	A	A	maintain	A
Clutha/Mata-au @ Luggate Br	B	maintain	B	B	maintain	B
Luggate Creek at SH6 Bridge	C	maintain	B	A	maintain	A
Lindis at Lindis Peak	A	maintain	A	A	maintain	A
Lindis at Ardgour Road	A	maintain	A	A	maintain	A
Lindis at Lindis Crossing						
Target Attribute States for River Management Classes						
Mountain			B			B
Hill			C			C
Low-elevation			C			C

**Target has been set using current state, see advice note above for explanation

Table 26 – Periphyton (Biomass), Periphyton (TNTP) target attribute states (rivers) for Dunstan rohe

Site	Periphyton Biomass			Periphyton (Total Nitrogen Total Phosphorus)					
	Baseline	2034 Interim Target	2045 Target	Total Nitrogen baseline	2034 Interim Target	2045 Total nitrogen target	Total Phosphorus baseline	2034 Interim Target	2045 Total phosphorus target
Shotover/Kimiākau @ Bowens Peak		n/a	B*	B	maintain	B	B	Improving trend	B
Mill Creek at Fish Trap		n/a	C*	C	Improving trend	C	C	Improving trend	C
Kawarau @ Chards Rd		n/a	C*	B	maintain	B	C	Improving trend	C
Arrow at Morven Ferry Road	A		A		n/a	C*		n/a	C*
Nevis/Te Papapuni at Wentworth Station		n/a	B*	B	n/a	B	B	maintain	B
Bannockburn at Te Wairere/ Lake Dunstan		n/a	C*	B	maintain	B	C	Improving trend	C
Hāwea at Camphill Bridge		n/a	C*	A	n/a	A	B	n/a	B
Cardrona/Ōrau at Mt Barker	B	n/a	B	B	Improving trend	B	C	maintain	C
Clutha/Mata-au @ Luggate Br		n/a	C*	B	maintain	B	B	Improving trend	B
Luggate Creek at SH6 Bridge	B	n/a	B	B	Improving trend	B	B	Improving trend	B
Lindis at Lindis Peak		n/a	C*	B	n/a	B	C	Improving trend	C
Lindis at Ardgour Road	B	n/a	B	B	maintain	B	C	Improving trend	C
Lindis at Lindis Crossing									
Target Attribute States for River Management Classes									
Mountain			B			B			B
Hill			C			C			C

Low-elevation			C			C			C
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*Target set using the *river* management class, see advice note above for explanation

Table 27 – Macroinvertebrates, Fish IBI target attribute states (rivers) for Dunstan rohe

Site	Macroinvertebrates [MCI score, Average Score per Metric (ASPM)]						Fish IBI		
	Baseline (MCI)	2034 Interim Target (MCI)	2045 Target (MCI)	Baseline (ASPM)	2034 Interim Target (ASPM)	2045 Target (ASPM)	Baseline	2034 Interim Target	2045 Target
Shotover/Kimiākau @ Bowens Peak		n/a	C*		n/a	C*			
Mill Creek at Fish Trap	D	n/a	C	D	n/a	C			
Kawarau @ Chards Rd		n/a	C*		n/a	C*			
Arrow at Morven Ferry Road		n/a	C*		n/a	C*			
Nevis/Te Papapuni at Wentworth Station		n/a	C*		n/a	C*			
Bannockburn at Te Wairere/Lake Dunstan		n/a	C*		n/a	C*			
Hāwea at Camphill Bridge		n/a	C*		n/a	C*			
Cardrona/Ōrau at Mt Barker	C	Improving trend	C	B	Improving trend	B	C	n/a	C
Clutha/Mata-au @ Luggate Br		n/a	C*		n/a	C*			
Luggate Creek at SH6 Bridge	C	maintain	C	B	maintain	B			
Lindis at Lindis Peak		n/a	C*		n/a	C*	C	n/a	C
Lindis at Ardgour Road	C	maintain	C	C	maintain	C	D	n/a	D
Lindis at Lindis Crossing							D	n/a	D
Target Attribute States for River Management Classes									

Mountain			C			C
Hill			C			C
Low-elevation			C			C

*Target set using the *river* management class, see advice note above for explanation

Table 28 – E.coli target attribute states (lakes) for Dunstan rohe

	E.coli (E.coli/100ml)											
	Baseline (median)	2034 Interim Target (median)	2045 Target (median)	Baseline (95th)	2034 Interim Target (95 th)	2045 Target (95 th)	Baseline (g260)	2034 Interim Target (g260)	2045 Target (g260)	Baseline (g540)	2034 Interim Target (g540)	2045 Target (g540)
Waiwhakaata at Mid Lake 10m	A	n/a	A	A	n/a	A	A	n/a	A	A	n/a	A
Te Wairere/Lake Dunstan at Cromwell Boat Club 10m*	A	n/a	A	A	n/a	A	A	n/a	A	A	n/a	A
Te Wairere/Lake Dunstan at Dead Mans Point	A	Improving trend	A	A	Improving trend	A	A	Improving trend	A	A	Improving trend	A
Te Wairere/Lake Dunstan at Clyde Dam 10m*	A	n/a	A	A	n/a	A	A	n/a	A	A	n/a	A

*Interim data = 3 1/2 years of monitoring

Table 29 – Phytoplankton, Total Nitrogen, Total Phosphorus target attribute states (lakes) for Dunstan rohe

	Phytoplankton (mg chl-a/ m ³)						Total Nitrogen (mg/m ³)			Total Phosphorus (mg/m ³)		
	Baseline (median)	2034 Interim Target (median)	2045 Target (median)	Baseline (annual max)	2034 Interim Target (ann max)	2045 Target (annual max)	Baseline	2034 Interim Target	2045 Target	Baseline	2034 Interim Target	2045 Target
Waiwhakaata at Mid Lake 10m	D	Improving trend	C	D	Improving trend	C	C	Improving trend	B	C	Improving trend	B
Te Wairere/Lake Dunstan at Cromwell Boat Club 10m*	A	n/a	A	A	n/a	A	A	n/a	A	A	n/a	A
Te Wairere/Lake Dunstan/ at Dead Mans Point	A	Improving trend	A	A	Improving trend	A	A	maintain	A	A	maintain	A
Te Wairere/Lake Dunstan at Clyde Dam 10m*	A	n/a	A	A	n/a	A	A	n/a	A	A	n/a	A

*Interim data = 3 1/2 years of monitoring

Table 30 – Ammonia target attribute states (lakes) for Dunstan rohe

	Ammonia (mg NH ₄ -N/L)					
	Baseline (median)	2034 Interim Target (median)	2045 Target (median)	95 th Baseline	2034 Interim Target (annual max)	2045 95 th Target
Waiwhakaata at Mid Lake 10m	A	Improving trend	A	B	Improving trend	B
Te Wairere/Lake Dunstan/ at Cromwell Boat Club 10m*	A	n/a	A	A	n/a	A
Te Wairere/Lake Dunstan at Dead Mans Point	A	maintain	A	A	maintain	A
Te Wairere/Lake Dunstan at Clyde Dam 10m*	A	n/a	A	A	n/a	A

*Interim data = 3 1/2 years of monitoring

Table 31 – E.coli Primary Contact Sites for Dunstan rohe

	E. coli primary contact sites (E.coli/100ml)		
	Baseline (95th percentile)	Interim target attribute state	2045 Target (95th percentile)
Waiwhakaata at Mill Creek Shallows	D	C	A

Rules

CAT2-R1 – Cultivation in Dunstan rohe

CAT2-R1-PER1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* does not take place within:
 - (a) the *bed* of any *lake* or continually or intermittently flowing *river*, *modified watercourse*, or open *drain* or within a *natural inland wetland* or a *natural wetland*; and
 - (b) 5 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river*, *modified watercourse*, or open *drain*, or the edge of any *natural inland wetland*, on *land* with a *slope* of less than 10 degrees;
 - (c) 10 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river*, *modified watercourse*, or open *drain*, or the edge of a *natural inland wetland*, on *land* with a *slope* between 10 and 20 degrees; and
- (2) *cultivation* does not occur on *land* with a *slope* greater than 20 degrees; and
- (3) *critical source areas* are identified ahead of *cultivation* activities and:
 - (a) are not cultivated with forage crops for *intensive winter grazing*; and
 - (b) sediment detention is established prior to *cultivation*; and
- (4) conditions (1) and (3) do not apply if:
 - (a) the *cultivation* is undertaken by direct drilling of seeds or *fertilisers* or no tillage practices, or is tree planting; or
 - (b) the use of *land* is undertaken in accordance with a *certified Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated and the following conditions are met:
 - (i) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (ii) a certifier has certified, in accordance with APP26 - Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) and (3); and
 - (iii) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor's findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

CAT2-R1-PER2

The use of *land* with a *slope* greater than 20 degrees for *cultivation* for the purpose of renewing or establishing pasture and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* is undertaken using no-tillage or direct seed drilling *cultivation* practices; and

- (2) *cultivation* does not take place within 10 metres from the outer edge of the *bed* of any *lake* or continually or intermittently flowing *river*, *modified watercourse*, or open drain, or the edge of a *natural inland wetland*; and
- (3) *cultivation* does not take place more than once in any 5-year period; and
- (4) *cultivation* is for the purpose of renewing or establishing pasture and is not undertaken to establish a crop used for *intensive winter grazing*, even as part of a pasture renewal cycle; and
- (5) *critical source areas* are identified ahead of *cultivation* activities and sediment detention is established prior to *cultivation*; and
- (6) conditions (1) to (5) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) to (5); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

CAT2-R1-DIS1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* that does not meet the conditions of Rules CAT2-R1-PER1 and CAT2-R1-PER2 is a discretionary activity.

Method

CAT2-M1 – Waiwhakaata (Lake Hayes) Catchment Action Plan

ORC must prepare an *action plan* for Waiwhakaata (Lake Hayes) catchment that outlines actions to be taken to reduce key *contaminants*, including phosphorus.

CAT3 – Manuherekia rohe

Overview

The Manuherekia rohe is the largest subcatchment of the Clutha/Mata-au catchment at approximately 3035 square kilometres. The boundaries of the rohe are those shown on MAP1 of the PORPS 2021. The Manuherekia catchment can be divided into two major sub-catchments. The eastern Ida Valley *drains* the eastern and south-eastern Otago uplands ('Rough Ridge'). The western Manuherekia Valley is separated from the Ida Valley by the central Raggedy Range, where the Idaburn River *drains* through a single gorge into the Manuherekia River. The river's headwaters are in the Hawkdun Range, and the catchment is surrounded by mountainous terrain, except to the south-west, where it joins the Clutha River/Mata-au at Alexandra.

There are several major *irrigation schemes* that operate within the rohe. Flow of the Manuherekia River is partly controlled by releases from Falls Dam. Blackstone Hill, Omakau, Manuherekia, and Galloway *irrigation schemes* take *water* out of the Manuherekia River and distribute the *water* through a network of open *water* channels and pipes to irrigate the Manuherekia Valley. The Poolburn Reservoir is used to store *water* to irrigate Ida Valley. *Water* from the Manorburn Reservoir is partly diverted into the Manuherekia Valley over an open *water* race to irrigate the upper Galloway Irrigation Scheme. The rest of the Manorburn *water* is used for *irrigation* in the Ida Valley.

Table 32 – Sites for Manuherekia rohe

Site	Map/information location
Monitoring sites	Dunstan Creek at Beattie Road Manuherekia at Blackstone Hill Manuherekia at Galloway Manuherekia at Ophir Thomsons Creek at SH85
Primary contact sites	Manuherekia at Shaky Bridge
Locations of <i>habitats of threatened species</i>	See APP6 – Threatened freshwater-dependent species and MAP[TS] – Threatened species habitat
<i>Outstanding water bodies</i>	See SCHED1 – Outstanding water bodies

Objectives

CAT3-O1 – Manuherekia rohe environmental outcomes

The *environmental outcomes* for the Manuherekia rohe are those set out in FMU1-O1 to FMU1-O15.

Policies

CAT3-P1 – Manuherekia rohe target attribute states

To achieve the *environmental outcomes* set out in CAT3-O1:

- (1) any interim target *attribute* states are achieved by the dates specified in Table 33 to Table40; and

- (2) all target *attribute* states set out in Table 33 to Table 40 are achieved by the date specified in the relevant *long term vision*.

CAT3-P2 – Manuherekia River

Improve the health and wellbeing of the Manuherekia River and tributaries by:

- (1) requiring all surface *water* and *groundwater* takes that are hydrologically connected to the Manuherekia River to comply with a mainstem *minimum flow* at Alexandra Campground of 2,500 l/s by 2040, phased in accordance with the timeframes in Part 3 of SCHED3 – Rivers: A Block environmental flows, levels and take limits; and
- (2) in addition to (2), requiring all takes from the following tributaries to comply with the relevant *environmental flow* for the tributary in Part 3 of SCHED3 – Rivers: A Block environmental flows, levels and take limits, by 1 July 2028:
 - (a) Dunstan Creek;
 - (b) Lauder Creek;
 - (c) Thomsons Creek;
 - (d) Chatto Creek;
 - (e) Manor Burn; and
- (3) requiring the metering of all takes and *discharges* of *water* to the Manuherekia River and tributaries, to inform management of the rohe in the future, including the setting of a *take limit* that supports the achievement of the *long-term visions* and *environmental outcomes* for the Clutha Mata-au FMU; and
- (4) setting the interim *take limit* for the Manuherekia rohe as the sum of the maximum instantaneous rate of take of all resource consents granted in the rohe at 31 October 2024, and
 - (a) avoiding any new allocation of *water* in the rohe; and
 - (b) reducing *over-allocation* in the rohe in accordance with EFL-P16 – Over-allocation; and
 - (c) recognising that when a *take limit* is set in the future, reductions in the rate and volume allocated to consents will be required if the *take limit* is exceeded.

Advice note:

In the following tables, *baseline states* are based on state of *environment* monitoring in the period 1 September 2012 to 30 August 2017. Where a target *attribute* state is followed by an asterisk *, the target *attribute* state is the site class target for that *attribute*. A site class target is the target *attribute* state that applies to a wider area using *river* network monitoring rather than a site-specific target. This is because no *baseline state* has been identified for this specific monitoring site for this *attribute*. Where a target *attribute* state is followed by two asterisks **, the target *attribute* state is set at the band for this site based on monitoring data from 2017-2022. This occurs when the site class target would be below what the 2017-2022 data indicates for this site.

Table 33 – Ammonia target attribute states (rivers) for Manuherehia rohe

	Ammonia (mg NH ₄ -N/L)					
Site	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2050 Target (95 th)
Manuherehia at Blackstone Hill	A	maintain	A	A	maintain	A
Dunstan Creek at Beattie Road	A	maintain	A	A	maintain	A
Thomsons Creek at SH85	A	maintain	A	A	maintain	A
Manuherehia at Ophir	A	Improving trend	A	A	Improving trend	A
Manuherehia at Galloway	A	maintain	A	A	maintain	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A
Low-elevation			A			A

Table 34 – Nitrate target attribute states (rivers) for Manuherehia rohe

	Nitrate (mg NO ₃ – N/L)					
Site	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2050 Target (95 th)
Manuherehia at Blackstone Hill	A	Improving trend	A	A	Improving trend	A
Dunstan Creek at Beattie Road	A	Improving trend	A	A	Improving trend	A
Thomsons Creek at SH85	A	Improving trend	A	A	Improving trend	A
Manuherehia at Ophir	A	Improving trend	A	A	Improving trend	A
Manuherehia at Galloway	A	Improving trend	A	A	Improving trend	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A
Low-elevation			A			A

Table 35 – Suspended fine sediment target attribute states (rivers) for Manuherekia rohe

Site	Suspended fine sediment (Visual clarity)			
	Baseline (median)	1 st Interim Target (median)	2 nd Interim Target (median)	2050 Target (median)
Manuherekia at Blackstone Hill		n/a	n/a	B*
Dunstan Creek at Beattie Road	A	Improving trend by 2034	n/a	A
Thomsons Creek at SH85		n/a	n/a	B*
Manuherekia at Ophir	D	Improving trend by 2032	C and improving trend by 2040	B
Manuherekia at Galloway	D	Improving trend by 2032	C and improving trend by 2040	B
Target Attribute States for River Management Classes				
Mountain				A
Hill				B
Low-elevation				B

*Target set using the *river* management class, see advice note above for explanation

Table 36 – E.coli target attribute states for Manuhereikia rohe

Site	E.coli (E.coli/100ml)											
	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2050 Target (95 th)	Baseline (g260)	2034 Interim Target (g260)	2050 Target (g260)	Baseline (g540)	2034 Interim Target (g540)	2050 Target (g540)
Manuhereikia at Blackstone Hill		n/a	A**		n/a	C*		n/a	A**		n/a	B**
Dunstan Creek at Beattie Road	A	Improving trend	A	C	Improving trend	B	A	Improving trend	A	B	Improving trend	B
Thomsons Creek at SH85		n/a	C*		n/a	C*		n/a	C*		n/a	C*
Manuhereikia at Ophir	D	Improving trend	C	D	Improving trend	C	D	Improving trend	C	D	Improving trend	C
Manuhereikia at Galloway	A	Improving trend	A	D	Improving trend	C	B	Improving trend	B	C	Improving trend	C
Target Attribute States for River Management Classes												
Mountain			B			B			B			B
Hill			C			C			C			C
Low-elevation			C			C			C			C

*Target set using the river management class, see advice note above for explanation

Table 37 – Dissolved reactive phosphorus target attribute states (rivers) for Manuherekia rohe

Site	Dissolved Reactive Phosphorus (mg/L)					
	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2050 Target (95 th)
Manuherekia at Blackstone Hill	A	maintain	A	A	maintain	A
Dunstan Creek at Beattie Road	A	maintain	A	A	maintain	A
Thomsons Creek at SH85	D	n/a	D	D	n/a	D
Manuherekia at Ophir	C	maintain	C	C	maintain	C
Manuherekia at Galloway	C	maintain	C	B	maintain	B
Target Attribute States for River Management Classes						
Mountain			B			B
Hill			C			C
Low-elevation			C			C

Table 38 – Periphyton (Biomass), Periphyton (TNTP) target attribute states (rivers) for Manuherekia rohe

Site	Periphyton Biomass			Periphyton (Total Nitrogen Total Phosphorus)					
	Baseline	2034 Interim Target	2050 Target	Total Nitrogen baseline	2034 interim Target	2050 Total nitrogen target	Total Phosphorus baseline	2034 interim Target	2050 Total phosphorus target
Manuherekia at Blackstone Hill	B	n/a	B	B	maintain	B	C	Improving trend	C
Dunstan Creek at Beattie Road	A	n/a	A	B	Improving trend	B	B	maintain	B
Thomsons Creek at SH85		n/a	C*	C	Improving trend	C	D	Improving trend	C
Manuherekia at Ophir	B	n/a	B	C	improving trend	C	C	Improving trend	C
Manuherekia at Galloway	B	n/a	B	B	Improving trend	B	C	Improving trend	C
Target Attribute States for River Management Classes									
Mountain			B			B			B
Hill			C			C			C
Low-elevation			C			C			C

*Target set using the *river* management class, see advice note above for explanation

Table 39 – Macroinvertebrates, Fish IBI target attribute states (rivers) for Manuherehia rohe

Site	Macroinvertebrates [MCI score, Average Score per Metric (ASPM)]						Fish IBI		
	Baseline (MCI)	2034 Interim Target (MCI)	2050 Target (MCI)	Baseline (ASPM)	2034 Interim Target (ASPM)	2050 Target (ASPM)	Baseline	2034 Interim Target	2050 Target
Manuherehia at Blackstone Hill	C	maintain	C	B	maintain	B			
Dunstan Creek at Beattie Road	B	maintain	B	A	maintain	A	C		C
Thomsons Creek at SH85		n/a	B**		n/a	C*	D		D
Manuherehia at Ophir		n/a	B**		n/a	C*			
Manuherehia at Galloway		n/a	B**		n/a	C*			
Target Attribute States for River Management Classes									
Mountain			C			C			
Hill			C			C			
Low-elevation			C			C			

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 40 – E.coli Primary Contact Sites for Manuherehia rohe

Site	<i>E. coli</i> primary contact sites (E.coli/100ml)		
	Baseline 95th percentile	Interim TAS	2050 Target 95th percentile
Manuherehia at Shaky Bridge	C	C	A

Rules

CAT3-R1 – Cultivation in Manuherekia rohe

CAT3-R1-PER1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* does not take place within:
 - (a) the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain* or within a *natural inland wetland* or a *natural wetland*; and
 - (b) 5 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain*, or the edge of any *natural inland wetland*, on *land* with a *slope* of less than 10 degrees; or
 - (c) 10 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain*, or the edge of a *natural inland wetland*, on *land* with a *slope* between 10 and 20 degrees; and
- (2) *cultivation* does not occur on *land* with a *slope* greater than 20 degrees; and
- (3) *critical source areas* are identified ahead of *cultivation* activities and:
 - (a) are not cultivated with forage crops for *intensive winter grazing*; and
 - (b) sediment detention is established prior to *cultivation*; and
- (4) conditions (1) and (3) do not apply if:
 - (a) the *cultivation* is undertaken by direct drilling of seeds or *fertilisers* or no tillage practices, or is tree planting; or
 - (b) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated and the following conditions are met:
 - (i) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (ii) a certifier has certified, in accordance with APP26 - Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) and (3); and
 - (iii) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor's findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

CAT3-R1-PER2

The use of *land* with a *slope* greater than 20 degrees for *cultivation* for the purpose of renewing or establishing pasture and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity provided if the following conditions are met:

- (1) *cultivation* is undertaken using no-tillage or direct seed drilling *cultivation* practices; and

- (2) *cultivation* does not take place within 10 metres from the outer edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse*, or open drain, or the edge of a *natural inland wetland*; and
- (3) *cultivation* does not take place more than once in any 5-year period; and
- (4) *cultivation* is for the purpose of renewing or establishing pasture and is not undertaken to establish a crop used for *intensive winter grazing*, even as part of a pasture renewal cycle; and
- (5) *critical source areas* are identified ahead of *cultivation* activities and sediment detention is established prior to *cultivation*; and
- (6) conditions (1) to (5) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) to (5); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

CAT3-R1-DIS1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* that does not meet the conditions of Rules CAT3-R1-PER1 and CAT3-R1-PER2 is a discretionary activity.

CAT4 – Roxburgh rohe

Overview

The Roxburgh rohe covers approximately 180,000 hectares and extends from the Waikerikeri Creek catchment to the north, to the Beaumont River catchment in the southeast. The boundaries of the rohe are those shown on MAP1 of the PORPS 2021. The Clutha/Mata-au River runs through the centre of the rohe, alongside the township of Roxburgh. The rohe includes a number of tributaries of the Clutha River/Mata-au, such as the Fraser River (also known as the Earnsclough), Benger Burn, Teviot River, and Beaumont River. Lake Roxburgh is located roughly in the middle of the rohe along the Clutha/Mata-Au River, while the Fraser and Teviot river catchments host the Fraser Dam and Lake Onslow, respectively. Alexandra and Clyde are the most populated urban settlements in the Roxburgh rohe. *Land* use in this area is predominantly rural with sheep, beef, deer and mixed *livestock* farming as well as orcharding taking place. Approximately 10 percent of the rohe is conservation *land* with commercial forestry being another dominant *land* use.

Table 41 – Sites for Roxburgh rohe

Site	Map/information location
Monitoring sites	Benger burn at SH8 Clutha/Mata-au @ Millers Flat Lake Onslow at Boat Ramp
Primary contact sites	n/a
Locations of <i>habitats of threatened species</i>	See APP6 – Threatened freshwater-dependent species and MAP[TS] – Threatened species habitat
<i>Outstanding water bodies</i>	See SCHED1 – Outstanding water bodies

Objectives

CAT4-O1 – Roxburgh rohe environmental outcomes

The *environmental outcomes* for the Roxburgh rohe are those set out in FMU1-O1 to FMU1-O15.

Policies

CAT4-P1 – Roxburgh rohe target attribute states

To achieve the *environmental outcomes* set out in CAT4-O1:

- (1) any interim target *attribute* states are achieved by the dates specified in Table 42 to Table 51; and
- (2) all target *attribute* states set out in Table 42 to Table 51 are achieved by the date specified in the relevant *long term vision*.

Advice note:

In the following tables, *baseline states* are based on state of *environment* monitoring in the period 1 September 2012 to 30 August 2017. Where a target *attribute* state is followed by an asterisk *, the target *attribute* state is the site class target for that *attribute*. A site class target is the target *attribute*

state that applies to a wider area using *river* network modelling rather than a site-specific target. This is because no *baseline state* has been identified for this specific monitoring site for this *attribute*. Where a target *attribute* state is followed by two asterisks **, the target *attribute* state is set at the band for this site based on monitoring data from 2017-2022. This occurs when the site class target would be below what the 2017-2022 data indicates for this site.

Table 42 – Ammonia target attribute states (rivers) for Roxburgh rohe

	Ammonia (mg NH ₄ -N/L)					
Site	Baseline (median)	2034 Interim Target (median)	2045 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2045 Target (95 th)
Benger burn at SH8	A	n/a	A	A	n/a	A
Clutha/Mata-au @ Millers Flat	A	Improving trend	A	A	Improving trend	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A
Low-elevation			A			A

Table 43 – Nitrate target attribute states (rivers) for Roxburgh rohe

	Nitrate (mg NO ₃ – N/L)					
Site	Baseline (median)	2034 interim target (median)	2045 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2045 Target (95 th)
Benger burn at SH8	A	n/a	A	A	n/a	A
Clutha/Mata-au @ Millers Flat	A	maintain	A	A	maintain	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A
Low-elevation			A			A

Table 44 – Suspended fine sediment target attribute states (rivers) for Roxburgh rohe

	Suspended fine sediment (visual clarity)		
Site	Baseline (median)	2034 Interim Target (median)	2045 Target (median)
Benger burn at SH8		n/a	B**
Clutha/Mata-au @ Millers Flat	D	maintain	D**
Target Attribute States for River Management Classes			
Mountain			A
Hill			C
Low-elevation			C

**Target has been set using current state, see advice note above for explanation

Table 45 – E.coli target attribute states (rivers) for Roxburgh rohe

	E.coli (E.coli/100ml)											
Site	Baseline (median)	2034 Interim Target (median)	2045 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2045 Target (95 th)	Baseline (g260)	2034 Interim Target (g260)	2045 Target (g260)	Baseline (g540)	2034 Interim Target (g540)	2045 Target (g540)
Benger burn at SH8		n/a	A**		n/a	C*		n/a	A**		n/a	B**
Clutha/Mata-au @ Millers Flat	A	Improving trend	A	A	Improving trend	A	A	Improving trend	A	A	Improving trend	A
Target Attribute States for River Management Classes												
Mountain			B			B			B			B
Hill			C			C			C			C
Low-elevation			C			C			C			C

*Target set using the river management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 46 – Dissolved reactive phosphorus target attribute states (rivers) for Roxburgh rohe

Site	Dissolved Reactive Phosphorus (mg/L)					
	Baseline (median)	2034 Interim Target (median)	2045 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2045 Target (95 th)
Benger burn at SH8	C	n/a	C	C	n/a	C
Clutha/Mata-au @ Millers Flat	A	n/a	A	A	n/a	A
Target Attribute States for River Management Classes						
Mountain			B			B
Hill			C			C
Low-elevation			C			C

Table 47 – Periphyton (Biomass), Periphyton (TNTP) target attribute states (rivers) for Roxburgh rohe

Site	Periphyton Biomass			Periphyton (Total Nitrogen Total Phosphorus)					
	Baseline	2034 Interim Target	2045 Target	Total Nitrogen baseline	2034 Interim Target	2045 Total nitrogen target	Total Phosphorus baseline	2034 Interim Target	2045 Total phosphorus target
Benger burn at SH8				C	n/a	C	D	n/a	C
Clutha/Mata-au @ Millers Flat				B	maintain	B	B	maintain	B
Target Attribute States for River Management Classes									
Mountain						B			B
Hill			C/B			C			C

Low-elevation						C			C
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Table 48 – Macroinvertebrates, Fish IBI target attribute states (rivers) for Roxburgh rohe

Site	Macroinvertebrates [MCI score, Average Score per Metric (ASPM)]								Fish IBI		
	Baseline (MCI)	2034 Interim Target (MCI)	2045 Target (MCI)	Trend (MCI)	Baseline (ASPM)	2034 Interim Target (ASPM)	Trend (ASPM)	2045 Target (ASPM)	Baseline	2034 Interim Target	2045 Target
Benger burn at SH8											
Clutha/Mata-au @ Millers Flat			C*								
Target Attribute States for River Management Classes											
Mountain			C								
Hill			C								
Low-elevation			C								

*Target set using the river management class, see advice note above for explanation

Table 49 – E.coli target attribute states (lakes) for Roxburgh rohe

	E.coli (E.coli/100ml)											
	Baseline (median)	2034 Interim Target (median)	2045 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2045 Target (95 th)	Baseline (g260)	2034 Interim Target (g260)	2045 Target (g260)	Baseline (g540)	2034 Interim Target (g540)	2045 Target (g540)
Lake Onslow at Boat Ramp	A	Improving trend	A	A	Improving trend	A	A	Improving trend	A	A	Improving trend	A

Table 50 – Phytoplankton, Total Nitrogen, Total Phosphorus target attribute states (lakes) for Roxburgh rohe

	Phytoplankton (mg chl-a/ m ³)						Total Nitrogen (mg/m ³)			Total Phosphorus (mg/m ³)		
	Baseline (median)	2034 Interim Target (median)	2045 Target (median)	Baseline (annual max)	2034 Interim Target (annual max)	2045 Target (annual max)	Baseline	2034 Interim Target	2045 Target	Baseline	2034 Interim Target	2045 Target
Lake Onslow at Boat Ramp	B	Improving trend	B	A	Improving trend	A	B	Improving trend	B	C	Improving trend	B

Table 51 – Ammonia target attribute states (lakes) for Roxburgh rohe

	Ammonia (mg NH ₄ -N/L)					
	Baseline (median)	2034 Interim Target (median)	2045 Target (median)	95 th Baseline	2034 Interim Target (annual max)	2045 95 th TAS
Lake Onslow at Boat Ramp	A	maintain	A	A	maintain	A

Rules

CAT4-R1 – Cultivation in Roxburgh rohe

CAT4-R1-PER1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* does not take place within:
 - (a) the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain* or within a *natural inland wetland* or a *natural wetland*; and
 - (b) 5 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain*, or the edge of any *natural inland wetland*, on *land* with a *slope* of less than 10 degrees; or
 - (c) 10 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain*, or the edge of a *natural inland wetland*, on *land* with a *slope* between 10 and 20 degrees; and
- (2) *cultivation* does not occur on *land* with a *slope* greater than 20 degrees; and
- (3) *critical source areas* are identified ahead of *cultivation* activities and:
 - (a) are not cultivated with forage crops for *intensive winter grazing*; and
 - (b) sediment detention is established prior to *cultivation*; and
- (4) conditions (1) and (3) do not apply if:
 - (a) the *cultivation* is undertaken by direct drilling of seeds or *fertilisers* or no tillage practices, or is tree planting; or
 - (b) the use of *land* is undertaken in accordance with a Freshwater Farm Plan that applies to *cultivation* of the area to be cultivated and the following conditions are met:
 - (i) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (ii) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) and (3); and
 - (iii) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

CAT4-R1-PER2

The use of *land* with a *slope* greater than 20 degrees for *cultivation* for the purpose of renewing or establishing pasture and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* is undertaken using no-tillage or direct seed drilling *cultivation* practices; and

- (2) *cultivation* does not take place within 10 metres from the outer edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse*, or open drain, or the edge of a *natural inland wetland*; and
- (3) *cultivation* does not take place more than once in any 5-year period; and
- (4) *cultivation* is for the purpose of renewing or establishing pasture and is not undertaken to establish a crop used for *intensive winter grazing*, even as part of a pasture renewal cycle; and
- (5) *critical source areas* are identified ahead of *cultivation* activities and sediment detention is established prior to *cultivation*; and
- (6) conditions (1) to (5) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (2), (3), (4) and (5); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

CAT4-R1-DIS1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* that does not meet the conditions of rules CAT4-R1-PER1 and CAT4-R1-PER2 is a discretionary activity.

CAT5 – Lower Clutha rohe

Overview

The Lower Clutha rohe covers approximately 4,000 square kilometres and includes the Poumāhaka catchment, as well as several other *river* catchments that feed the Clutha/Mata-au River including Waitāhuna, Te Waiwhero, Tuapeka and Waipahī catchments, and a number of smaller tributaries. The boundaries of the rohe are those shown on MAP1 of the PORPS 2021. The rohe also includes Roto-nui-a-Whatu/Lake Tuakitoto, which is a small shallow *lake* with an adjoining *wetland* of a type now rare in Otago. The main *land* use within the Lower Clutha rohe is dry stock farming of mainly pasture grazing beef, sheep, and deer. Dairy farming, forestry and conservation *land* uses have increased over time.

The main *water* feature in the Lower Clutha rohe is the Clutha River/Mata-au as it flows to the coast to *discharge* into the Pacific Ocean downstream of Balclutha. The Clutha River/Mata-au is the largest *river* by area and flow and the second longest *river* in New Zealand. Seventy five percent of the Clutha River/Mata-au’s flow measured at Balclutha is generated in the headwaters of Lake Wānaka, Whakatipu Waimāori/Lake Wakatipu and Lake Hāwea which comprise just 34 percent of the total Clutha River/Mata-au catchment area. The remaining 66 percent of its catchment area provides just 25 percent of the flow measured at Balclutha. Flows at Balclutha are highly modified by power generation surges from the Roxburgh power station.

Table 52 – Sites for Lower Clutha rohe

Site	Map/information location
Monitoring sites	Clutha River/Mata-au at Balclutha Crookston Burn at Kelso Road Heriot Burn at Park Hill Road Lovells Creek at Station Road Poumāhaka at Burkes Ford Poumāhaka at Glenken Waipahī at Cairns Peak Waipahī at Waipahī Wairuna at Millar Road Waitāhuna at Tweeds Bridge Te Waiwhero at Clutha/Mata-au confluence u/s 1km Te Waiwhero at Maws Farm Blackcleugh Burn at Rongahere Road Upper Poumāhaka at Aitchison Runs Road Waiwere at Hillfoot Road Roto-nui-a-Whatu/Lake Tuakitoto at Outlet
Primary contact sites	n/a
Locations of <i>habitats of threatened species</i>	See APP6 – Threatened freshwater-dependent species and MAP[TS] – Threatened species habitat
<i>Outstanding water bodies</i>	See SCHED1 – Outstanding water bodies

Objectives

CAT5-O1 – Lower Clutha rohe environmental outcomes

The *environmental outcomes* for the Lower Clutha rohe are those set out in FMU1-O1 to FMU1-O15.

Policies

CAT5-P1 – Lower Clutha rohe target attribute states

To achieve the *environmental outcomes* set out in CAT5-O1:

- (1) any interim target *attribute* states are achieved by the dates specified in Table 53 to Table 65; and
- (2) all target *attribute* states set out in Table 53 to Table 65 are achieved by the date specified in the relevant *long term vision*.

Advice note:

In the following tables, *baseline states* are based on state of *environment* monitoring in the period 1 September 2012 to 30 August 2017. Where a target *attribute* state is followed by an asterisk *, the target *attribute* state is the site class target for that *attribute*. A site class target is the target *attribute* state that applies to a wider area using *river* network monitoring rather than a site-specific target. This is because no *baseline state* has been identified for this specific monitoring site for this *attribute*. Where a target *attribute* state is followed by two asterisks **, the target *attribute* state is set at the band for this site based on monitoring data from 2017-2022. This occurs when the site class target would be below what the 2017-2022 data indicates for this site.

Table 53 – Ammonia target attribute states (rivers) for Lower Clutha rohe

Site	Ammonia (mg NH4-N/L)					
	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2050 Target (95 th)
Blackcleugh Burn at Rongahere Road		n/a	A*		n/a	A*
Upper Poumāhaka at Aitchison Runs Road		n/a	A*		n/a	A*
Poumāhaka at Glenken	A	maintain	A	A	maintain	A
Heriot Burn at Park Hill Road	A	maintain	A	A	maintain	A
Crookston Burn at Kelso Road	A	maintain	A	B	maintain	A
Waipahī at Waipahī	A	maintain	A	A	maintain	A
Waipahī at Cairns Peak	A	maintain	A	A	maintain	A
Wairuna at Millar Road	A	maintain	A	B	Improving trend	A
Poumāhaka at Burkes Ford	A	maintain	A	A	maintain	A
Te Waiwhero at Hillfoot Road						
Te Waiwhero at Maws Farm	A	maintain	A	A	maintain	A
Te Waiwhero at Clutha/Mata-au confluence u/s 1km		n/a	A*		n/a	A*
Waitāhuna at Tweeds Bridge	A	maintain	A	A	maintain	A
Clutha/Mata-au at Balclutha	A	Improving trend	A	A	Improving trend	A
Lovells Creek at Station Road	A	maintain	A	A	maintain	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A

Low-elevation			A			A
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*Target set using the *river* management class, see advice note above for explanation

Table 54 – Nitrate target attribute states (rivers) for Lower Clutha rohe

Site	Nitrate (mg NO ₃ – N/L)					
	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2050 Target (95 th)
Blackcleugh Burn at Rongahere Road		n/a	A*		n/a	A*
Upper Poumāhaka at Aitchison Runs Road		n/a	A*		n/a	A*
Poumāhaka at Glenken	A	maintain	A	A	maintain	A
Heriot Burn at Park Hill Road	B	Improving trend	A	B	Improving trend	A
Crookston Burn at Kelso Road	B	Improving trend	A	B	Improving trend	A
Waipahī at Waipahī	B	Improving trend	A	B	Improving trend	A
Waipahī at Cairns Peak	A	Improving trend	A	B	Improving trend	A
Wairuna at Millar Road	B	Improving trend	A	C	Improving trend	A
Poumāhaka at Burkes Ford	A	Improving trend	A	B	Improving trend	A
Te Waiwhero at Hillfoot Road						
Te Waiwhero at Maws Farm	B	maintain	A	B	Improving trend	A
Te Waiwhero at Clutha/Mata-au confluence u/s 1km		n/a	A*		n/a	A*
Waitāhuna at Tweeds Bridge	A	Improving trend	A	A	Improving trend	A
Clutha/Mata-au at Balclutha	A	Improving trend	A	A	Improving trend	A
Lovells Creek at Station Road	B	Improving trend	A	C	Improving trend	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A

Low-elevation			A			A
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*Target set using the *river* management class, see advice note above for explanation

Table 55 – Suspended fine sediment target attribute states (rivers) for Lower Clutha rohe

Site	Suspended fine sediment (visual clarity)		
	Baseline (median)	2034 Interim Target (median)	2050 Target (median)
Blackcleugh Burn at Rongahere Road		n/a	A**
Upper Poumāhaka at Aitchison Runs Road		n/a	A**
Poumāhaka at Glenken	D	Improving trend	C
Heriot Burn at Park Hill Road	D	Improving trend	C
Crookston Burn at Kelso Road	D	Improving trend	C
Waipahī at Waipahī	A	maintain	A
Waipahī at Cairns Peak	C	maintain	C
Wairuna at Millar Road	D	Improving trend	C
Poumāhaka at Burkes Ford	D	Improving trend	C
Te Waiwhero at Hillfoot Road			
Te Waiwhero at Maws Farm	A	maintain	A
Te Waiwhero at Clutha/Mata-au confluence u/s 1km		n/a	C*
Waitāhuna at Tweeds Bridge	D	Improving trend	C
Clutha/Mata-au at Balclutha		n/a	D**
Lovells Creek at Station Road		n/a	C*
Target Attribute States for River Management Classes			
Mountain			A
Hill			C
Low-elevation			C

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 56 – E.coli target attribute states (rivers) for Lower Clutha rohe

Site	E.coli (E.coli/100ml)														
	Baseline (median)	1 st Interim Target (median)	2 nd Interim Target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2050 Target (95 th)	Baseline (g260)	1st Interim Target (g260)	2nd Interim Target (g260)	2050 Target (g260)	Baseline (g540)	1 st Interim Target (g540)	2 nd Interim Target (g540)	2050 Target (g540)
Blackcleugh Burn at Rongahere Road		n/a	n/a	A**		n/a	A**		n/a	n/a	A**		n/a	n/a	A**
Upper Poumāhaka at Aitchison Runs Road		n/a	n/a	A**		n/a	A**		n/a	n/a	A**		n/a	n/a	A**
Poumāhaka at Glenken	D	Improving trend by 2034	n/a	C	D	Improving trend	C	D	Improving trend by 2034	n/a	C	C	Improving trend by 2034	n/a	C
Heriot Burn at Park Hill Road	E	Improving trend by 2032	D and improving trend by 2040	C	D	Improving trend	C	E	Improving trend by 2032	D and improving trend by 2040	C	E	Improving trend by 2032	D and improving trend by 2040	C
Crookston Burn at Kelso Road	E	Improving trend by 2032	D and improving trend by 2040	C	D	Improving trend	C	E	Improving trend by 2032	D and improving trend by 2040	C	E	Improving trend by 2032	D and improving trend by 2040	C
Waipahī at Waipahī	D	n/a		C	D	Improving trend	C	D		n/a	C	C	Improving trend	n/a	C
Waipahī at Cairns Peak	D	Improving trend by 2034	n/a	C	D	Improving trend	C	D	Improving trend by 2034	n/a	C	E	Improving trend by 2032	D and improving trend by 2040	C
Wairuna at Millar Road	E	Improving trend by 2032	D and improving trend by 2040	C	D	Improving trend	C	E	Improving trend by 2032	D and improving trend by 2040	C	E	Improving trend by 2032	D and improving trend by 2040	C
Poumāhaka at Burkes Ford	A	2034 maintain	n/a	A	D	Improving trend	C	C		n/a	C	C	2034 Maintain	n/a	C
Te Waiwhero at Hillfoot Road															
Te Waiwhero at Maws Farm	D	Improving trend by 2034	n/a	C	D	Improving trend	C	D	Improving trend by 2034	n/a	C	D	2034 maintain	n/a	C
Te Waiwhero at Clutha/Mata-au confluence u/s 1km		n/a	n/a	C*		n/a	C*		n/a	n/a	C*		n/a	n/a	C*
Waitāhuna at Tweeds Bridge	E	Improving trend by 2032	D and improving trend by 2040	C	D	Improving trend	C	E	Improving trend by 2032	D and improving trend by 2040	C	E	Improving trend by 2034	n/a	C
Clutha/Mata-au at Balclutha	A	Improving trend by 2034	n/a	A	D	Improving trend	C	A	Improving trend by 2034	n/a	A	B	Improving trend by 2034	n/a	B

Site	E.coli (E.coli/100ml)														
	Baseline (median)	1 st Interim Target (median)	2 nd Interim Target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim Target (95 th)	2050 Target (95 th)	Baseline (g260)	1 st Interim Target (g260)	2 nd Interim Target (g260)	2050 Target (g260)	Baseline (g540)	1 st Interim Target (g540)	2 nd Interim Target (g540)	2050 Target (g540)
Lovells Creek at Station Road	E	Improving trend by 2032	D and improving trend by 2040	C	D	Improving trend	C	E	Improving trend by 2032	D and improving trend by 2040	C	E	Improving trend by 2034	n/a	C
Target Attribute States for River Management Classes															
Mountain				B			B				B				B
Hill				C			C				C				C
Low-elevation				C			C				C				C

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 57 – Dissolved reactive phosphorus target attribute states (rivers) for Lower Clutha rohe

Site	Dissolved Reactive Phosphorus (mg/L)						
	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	Baseline (95 th)	1 st Interim Target (95 th)	2 nd Interim Target (95 th)	2050 Target (95 th)
Blackcleugh Burn at Rongahere Road		n/a	C*		n/a	n/a	A**
Upper Poumāhaka at Aitchison Runs Road		n/a	A**		n/a	n/a	A**
Poumāhaka at Glenken	B	maintain	B	A	2034 maintain	n/a	A
Heriot Burn at Park Hill Road	D	Improving trend	C	D	n/a		C
Crookston Burn at Kelso Road	D	Improving trend	C	D	n/a		C
Waipahī at Waipahī	C	Improving trend	C	C	Improving trend by 2034	n/a	C
Waipahī at Cairns Peak	C	maintain	C	C	2034 maintain	n/a	B
Wairuna at Millar Road	D	Improving trend	C	D	n/a		C
Poumāhaka at Burkes Ford	C	Improving trend	C	B	Improving trend by 2034	n/a	B
Te Waiwhero at Hillfoot Road							
Te Waiwhero at Maws Farm	D	Improving trend	C	D	Improving trend by 2032	improving trend by 2040	C
Te Waiwhero at Clutha/Mata-au confluence u/s 1km		n/a	C*		n/a	n/a	C*
Waitāhuna at Tweeds Bridge	C	Improving trend	C	C	Improving trend by 2034	n/a	B
Clutha/Mata-au at Balclutha	A	maintain	A	A	2034 maintain	n/a	A
Lovells Creek at Station Road	C	maintain	C	C	2034 maintain	n/a	B
Target Attribute States for River Management Classes							
Mountain			B				B

Hill			C				C
Low-elevation			C				C

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 58 – Periphyton (Biomass), Periphyton (TNTP) target attribute states (rivers) for Lower Clutha rohe

Site	Periphyton Biomass			Periphyton (Total Nitrogen Total Phosphorus)					
	Baseline	2034 Interim Target	2050 Target	Total Nitrogen baseline	2034 Interim Target	2050 Total nitrogen target	Total Phosphorus baseline	2034 Interim Target	2050 Total phosphorus target
Blackcleugh Burn at Rongahere Road	A	n/a	A	B	n/a	B	C	Improving trend	B
Upper Poumāhaka at Aitchison Runs Road	A	n/a	A	D	Improving trend	C	D	Improving trend	C
Poumāhaka at Glenken		n/a	C*	C	Improving trend	C	C	Improving trend	C
Heriot Burn at Park Hill Road		n/a	C*	D	Improving trend	C	D	Improving trend	C
Crookston Burn at Kelso Road		n/a	C*	D	Improving trend	C	D	Improving trend	C
Waipahī at Waipahī	D	Improving trend	C	C	Improving trend	C	C	Improving trend	C
Waipahī at Cairns Peak		n/a	C*	D	Improving trend	C	D	Improving trend	C
Wairuna at Millar Road		n/a	C*	D	Improving trend	C	D	Improving trend	C
Poumāhaka at Burkes Ford		n/a	C*	D	Improving trend	C	D	Improving trend	C
Te Waiwhero at Hillfoot Road									
Te Waiwhero at Maws Farm		n/a	C*	D	Improving trend	C	D	Improving trend	C

Site	Periphyton Biomass			Periphyton (Total Nitrogen Total Phosphorus)					
	Baseline	2034 Interim Target	2050 Target	Total Nitrogen baseline	2034 Interim Target	2050 Total nitrogen target	Total Phosphorus baseline	2034 Interim Target	2050 Total phosphorus target
Te Waiwhero at Clutha/Mata-au confluence u/s 1km		n/a	C*		n/a	C*		n/a	C*
Waitāhuna at Tweeds Bridge	A	n/a	A	C	Improving trend	C	D	Improving trend	C
Clutha/Mata-au at Balclutha		n/a	C*	B	maintain	B	B	Improving trend	B
Lovells Creek at Station Road		n/a	C*	D	Improving trend	C	D	Improving trend	C
Target Attribute States for River Management Classes									
Mountain			B			B			B
Hill			C			C			C
Low-elevation			C			C			C

*Target set using the *river* management class, see advice note above for explanation

Table 59 – Macroinvertebrates target attribute states (rivers) for Lower Clutha rohe

Site	Macroinvertebrates [MCI score, Average Score per Metric (ASPM)]					
	Baseline (MCI)	2034 Interim Target (MCI)	2050 Target (MCI)	Baseline (ASPM)	2034 Interim Target (ASPM)	2050 Target (ASPM)
Blackcleugh Burn at Rongahere Road		n/a	C*		n/a	C*
Upper Poumāhaka at Aitchison Runs Road		n/a	B**		n/a	C*
Poumāhaka at Glenken		n/a	B**		n/a	C*
Heriot Burn at Park Hill Road	C	n/a	C	B	n/a	B
Crookston Burn at Kelso Road		n/a	C*		n/a	C*
Waipahī at Waipahī	D	Improving trend	C	C	Improving trend	C
Waipahī at Cairns Peak	C	n/a	C	C		C
Wairuna at Millar Road	D	Improving trend	C			
Poumāhaka at Burkes Ford		n/a	C*		n/a	C*
Te Waiwhero at Hillfoot Road						
Te Waiwhero at Maws Farm		n/a	C*		n/a	C*
Te Waiwhero at Clutha/Mata-au confluence u/s 1km	D	Improving trend	C	D	n/a	C
Waitāhuna at Tweeds Bridge	C		C	B	Improving trend	B
Clutha/Mata-au at Balclutha		n/a	C*		n/a	C*
Lovells Creek at Station Road		n/a	C*		n/a	C*
Target Attribute States for River Management Classes						
Mountain			C			C
Hill			C			C

Low-elevation			C			C
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*Target set using the *river* management class, see advice note above for explanation**Target has been set using current state, see advice note above for explanation

Table 60 – Fish IBI target attribute states (rivers) for Lower Clutha rohe

Site	Fish IBI		
	Baseline	2034 Interim Target	2050 Target
Blackcleugh Burn at Rongahere Road			
Upper Poumāhaka at Aitchison Runs Road			
Poumāhaka at Glenken			
Heriot Burn at Park Hill Road	D	n/a	B
Crookston Burn at Kelso Road			
Waipahī at Waipahī			
Waipahī at Cairns Peak	D	n/a	C
Wairuna at Millar Road	D	n/a	B
Poumāhaka at Burkes Ford			
Te Waiwhero at Hillfoot Road	D	n/a	C
Te Waiwhero at Maws Farm			
Te Waiwhero at Clutha/Mata-au confluence u/s 1km			
Waitāhuna at Tweeds Bridge			
Clutha/Mata-au at Balclutha			
Lovells Creek at Station Road			
Target Attribute States for River Management Classes			
Mountain			
Hill			
Low-elevation			

Table 61 – E.coli target attribute states (lakes) for Lower Clutha rohe

	E.coli (E.coli/100ml)											
	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	Baseline (95th)	2034 Interim Target (95th)	2050 Target (95th)	Baseline (g260)	2034 Interim Target (g260)	2050 Target (g260)	Baseline (g540)	2034 Interim Target (g540)	2050 Target (g540)
Roto-nui-a-Whatu/Lake Tuakitoto at Outlet	A	maintain	A	D	Improving trend	C	A	maintain	A	B	maintain	B

Table 62 – Phytoplankton target attribute states (lakes) for Lower Clutha rohe

	Phytoplankton (mg chl-a/ m ³)					
	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	Baseline (annual max)	2034 Interim Target (annual max)	2050 Target (annual max)
Roto-nui-a-Whatu/Lake Tuakitoto at Outlet	C	Improving trend	C	D	Improving trend	C

Table 63 – Total Nitrogen target attribute states (lakes) for Lower Clutha rohe

	Total Nitrogen (mg/m ³)		
	Baseline	2034 Interim Target	2050 Target
Roto-nui-a-Whatu/Lake Tuakitoto at Outlet	D	Improving trend	C

Table 64 – Total Phosphorus target attribute states (lakes) for Lower Clutha rohe

	Total Phosphorus (mg/m ³)

	Baseline	2034 Interim Target	2050 Target
Roto-nui-a-Whatu/Lake Tuakitoto at Outlet	D	Improving trend	C

Table 65 – Ammonia target attribute states (lakes) for Lower Clutha rohe

	Ammonia (mg NH ₄ -N/L)					
	Baseline (median)	2034 Interim Target (median)	2050 Target (median)	95 th Baseline	2034 Interim Target (annual max)	2050 95 th TAS
Roto-nui-a-Whatu/Lake Tuakitoto at Outlet	A	maintain	A	B	maintain	B

Rules

CAT5-R1 – Cultivation in Lower Clutha rohe

CAT5-R1-PER1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* does not take place within:
 - (a) the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain* or within a *natural inland wetland* or a *natural wetland*; and
 - (b) 5 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain*, or the edge of any *natural inland wetland*, on *land* with a *slope* of less than 10 degrees; or
 - (c) 10 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain*, or the edge of a *natural inland wetland*, on *land* with a *slope* between 10 and 20 degrees; and
- (2) *cultivation* does not occur on *land* with a *slope* greater than 20 degrees; and
- (3) *critical source areas* are identified ahead of *cultivation* activities and:
 - (a) are not cultivated with forage crops for *intensive winter grazing*; and
 - (b) sediment detention is established prior to *cultivation*; and
- (4) conditions (1) and (3) do not apply if:
 - (a) the *cultivation* is undertaken by direct drilling of seeds or *fertilisers* or no tillage practices, or is tree planting; or
 - (b) the use of *land* is undertaken in accordance with a Freshwater Farm Plan that applies to *cultivation* of the area to be cultivated and the following conditions are met:
 - (i) the Freshwater Farm Plan includes that the farm operator intends to rely on the Freshwater Farm Plan to meet the requirements of this rule; and
 - (ii) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) and (3); and
 - (iii) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor's findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

CAT5-R1-PER2

The use of *land* with a *slope* greater than 20 degrees for *cultivation* for the purpose of renewing or establishing pasture and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* is undertaken using no-tillage or direct seed drilling *cultivation* practices; and

- (2) *cultivation* does not take place within 10 metres from the outer edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse*, or open drain, or the edge of a *natural inland wetland*; and
- (3) *cultivation* does not take place more than once in any 5-year period; and
- (4) *cultivation* is for the purpose of renewing or establishing pasture and is not undertaken to establish a crop used for *intensive winter grazing*, even as part of a pasture renewal cycle; and
- (5) *critical source areas* are identified ahead of *cultivation* activities and sediment detention is established prior to *cultivation*; and
- (6) conditions (1) to (5) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* is no greater than that allowed for by conditions (1) to (5); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

CAT5-R1-DIS1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* that does not meet the conditions of Rules CAT5-R1-PER1 and CAT5-R1-PER2 is a discretionary activity.

FMU2 – Taiari freshwater management unit

Overview

The Taiari *FMU* covers the entire Taiari River catchment, reaching from Taiari Mouth across the Taiari Plain into the Strath Taiari and Maniatoto Basins. The boundaries of the *FMU* are those shown on MAP1 of the PORPS 2021. Kāi Tahu used all areas of the Taiari catchment, with many *mahika kai* sites and settlements associated with the many waterways, *lakes*, and *wetlands* across the *FMU*.

The Taiari River is the fourth-longest in Aotearoa New Zealand, draining the eastern Otago uplands and following an almost circular path from its source to the sea. The main tributaries of the Taiari River include the Kye Burn, Sow Burn, Deep Stream, Sutton Stream, Lee Stream, Silverstream and the Waipōuri River. Notable *freshwater* bodies include Lakes Mahinerangi, Waipōuri, and Waihola, and the Taiari Scroll Plain *wetlands*. Water from the Taiari and its tributaries feed seven small rural water supply schemes, three small urban supply schemes, and Dunedin city. The main urban settlements in the Taiari *FMU* are Mosgiel, Middlemarch, and Ranfurly.

Table 66 – Sites for Taiari *FMU*

Site	Map/information location
Monitoring sites	Deep Stream at SH87 Kye Burn at SH85 Bridge Nenthorn at Mt Stoker Road Whakaehu/Silver Stream at Taiari Depot Taiari at Allanton Bridge Taiari at Linnburn Runs Road Taiari at Maka Kahikātoa/Outram Taiari at Stonehenge Taiari at Sutton Taiari at Tiroiti Taiari at Waipiata Waipōuri at Waipōuri Falls Reserve Waihora/Lake Waihola at Waihola Mid Waihora/Lake Waihola at Waihola South
Primary contact sites	Waihora/Lake Waihola at End of jetty Taiari at Maka Kahikātoa/Outram Taiari at Waipiata
Locations of <i>habitats of threatened species</i>	See APP6 – Threatened freshwater-dependent species and MAP[TS] – Threatened species habitat
Outstanding water bodies	See SCHED1 – Outstanding water bodies

Objectives

FMU2-O1 – Taiari ecosystem health

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

FMU2-O2 – Taiari human contact

Water bodies are clean and safe for *human contact activities* and support the health of people and their connections with *water bodies*.

FMU2-O3 – Taiari threatened species (habitat)

The *habitats* of *threatened species* are protected and restored, to the extent practicable, to support the *recovery* of *threatened species*.

FMU2-O4 – Taiari threatened species (recovery)

Threatened species are *recovering* throughout their range to be resilient, viable, and functioning.

FMU2-O5 – Taiari mahika kai (condition)

Populations of *mahika kai species* values by Kai Tahu are self-sustaining and plentiful enough to support cultural take.

FMU2-O6 – Taiari mahika kai (access, harvest, and use)

Mana whenua can safely access, harvest and use *mahika kai* resources now and in the future.

FMU2-O7 – Taiari natural form and character

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*.

FMU2-O8 – Taiari drinking water supply (source water)

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

FMU2-O9 – Taiari animal drinking water

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

FMU2-O10 – Taiari wāhi tūpuna

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.

FMU2-O11 – Taiari taoka species

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

FMU2-O12 – Taiari fishing

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.

FMU2-O13 – Taiari cultivation, and production of food, beverages and fibre

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.

FMU2-O14 – Taiari commercial and industrial use

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

FMU2-O15 – Taiari hydro-electricity generation

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.

Policies

FMU2-P1 – Taiari target attribute states

To achieve the *environmental outcomes* set out in FMU2-O1 to FMU2-O15:

- (1) any interim target *attribute* states are achieved by the dates specified in Table 67 to Table 77 and
- (2) all target *attribute* states set out in Table 67 to Table 77 are achieved by the date specified in the relevant *long term vision*.

FMU2-P2 – Taiari river

Improve the health and wellbeing of the Taiari River and tributaries by:

- (1) requiring all surface *water* and *groundwater* takes that are hydrologically connected to the Taiari River to comply with the relevant *minimum flow* specified in Part 3 of SCHED3 – Rivers: A Block environmental flows, levels and take limits; and
- (2) requiring the metering of all takes and *discharges* of water to the Taiari River and tributaries, to inform management of the *FMU* in the future, including the setting of a *take limit* that supports the achievement of the long-term visions and *environmental outcomes* for the Taiari *FMU*; and
- (3) setting the interim *take limit* as the sum of the maximum instantaneous rate of take of all resource consents granted in the Taiari River at 31 October 2024, and
 - (a) avoiding any new allocation of *water* from the Taiari river; and

- (b) reducing *over-allocation* in accordance with EFL-P16 – Over-allocation; and
- (c) recognising that when a *take limit* is set in the future, reductions in the rate and volume allocated to consents will be required if the *take limit* is exceeded.

Advice note:

In the following tables, *baseline states* are based on state of *environment* monitoring in the period 1 September 2012 to 30 August 2017. Where a target *attribute* state is followed by an asterisk *, the target *attribute* state is the site class target for that *attribute*. A site class target is the target *attribute* state that applies to a wider area using *river* network modelling rather than a site-specific target. This is because no *baseline state* has been identified for this specific monitoring site for this *attribute*. Where a target *attribute* state is followed by two asterisks **, the target *attribute* state is set at the band for this site based on monitoring data from 2017-2022. This occurs when the site class target would be below what the 2017-2022 data indicates for this site.

Table 67 – Ammonia target attribute states (rivers) for Taiari FMU

Site	Ammonia (mg NH ₄ -N/L)					
	Baseline (median)	Interim target (median)	2050 Target (median)	Baseline (95 th)	2034 interim target (95 th)	2050 Target (95 th)
Taiari at Linnburn Runs Road	A	maintain	A	A	maintain	A
Taiari at Stonehenge	A	Improving trend	A	A	Improving trend	A
Taiari at Waipiata	A	maintain	A	A	maintain	A
Kye Burn at SH85 Bridge	A	maintain	A	A	maintain	A
Taiari at Tiroiti	A	maintain	A	A	maintain	A
Taiari at Sutton	A	maintain	A	A	maintain	A
Nenthorn at Mt Stoker Road	A	maintain	A	A	maintain	A
Deep Stream at SH87	A	maintain	A	A	maintain	A
Taiari at Maka Kahikātoa/Outram	A	maintain	A	A	maintain	A
Whakaehu/Silver Stream at Taiari Depot	A	maintain	A	B	Improving trend	A
Taiari at Allanton Bridge	A	maintain	A	A	maintain	A
Waipōuri at Waipōuri Falls Reserve	A	maintain	A	A	maintain	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A
Low-elevation			A			A

Table 68 – Nitrate target attribute states (rivers) for Taiari FMU

Site	Nitrate (mg NO ₃ – N/L)					
	Baseline (median)	2034 interim target (median)	2050 Target (median)	Baseline (95 th)	Interim target (95 th)	2050 Target (95 th)
Taiari at Linnburn Runs Road	A	n/a	A	A	n/a	A
Taiari at Stonehenge	A	improving trend	A	A	improving trend	A
Taiari at Waipiata	A	improving trend	A	A	improving trend	A
Kye Burn at SH85 Bridge	A	improving trend	A	A	improving trend	A
Taiari at Tiroiti	A	improving trend	A	A	improving trend	A
Taiari at Sutton	A	improving trend	A	A	improving trend	A
Nenthorn at Mt Stoker Road	A	n/a	A	A	n/a	A
Deep Stream at SH87	A	n/a	A	A	n/a	A
Taiari at Maka Kahikātoa/Outram	A	maintain	A	A	maintain	A
Whakaehu/Silver Stream at Taiari Depot	A	improving trend	A	A	improving trend	A
Taiari at Allanton Bridge	A	improving trend	A	A	improving trend	A
Waipōuri at Waipōuri Falls Reserve	A	improving trend	A	A	improving trend	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A
Low-elevation			A			A

Table 69 – Suspended fine sediment target attribute states (rivers) for Taiari FMU

Site	Suspended fine sediment (Visual clarity)		
	Baseline (median)	2034 Interim target (median)	2050 Target (median)
Taiari at Linnburn Runs Road	C	maintain	C**
Taiari at Stonehenge	C	maintain	C**
Taiari at Waipiata	D	maintain	D**
Kye Burn at SH85 Bridge	C	maintain	C
Taiari at Tiroiti		maintain	D**
Taiari at Sutton	D	maintain	D**
Nenthorn at Mt Stoker Road		n/a	A**
Deep Stream at SH87		n/a	A**
Taiari at Maka Kahikātoa/Outram		maintain	C**
Whakaehu/Silver Stream at Taiari Depot	A	maintain	A
Taiari at Allanton Bridge	D	maintain	D**
Waipōuri at Waipōuri Falls Reserve	D	maintain	D**
Target Attribute States for River Management Classes			
Mountain			A
Hill			C
Low-elevation			C

**Target has been set using current state, see advice note above for explanation

Table 70 – E.coli target attribute states (rivers) for Taiari FMU

Site	E.coli (E.coli/100ml)											
	Baseline (median)	2034 Interim target (trend)	2050 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2050 Target (95 th)	Baseline (g260)	2034 Interim target (g260)	2050 Target (g260)	Baseline (g540)	2034 interim target (g540)	2050 Target (g540)
Taiari at Linnburn Runs Road	A	improving trend	A	B	improving trend	B	B	improving trend	B	B	improving trend	B
Taiari at Stonehenge	A	improving trend	A	A	improving trend	A	A	improving trend	A	A	improving trend	A
Taiari at Waipiata	A	improving trend	A	B	improving trend	B	B	improving trend	B	B	improving trend	B
Kye Burn at SH85 Bridge	A	improving trend	A	A	improving trend	A	A	improving trend	A	A	improving trend	A
Taiari at Tiroiti		n/a	A**		n/a	A**		n/a	A**		n/a	A**
Taiari at Sutton	D		C	C		C	B	improving trend	B	C	improving trend	C
Nenthorn at Mt Stoker Road		n/a	A**		n/a	A**		n/a	A**		n/a	A**
Deep Stream at SH87		n/a	A**		n/a	A**		n/a	A**		n/a	A**
Taiari at Maka Kahikātoa/Outram		n/a	A**		n/a	A**		n/a	A**		n/a	B*
Whakaehu/Silver Stream at Taiari Depot	D	Improving trend	C	D	Improving trend	C	C	improving trend	C	C	improving trend	C

	E.coli (E.coli/100ml)											
Site	Baseline (median)	2034 Interim target (trend)	2050 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2050 Target (95 th)	Baseline (g260)	2034 Interim target (g260)	2050 Target (g260)	Baseline (g540)	2034 interim target (g540)	2050 Target (g540)
Taiari at Allanton Bridge	A	improving trend	A	D	Improving trend	B	B	improving trend	B	B	improving trend	B
Waipōuri at Waipōuri Falls Reserve	A	improving trend	A	A	improving trend	A	A	improving trend	A	A	improving trend	A
Target Attribute States for River Management Classes												
Mountain			B			B			B			B
Hill			B			B			B			B
Low-elevation			C			C			C			C

**Target has been set using current state, see advice note above for explanation

Table 71 – Dissolved reactive phosphorus target attribute states (rivers) for Taiari FMU

Site	Dissolved Reactive Phosphorus (mg/L)						
	Baseline (median)	1 st interim target	2 nd interim target (median)	2050 Target (median)	Baseline (95 th)	2034 interim target (95 th)	2050 Target (95 th)
Taiari at Linnburn Runs Road	A	2034 maintain	n/a	A	A	maintain	A
Taiari at Stonehenge	B	improving trend by 2034	n/a	B	A	improving trend	A
Taiari at Waipiata	D	Improving trend by 2032	C and improving trend by 2040	C	D	C	C
Kye Burn at SH85 Bridge	A	2034 maintain	n/a	A	A	maintain	A
Taiari at Tiroiti	C	2034 maintain	n/a	C	C	maintain	B
Taiari at Sutton	C	2034 maintain	n/a	C	C	maintain	B
Nenthorn at Mt Stoker Road	B	2034 maintain	n/a	B	B	maintain	B
Deep Stream at SH87	A	2034 maintain	n/a	A	A	maintain	A
Taiari at Maka Kahikātoa/Outram	C	2034 maintain	n/a	C	B	maintain	A
Whakaehu/Silver Stream at Taiari Depot	A	2034 maintain	n/a	A	B	maintain	A
Taiari at Allanton Bridge	C	improving trend by 2034	n/a	C	B	improving trend	B
Waipōuri at Waipōuri Falls Reserve	A	improving trend by 2034	n/a	A	A	improving trend	A
Target Attribute States for River Management Classes							
Mountain				B			B

Site	Dissolved Reactive Phosphorus (mg/L)						
	Baseline (median)	1 st interim target	2 nd interim target (median)	2050 Target (median)	Baseline (95 th)	2034 interim target (95 th)	2050 Target (95 th)
Hill				C			C
Low-elevation				C			C

Table 72 – Periphyton (Biomass), Periphyton (TNTP) target attribute states (rivers) for Taiari FMU

Site	Periphyton Biomass			Periphyton (Total Nitrogen Total Phosphorus)					
	Baseline	2034 interim target	2050 Target	Total Nitrogen baseline	2034 Total Nitrogen interim target	2050 Total nitrogen target	Total Phosphorus baseline	2034 Total Phosphorus interim target	2050 Total phosphorus target
Taiari at Linnburn Runs Road				B	improving trend	B	C	improving trend	C
Taiari at Stonehenge				B	improving trend	B	C	improving trend	C
Taiari at Waipiata				C	improving trend	C	D	improving trend	C
Kye Burn at SH85 Bridge	A	n/a	A	B	improving trend	B	C	improving trend	C
Taiari at Tiroiti				C	improving trend	C	D	improving trend	C
Taiari at Sutton				C	improving trend	C	D	improving trend	C
Nenthorn at Mt Stoker Road				C	maintain	C	C	improving trend	C
Deep Stream at SH87		n/a	C*	B	maintain	B	C	improving trend	C
Taiari at Maka Kahikātoa/Outram				C	maintain	C	C	improving trend	C
Whakaehu/Silver Stream at Taiari Depot	D	improving trend	C	C	improving trend	C	C	improving trend	C
Taiari at Allanton Bridge				C	improving trend	C	D	improving trend	C

Waipōuri at Waipōuri Falls Reserve				C	improving trend	C	C	improving trend	C
Target Attribute States for River Management Classes									
Mountain			B			B			B
Hill			C			C			C
Low-elevation			C			C			C

*Target set using the river management class, see advice note above for explanation

Table 73 – Macroinvertebrates, Fish IBI target attribute states (rivers) for Taiari FMU

Site	Macroinvertebrates [MCI score, Average Score per Metric (ASPM)]						Fish IBI	
	Baseline (MCI)	2034 Interim target (MCI)	Target (MCI)	Baseline (ASPM)	2034 Interim target (ASPM)	Target (ASPM)	Baseline	Target
Taiari at Linnburn Runs Road		n/a	C*		n/a	C*		
Taiari at Stonehenge		n/a	B**		n/a	C*		
Taiari at Waipiata		n/a	B**		n/a	C*		
Kye Burn at SH85 Bridge		n/a	B**		n/a	C*	C	C
Taiari at Tiroiti		n/a	C*		n/a	C*		
Taiari at Sutton		n/a	B**		n/a	C*		
Nenthorn at Mt Stoker Road	C	n/a	C	B	n/a	B		
Deep Stream at SH87		n/a	B**		n/a	C*		
Taiari at Maka Kahikātoa/Outram		n/a	B**		n/a	C*		
Whakaehu/Silver Stream at Taiari Depot	D	n/a	C*	D	n/a	C*		
Taiari at Allanton Bridge	D	Improving trend	C	D	Improving trend	C		
Waipōuri at Waipōuri Falls Reserve	C	n/a	C	C	n/a	C		
Whakaehu/Silver Stream at Riccarton Road		n/a	C*		n/a	C*	NA (C – A)	C
Target Attribute States for River Management Classes								
Mountain			C			C		
Hill			C			C		

Low-elevation			C			C		
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*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 74 – E.coli target attribute states (lakes) for Taiari FMU

Site	E.coli (E.coli/100ml)								
	Baseline (median)	2050 Target (median)	Baseline (95th)	2034 interim target (95 th)	2050 Target (95th)	Baseline (g260)	2050 Target (g260)	Baseline (g540)	2050 Target (g540)
Waihora/Lake Waihora at Waihora Mid	A	A	B	n/a	B	A	A	B	B
Waihora/Lake Waihora at Waihora South	A	A	D	improving trend	C	A	A	B	B

Table 75 – Phytoplankton, Total Nitrogen, Total Phosphorus target attribute states (lakes) for Taiari FMU

Site	Phytoplankton (mg chl-a/ m ³)					Total Nitrogen (mg/m ³)		Total Phosphorus (mg/m ³)		
	Baseline (median)	2034 interim target (median)	2050 Target (median)	Baseline (annual max)	2050 Target (annual max)	Baseline	2050 Target	Baseline	2034 interim target	2050 Target
Waihora/Lake Waihora at Waihora Mid	C	n/a	C	D	C	C	C	C	n/a	C
Waihora/Lake Waihora at Waihora South	D	improving trend	C	D	C	D	C	D	improving trend	C

Table 76 – Ammonia target attribute states (lakes) for Taiari FMU

	Ammonia (mg NH ₄ -N/L)				
	Baseline (median)	2034 interim target (median)	2050 Target (median)	95 th Baseline	2050 95 th TAS
Waihora/Lake Waihora at Waihora Mid	A	n/a	A	B	A
Waihora/Lake Waihora at Waihora South	B	improving trend	A	B	A

Table 77 – E.coli Primary Contact Sites for Taiari FMU

	E. coli primary contact sites (E.coli/100ml)		
	Baseline (95th percentile)	2034 Interim target	2050 Target (95th percentile)
Taiari at Waipiata	D	C	A
Taiari at Maka Kahikātoa/Outram	D	C	A
Waihora/Lake Waihora at End of jetty	B	B	A

Rules

FMU2-R1 – Cultivation in Taiari FMU

FMU2-R1-PER1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* does not take place within:
 - (a) the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain* or within a *natural inland wetland* or a *natural wetland*; and
 - (b) 5 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain*, or the edge of any *natural inland wetland*, on *land* with a *slope* of less than 10 degrees;
 - (c) 10 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain*, or the edge of a *natural inland wetland*, on *land* with a *slope* between 10 and 20 degrees; and
- (2) *cultivation* does not occur on *land* with a *slope* greater than 20 degrees; and
- (3) *critical source areas* are identified ahead of *cultivation* activities and:
 - (a) are not cultivated with forage crops for *intensive winter grazing*; and
 - (b) sediment detention is established prior to *cultivation*; and
- (4) conditions (1) and (3) do not apply if:
 - (a) the *cultivation* is undertaken by direct drilling of seeds or *fertilisers* or no tillage practices, or is tree planting; or
 - (b) the use of *land* is undertaken in accordance with a *certified Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated and the following conditions are met:
 - (i) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (ii) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) and (3); and
 - (iii) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor's findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

FMU2-R1-PER2

The use of *land* with a *slope* greater than 20 degrees for *cultivation* for the purpose of renewing or establishing pasture and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* is undertaken using no-tillage or direct seed drilling *cultivation* practices; and

- (2) *cultivation* does not take place within 10 metres from the outer edge of the *bed* of any *lake* or continually or intermittently flowing *river*, *modified watercourse*, or open drain, or the edge of a *natural inland wetland*; and
- (3) *cultivation* does not take place more than once in any 5-year period; and
- (4) *cultivation* is for the purpose of renewing or establishing pasture and is not undertaken to establish a crop used for *intensive winter grazing*, even as part of a pasture renewal cycle; and
- (5) *critical source areas* are identified ahead of *cultivation* activities and sediment detention is established prior to *cultivation*; and
- (6) Conditions (1) to (5) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) to (5); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

FMU2-R1-DIS1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* that does not meet the conditions of Rules FMU2-R1-PER1 and FMU2-R1-PER2 is a discretionary activity.

FMU2-R2– Lake Waipōuri/Waihola wetland complex

FMU2-R2-PR1

Unless provided for by Part 3, subpart 1 of the NESF the take and use of surface *water* from the Lake Waipōuri/Waihola wetland complex is a prohibited activity.

Method

FMU2-M1 – Monitoring site review

ORC may from time to time undertake a review of the target *attribute* state monitoring sites provided in the *FMU* chapters to determine which sites are required for effective and efficient monitoring of the *environmental outcomes* of the plan.

FMU3 – North Otago freshwater management unit

Overview

The North Otago *FMU* covers approximately 296,000 hectares, including the Waitaki River in the north down through Ōamaru and Palmerston townships. The boundaries of the *FMU* are those shown on MAP1 of the PORPS 2021. It includes parts of the lower Waitaki Plains, Trotters Creek and the Kākaunui, Shag/Waihemo, Waianakarua and Pleasant rivers. High natural character values exist in the upper catchments of the Kākaunui and Waianakarua rivers, and Trotters Gorge. The main *land* covers in the North Otago *FMU* are high and low producing exotic grasslands, exotic forests and tall tussock grasslands with high producing exotic grasslands being the dominant *land* cover.

In Kāi Tahu tradition, the creation of the Kākaunui River relates in time to Te Waka o Aoraki, the shaping of the island and the stocking of the waterways and forests. Historically, this *river* was an essential part of the coastal trails north and south. It was also part of the seasonal trail of *mahika kai* (resource gathering) and hapū and whānau bonding. There are surviving rock art remnants and rock shelters associated with these activities, which are a particular taoka (treasure) of the area and provide a unique record of the lives and beliefs of tūpuna (ancestors).

The Kākaunui River's *water* resource is heavily used for *irrigation*. The North Otago Irrigation Scheme services much of the lower Kākaunui River and Waiareka Creek. In contrast, *land* use in the Kauru and upper Kākaunui are typified by red tussock, native forest, commercial forestry or pasture for deer, sheep, and beef. Large areas of the North Otago *FMU* are underlain by volcanic soils, where market garden farming is common.

Waitaki catchment

The Resource Management (Waitaki Catchment) Amendment Act 2004 (Waitaki Act) established the Waitaki Catchment Water Allocation Board with the function of developing a regional plan for the allocation of *water* in the *Waitaki catchment* on a basis consistent with the purpose and principles of the RMA. The *Waitaki catchment* is located largely within the Canterbury region; however, a small portion at the southern end falls within the Otago region.

The Waitaki Catchment Water Allocation Regional Plan (Waitaki Plan) is the regional plan for the allocation of *water* in that part of the *Waitaki catchment* that is within the Canterbury region. The Waitaki Plan applies to the taking, using, *damming*, or diverting of *water* from *water bodies* within the *Waitaki catchment*, whether the *water* is used within or outside the catchment.

The Waitaki Act also provides that the Board may change the ORC's regional plan as it relates to the *Waitaki catchment*, as necessary, to ensure that the provisions give effect to the Waitaki Plan.

Within the parts of the *Waitaki catchment* that are within the Otago region, the relevant policies from the Waitaki are included in the LWRP and apply in addition to those in the region-wide sections of the LWRP.

Table 78 – Sites for North Otago FMU

Site	Map/information location
Monitoring sites	Awamoko at SH83 Kākaunui at Clifton Falls Bridge Kākaunui at McCones Kauru at Ewings Ōamaru Creek at SH1 Shag/Waihemo at Craig Road Shag/Waihemo at Goodwood Pump Trotters Creek at Mathesons Waianakarua at Browns Waiareka Creek at Taipo Road
Primary contact sites	n/a
Locations of <i>habitats of threatened species</i>	See APP6 – Threatened freshwater-dependent species and MAP[TS] – Threatened species habitat
Outstanding water bodies	See SCHED1 – Outstanding water bodies

Objectives

FMU3-01 – North Otago ecosystem health

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

FMU3-02 – North Otago human contact

Water bodies are clean and safe for *human contact activities* and support the health of people and their connections with *water bodies*.

FMU3-03 – North Otago threatened species (habitat)

The *habitats of threatened species* are protected and restored, to the extent practicable, to support the *recovery of threatened species*.

FMU3-04 – North Otago threatened species (recovery)

Threatened species are *recovering* throughout their range to be resilient, viable, and functioning.

FMU3-05 – North Otago mahika kai (condition)

Populations of *mahika kai species* values by Kai Tahu are self-sustaining and plentiful enough to support cultural take.

FMU3-06 – North Otago mahika kai (access, harvest, and use)

Mana whenua can safely access, harvest and use *mahika kai* resources now and in the future.

FMU3-07 – North Otago natural form and character

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*.

FMU3-08 – North Otago drinking water supply (source water)

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

FMU3-09 – North Otago animal drinking water

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

FMU3-010 – North Otago wāhi tūpuna

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.

FMU3-011 – North Otago taoka species

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

FMU3-012 – North Otago fishing

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.

FMU3-013 – North Otago cultivation, and production of food, beverages, and fibre

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.

FMU3-014 – North Otago commercial and industrial use

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

FMU3-015 – North Otago hydro-electricity generation

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.

Policies

FMU3-P1 – North Otago target attribute states

To achieve the *environmental outcomes* set out in FMU3-01 to FMU3-015:

- (1) any interim target *attribute* states are achieved by the dates specified in Table 79 to Table 85; and
- (2) all target *attribute* states set out in Table 79 to Table 85 are achieved by the date specified in the relevant *long term vision*.

Advice note:

In the following tables, *baseline states* are based on state of *environment* monitoring in the period 1 September 2012 to 30 August 2017. Where a target *attribute* state is followed by an asterisk *, the target *attribute* state is the site class target for that *attribute*. A site class target is the target *attribute* state that applies to a wider area using *river* network monitoring rather than a site-specific target. This is because no *baseline state* has been identified for this specific monitoring site for this *attribute*. Where a target *attribute* state is followed by two asterisks **, the target *attribute* state is set at the band for this site based on monitoring data from 2017-2022. This occurs when the site class target would be below what the 2017-2022 data indicates for this site.

Table 79 – Ammonia target attribute states (rivers) for North Otago FMU

Site	Ammonia (mg NH ₄ -N/L)					
	Baseline (median)	2034 Interim target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2050 Target (95 th)
Awamoko at SH83	A	maintain	A	B	improving trend	A
Kākaunui at Clifton Falls Bridge	A	maintain	A	A	maintain	A
Kauru at Ewings	A	maintain	A	A	maintain	A
Waiareka Creek at Taipo Road	A	maintain	A	B	improving trend	A
Kākaunui at McCones	A	maintain	A	A	maintain	A
Shag/Waihemo at Craig Road	A	maintain	A	A	maintain	A
Shag/Waihemo at Goodwood Pump	A	maintain	A	A	maintain	A
Trotters Creek at Mathesons	A	improving trend	A	A	improving trend	A
Waianakarua at Browns	A	maintain	A	A	maintain	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A
Low-elevation			A			A

Table 80 – Nitrate target attribute states (rivers) for North Otago FMU

Site	Nitrate (mg NO ₃ – N/L)					
	Baseline (median)	2034 Interim target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2050 Target (95 th)
Awamoko at SH83	A	improving trend	A	B	improving trend	A
Kākaunui at Clifton Falls Bridge	A	improving trend	A	A	improving trend	A
Kauru at Ewings	A	maintain	A	A	maintain	A
Waiareka Creek at Taipo Road	A	improving trend	A	B	improving trend	A
Kākaunui at McCones	A	improving trend	A	A	improving trend	A
Shag/Waihemo at Craig Road	A	improving trend	A	A	improving trend	A
Shag/Waihemo at Goodwood Pump	A	improving trend	A	A	improving trend	A
Trotters Creek at Mathesons	A	improving trend	A	B	improving trend	A
Waianakarua at Browns	A	improving trend	A	A	improving trend	A
Target Attribute States for River Management Classes						
Mountain			A			A
Hill			A			A
Low-elevation			A			A

Table 81 – Suspended fine sediment target attribute states (rivers) for North Otago FMU

Site	Suspended fine sediment (visual clarity)		
	Baseline (median)	2034 interim target (median)	2050 Target (median)
Awamoko at SH83		n/a	A*
Ōamaru Creek at SH1		n/a	A*
Kākaunui at Clifton Falls Bridge	A	maintain	A
Kauru at Ewings		n/a	A*
Waiareka Creek at Taipo Road	A	improving trend	A
Kākaunui at McCones		n/a	A*
Shag/Waihemo at Craig Road		n/a	A*
Shag/Waihemo at Goodwood Pump	A	improving trend	A
Trotters Creek at Mathesons		n/a	A*
Waianakarua at Browns	A	improving trend	A
Target Attribute States for River Management Classes			
Mountain			A
Hill			A
Low-elevation			A

*Target set using the *river* management class, see advice note above for explanation

Table 82 – E. coli target attribute states (rivers) for North Otago FMU

Site	E.coli (E.coli/100ml)											
	Baseline (median)	2034 Interim target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2050 Target (95 th)	Baseline (g260)	2034 Interim target (g260)	2050 Target (g260)	Baseline (g540)	2034 Interim target (g540)	2050 Target (g540)
Awamoko at SH83		n/a	C*		n/a	C*		n/a	C*		n/a	C*
Ōamaru Creek at SH1		n/a	C*		n/a	C*		n/a	C*		n/a	C*
Kākaunui at Clifton Falls Bridge	D		C	C	improving trend	B	D	improving trend	B	E	improving trend	B
Kauru at Ewings		n/a	A**		n/a	B*		n/a	B*		n/a	B*
Waiareka Creek at Taipo Road	D	improving trend	C	D	improving trend	C	D	improving trend	C	D	improving trend	C
Kākaunui at McCones		n/a	A**		n/a	B*		n/a	B*		n/a	B*
Shag/Waihemo at Craig Road	A	maintain	A	B		B	A	maintain	A	B		B
Shag/Waihemo at Goodwood Pump	A	improving trend	A	C		C	B		B	C		C
Trotters Creek at Mathesons		n/a	C*		n/a	C*		n/a	C*		n/a	C*
Waianakarua at Browns	A	improving trend	A	D	Improving trend	B	B		B	C	Improving trend	B
Target Attribute States for River Management Classes												
Mountain			B			B			B			B

	E.coli (E.coli/100ml)											
Site	Baseline (median)	2034 Interim target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2050 Target (95 th)	Baseline (g260)	2034 Interim target (g260)	2050 Target (g260)	Baseline (g540)	2034 Interim target (g540)	2050 Target (g540)
Hill			B			B			B			B
Low-elevation			C			C			C			C

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 83 – Dissolved reactive phosphorus target attribute states (rivers) for North Otago FMU

	Dissolved Reactive Phosphorus (mg/L)					
Site	Baseline (median)	2034 Interim target (median)	2050 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2050 Target (95 th)
Awamoko at SH83	D	Improving trend	C	D	Improving trend	C
Kākaunui at Clifton Falls Bridge	A	maintain	A	A	maintain	A
Kauru at Ewings	A	maintain	A	A	maintain	A
Waiareka Creek at Taipo Road	D	Improving trend	A	D	Improving trend	C
Kākaunui at McCones	A	maintain	A	A	maintain	A
Shag/Waihemo at Craig Road	A	maintain	A	A	maintain	A
Shag/Waihemo at Goodwood Pump	B	maintain	B	A	maintain	A
Trotters Creek at Mathesons	A	maintain	A	A	maintain	A
Waianakarua at Browns	A	maintain	A	A	maintain	A
Target Attribute States for River Management Classes						

Mountain			B			B
Hill			C			C
Low-elevation			C			C

Table 84 – Periphyton (Biomass), Periphyton (TNTP) target attribute states for North Otago

Site	Periphyton Biomass			Periphyton (Total Nitrogen Total Phosphorus)					
	Baseline	2034 Interim Target	2050 Target	Total Nitrogen baseline	2034 Interim Target	2050 Total nitrogen target	Total Phosphorus baseline	2034 Interim Target	2050 Total phosphorus target
Awamoko at SH83		n/a	C*	D	improving trend	C	D	improving trend	C
Ōamaru Creek at SH1	D	improving trend	C		n/a	C*		n/a	C*
Kākaunui at Clifton Falls Bridge		n/a	B**	B	improving trend	B	C	maintain	C
Kauru at Ewings		n/a	C*	B	improving trend	B	C	improving trend	C
Waiareka Creek at Taipo Road		n/a	C*	D	improving trend	C	D	improving trend	C
Kākaunui at McCones	D	improving trend	C	C	improving trend	C	C	improving trend	C
Shag/Waihemo at Craig Road		n/a	C*	C	improving trend	C	C	improving trend	C
Shag/Waihemo at Goodwood Pump	D	improving trend	C	C	improving trend	C	C	improving trend	C
Trotters Creek at Mathesons		n/a	C*	D	improving trend	C	C	improving trend	C
Waianakarua at Browns	D	improving trend	C	C	improving trend	C	C	maintain	C
Target Attribute States for River Management Classes									
Mountain			B			B			B
Hill			C			C			C

Low-elevation			C			C			C
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*Target set using the *river* management class, see advice note above for explanation

Table 85 – Macroinvertebrates, Fish IBI target attribute states (rivers) for North Otago FMU

Site	Macroinvertebrates						Fish IBI	
	Baseline (MCI)	2034 Interim Target (MCI)	2050 Target (MCI)	Baseline (ASPM)	2034 Interim Target (ASPM)	2050 Target (ASPM)	Baseline	2050 Target
Awamoko at SH83		n/a	C*		n/a	C*		
Kākaunui at Clifton Falls Bridge	C		C	C		C	B	B
Kauru at Ewings	C		C	B	n/a	B		
Waiareka Creek at Taipo Road	D	improving trend	C	D	improving trend	C		
Kākaunui at McCones	D	improving trend	C	C		C	A	A
Waihemo/Shag at Craig Road	C	n/a	C	C		C	B	B
Waihemo/Shag at Goodwood Pump	D	improving trend	C	B	improving trend	B		
Trotters Creek at Mathesons	D	improving trend	C	D	improving trend	C		
Waianakarua at Browns	C	improving trend	C	B	maintain	B	A	A
Target Attribute States for River Management Classes								
Mountain			C			C		
Hill			C			C		
Low-elevation			C			C		

*Target set using the *river* management class, see advice note above for explanation

FMU3-P2 – Waitaki River whole of catchment approach

Recognise the importance of connectedness between all parts of the catchment from the mountains to the sea and between all parts of *freshwater* systems of the Waitaki River and associated *beds*, banks, margins, tributaries, islands, *lakes*, *wetlands* and *aquifers*.

FMU3-P3 – Waitaki River allocation to activities

When considering resource consent applications to take, divert or use *water* within the *Waitaki catchment*, ensure that the allocation to an activity does not result in an exceedance of the annual allocations to activities in Table 86.

Table 86 – Annual allocations to activities within the Waitaki Catchment.

	Downstream of Waitaki Dam and Black Point*
Town and Community water supply	19
Industrial and commercial activities (outside municipal or town supply areas)	8.5
Tourism and recreational facilities	4.3
Agricultural and horticultural activities	1100
Mahinga kai	315**
Any other activities	144
Hydro-electricity generation***	All other flows except the flows that must remain in the rivers, pursuant to the environmental flows in: <ul style="list-style-type: none">• SCHED3 – Rivers: A Block environmental flows, levels and take limits; and• SCHED4 – Rivers: B Block environmental flows, levels and take limits

*Units refer to millions of cubic metres per year.

** Combined annual allocation for all activities downstream of Waitaki Dam.

****Water* taken or diverted and returned to the same *water body* in the vicinity of the take or *diversion* point, in the same condition and quality as taken, for fisheries and wildlife or micro hydro-electricity generation, does not need to be accounted for in the annual allocation to activities in Table 86.

FMU3-P4 – Use of water outside of the Waitaki catchment

When considering whether to grant or refuse resource consent applications to take, divert or use *water* outside of the *Waitaki catchment*, the consent authority will have regard to the extent to which granting consent will reduce the availability of *water* to current and reasonably foreseeable in-catchment needs.

FMU3-P5 – Welcome Creek

Set an environmental flow and level regime and ensure that any take, use, *damming* or *diversion* of *water* in Welcome Creek recognises and provides for the relationship of Kāi Tahu and their culture and

traditions with Welcome Creek, and enables appropriate access to *water* for activities identified in Policy FMU-P3 to the extent consistent with the objectives in this Plan.

Method

FMU3-M1 – Monitoring Site Review

ORC may from time to time undertake a review of the target *attribute* state monitoring sites provided in the *FMU* chapters to determine which sites are required for effective and efficient monitoring of the *environmental outcomes* of the plan.

FMU4 – Dunedin & Coast freshwater management unit

Overview

The Dunedin & Coast *FMU* spans over 1,000 square kilometres. It runs from Waikōuaiti in the north to the Clutha/Mata-au mouth in the south, and is split into two halves by the mouth of the Taiari catchment/*FMU*, encompassing Dunedin city, the Otago Peninsula and the coastal catchments to the mouth of the Clutha/Mata-Au. The boundaries of the *FMU* are those shown on MAP1 of the PORPS 2021. The largest catchment is the Waikōuaiti, with other main catchments being the Waitati River, Leith Stream and Kaikarae Stream catchments within Dunedin city and the Tokomairaro) River in the south near Milton. There are a number of estuaries within the *FMU* which range from natural to modified ecosystems depending on the surrounding *land* use.

The main *land* use in the Dunedin & Coast *FMU* is commercial forestry, followed by mixed dry stock farming including sheep, beef and deer over a significant portion of the *FMU*. Dairy farming and urban use are also prominent *land* uses. While this *FMU* has the most significant urban centre in Otago, it comprises only 4% of the *land* area.

Table 87 – Sites for Dunedin & Coast *FMU*

Site	Map/information location
Monitoring sites	Waikōuaiti at Confluence d/s Kaikarae Stream at Brighton Road Leith at Dundas Street Bridge Lindsays Creek at North Road Bridge Tokomairaro at Blackbridge Tokomairaro at West Branch Bridge Akatore Creek at Akatore Creek Road
Primary contact sites	Waikōuaiti N Branch at Bucklands
Locations of <i>habitats</i> of <i>threatened species</i>	See APP6 – Threatened freshwater-dependent species and MAP[TS] – Threatened species habitat
<i>Outstanding water bodies</i>	See SCHED1 – Outstanding water bodies

Objectives

FMU4-01 – Dunedin & Coast ecosystem health

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

FMU4-02 – Dunedin & Coast human contact

Water bodies are clean and safe for *human contact activities* and support the health of people and their connections with *water bodies*.

FMU4-03 – Dunedin & Coast threatened species (habitat)

The *habitats* of *threatened species* are protected and restored, to the extent practicable, to support the *recovery* of *threatened species*.

FMU4-O4 – Dunedin & Coast threatened species (recovery)

Threatened species are recovering throughout their range to be resilient, viable, and functioning.

FMU4-O5 – Dunedin & Coast mahika kai (condition)

Populations of *mahika kai species* values by Kai Tahu are self-sustaining and plentiful enough to support cultural take.

FMU4-O6 – Dunedin & Coast mahika kai (access, harvest, and use)

Mana whenua can safely access, harvest and use *mahika kai* resources now and in the future.

FMU4-O7 – Dunedin & Coast natural form and character

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*.

FMU4-O8 – Dunedin & Coast drinking water supply (source water)

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

FMU4-O9 – Dunedin & Coast animal drinking water

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

FMU4-O10 – Dunedin & Coast wāhi tūpuna

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.

FMU4-O11 – Dunedin & Coast taoka species

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

FMU4-O12 – Dunedin & Coast fishing

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.

FMU4-O13 – Dunedin & Coast cultivation, and production of food, beverages and fibre

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.

FMU4-O14 – Dunedin & Coast commercial and industrial use

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

FMU4-O15 – Dunedin & Coast hydro-electricity generation

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.

Policies

FMU4-P1 – Dunedin & Coast target attribute states

To achieve the *environmental outcomes* set out in FMU4-O1 to FMU4-O15:

- (1) any interim target *attribute* states are achieved by the dates specified in Table 88 to Table 96; and
- (2) all target *attribute* states set out in Table 88 to Table 96 are achieved by the date specified in the relevant *long term vision*.

Advice note:

In the following tables, *baseline states* are based on state of *environment* monitoring in the period 1 September 2012 to 30 August 2017. Where a target *attribute* state is followed by an asterisk *, the target *attribute* state is the site class target for that *attribute*. A site class target is the target *attribute* state that applies to a wider area using *river* network rather than a site-specific target. This is because no *baseline state* has been identified for this specific monitoring site for this *attribute*. Where a target *attribute* state is followed by two asterisks **, the target *attribute* state is set at the band for this site based on monitoring data from 2017-2022. This occurs when the site class target would be below what the 2017-2022 data indicates for this site.

Table 88 – Ammonia target attribute states (rivers) for Dunedin & Coast FMU

Site	Ammonia (mg NH ₄ -N/L)					
	Baseline (median)	2034 Interim target (median)	2040 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2040 Target (95 th)
Waikōuaiti at Confluence d/s		n/a	A*		n/a	A*
Lindsays Creek at North Road Bridge	A	maintain	A	A	maintain	A
Leith at Dundas Street Bridge	A	maintain	A	B	Improving trend	A
Kaikarāe Stream at Brighton Road	A	improving trend	A	B	improving trend	A
Tokomairaro at West Branch Bridge	A	maintain	A	A	maintain	A
Tokomairaro at Blackbridge	A	improving trend	A	A	improving trend	A
Akatore Creek at Akatore Creek Road		n/a	A*		n/a	A*
Target Attribute States for River Management Classes						
Mountain			A			A

Hill			A			A
Low-elevation			A			A

*Target set using the *river* management class, see advice note above for explanation

Table 89 – Nitrate target attribute states (rivers) for Dunedin & Coast FMU

Site	Nitrate (mg NO ₃ – N/L)					
	Baseline (median)	2034 Interim target (median)	2040 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2040 Target (95 th)
Waikōuaiti at Confluence d/s		n/a	A*		n/a	A*
Lindsays Creek at North Road Bridge	A	maintain	A	A	maintain	A
Leith at Dundas Street Bridge	A	improving trend	A	A	improving trend	A
Kaikarae Stream at Brighton Road	A	improving trend	A	A	improving trend	A
Tokomairaro at West Branch Bridge	A	improving trend	A	A	improving trend	A
Tokomairaro at Blackbridge	A	maintain	A	B	improving trend	A
Akatore Creek at Akatore Creek Road		n/a	A*		n/a	A*

*Target set using the *river* management class, see advice note above for explanation

Table 90 – Suspended fine sediment target attribute states (rivers) from Dunedin & Coast FMU

Site	Suspended fine sediment (visual clarity)		
	Baseline (median)	2034 Interim target (median)	2040 Target (median)
Waikōuaiti at Confluence d/s	A	n/a	A
Lindsays Creek at North Road Bridge	C	improving trend	B
Leith at Dundas Street Bridge	A	maintain	A
Kaikarae Stream at Brighton Road	A	improving trend	A
Tokomairaro at West Branch Bridge	B	maintain	B
Tokomairaro at Blackbridge		n/a	B*
Akatore Creek at Akatore Creek Road		n/a	A**
Target Attribute States for River Management Classes			
Mountain			

Hill			C
Low-elevation			B

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 91 – E. coli target attribute states (rivers) for Dunedin & Coast FMU

Site	E.coli (E.coli/100ml)											
	Baseline (median)	2034 Interim target (median)	2040 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2040 Target (95 th)	Baseline (g260)	2034 interim target g260)	2040 Target (g260)	Baseline (g540)	2034 Interim target (g540)	2040 Target (g540)
Waikōuaiti at Confluence d/s	A	n/a	A	D	Improving trend	C	A	n/a	A	C		C
Lindsays Creek at North Road Bridge		n/a	C*		n/a	C*		n/a	C*		n/a	C*
Leith at Dundas Street Bridge		n/a	C*		n/a	C*		n/a	C*		n/a	C*
Kaikarae Stream at Brighton Road		n/a	C*		n/a	C*		n/a	C*		n/a	C*
Tokomairaro at West Branch Bridge	D	improving trend	C	D	improving trend	C	D	improving trend	C	E	improving trend	C
Tokomairaro at Blackbridge		n/a	C*		n/a	C*		n/a	C*		n/a	C*
Akatore Creek at Akatore Creek Road		n/a	A**		n/a	C*		n/a	A**		n/a	C*
Target Attribute States for River Management Classes												
Mountain												
Hill			B			B			B			B
Low-elevation			C			C			C			C

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 92 – Dissolved reactive phosphorus target attribute states (rivers) for Dunedin & Coast FMU

Site	Dissolved Reactive Phosphorus (mg/L)					
	Baseline (median)	2034 Interim target (median)	2040 Target (median)	Baseline (95 th)	2034 Interim target (95 th)	2040 Target (95 th)
Waikōuaiti at Confluence d/s	A	n/a	A	A	n/a	A
Lindsays Creek at North Road Bridge	C	maintain	C	B	maintain	B
Leith at Dundas Street Bridge	D	maintain	D	C	maintain	C
Kaikarāe Stream at Brighton Road	B	improving trend	B	B	improving trend	B
Tokomairaro at West Branch Bridge	C	improving trend	C	A	improving trend	A
Tokomairaro at Blackbridge	D	Improving trend	C	C	maintain	C
Akatore Creek at Akatore Creek Road		n/a	A**		n/a	A**
Target Attribute States for River Management Classes						
Mountain						
Hill			C			C
Low-elevation			C			C

**Target has been set using current state, see advice note above for explanation

Table 93 – Periphyton (Biomass), Periphyton (TNTP) target attribute states (rivers) for Dunedin & Coast FMU

Site	Periphyton Biomass			Periphyton (Total Nitrogen Total Phosphorus)					
	Baseline	2034 Interim target	2040 Target	Total Nitrogen baseline	Total Nitrogen 2034 Interim target	2040 Total Nitrogen target	Total Phosphorus baseline	Total phosphorus 2034 Interim target	2040 Total phosphorus target
Waikōuaiti at Confluence d/s				C	n/a	C	C	improving trend	C
Lindsays Creek at North Road Bridge				D	improving trend	C	D	improving trend	C
Leith at Dundas Street Bridge				C	improving trend	C	C	improving trend	C
Kaikarāe Stream at Brighton Road	D	n/a	C	C	improving trend	C	C	improving trend	C
Tokomairaro at West Branch Bridge	C	n/a	C	D	improving trend	C	C	improving trend	C
Tokomairaro at Blackbridge				D	improving trend	C	D	improving trend	C
Akatore Creek at Akatore Creek Road	C	n/a	C		n/a	C*		n/a	C*
Target Attribute States for River Management Classes									
Mountain									
Hill			C			C			C
Low-elevation			C			C			C

*Target set using the *river* management class, see advice note above for explanation

Table 94 – Macroinvertebrates target attribute states (rivers) for Dunedin & Coast FMU

	Macroinvertebrates [MCI score, Average Score per Metric (ASPM)]					
Site	Baseline (MCI)	2034 interim target (MCI)	2040 Target (MCI)	Baseline (ASPM)	2034 interim target (ASPM)	2040 Target (ASPM)
Waikōuaiti at Confluence d/s	D	improving trend	C		n/a	C*
Lindsays Creek at North Road Bridge	D	improving trend	C	D	improving trend	C
Leith at Dundas Street Bridge	D	improving trend	C	D	n/a	C
Kaikarae Stream at Brighton Road	D	improving trend	C	D	improving trend	C
Tokomairaro at West Branch Bridge	C		C	B	n/a	B
Tokomairaro at Blackbridge		n/a	C*		n/a	C*
Akatore Creek at Akatore Creek Road		n/a	B**		n/a	C*
Target Attribute States for River Management Classes						
Mountain						
Hill			C			C
Low-elevation			C			C

*Target set using the *river* management class, see advice note above for explanation

**Target has been set using current state, see advice note above for explanation

Table 95 – Fish IBI target attribute states (rivers) for Dunedin & Coast FMU

Site	Fish IBI		
	Baseline	2034 interim baseline	2040 Target
Waikōuaiti at Confluence d/s			
Lindsays Creek at North Road Bridge	D	n/a	D
Leith at Dundas Street Bridge			
Kaikarāe Stream at Brighton Road	B	n/a	B
Tokomairaro at West Branch Bridge			
Tokomairaro at Blackbridge			
Akatore Creek at Akatore Creek Road			
Target Attribute States for River Management Classes			
Mountain			
Hill			
Low-elevation			

Table 96 – E.coli Primary Contact Sites for Dunedin & Coast FMU

	E. coli primary contact sites (E.coli/100ml)		
	Baseline 95th percentile	Interim TAS	2040 Target 95th percentile
Waikōuaiti N Branch at Bucklands	D	C	A

Rules

FMU4-R1 – Cultivation in Dunedin & Coast FMU

FMU4-R1-PER1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* does not take place within:
 - (a) the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain* or within a *natural inland wetland* or a *natural wetland*; and
 - (b) 5 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain, or the edge of any natural inland wetland, on land* with a *slope* of less than 10 degrees; or

- (c) 10 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse*, or open drain, or the edge of a *natural inland wetland*, on *land* with a *slope* between 10 and 20 degrees; and
- (2) *cultivation* does not occur on *land* with a *slope* greater than 20 degrees; and
- (3) *critical source areas* are identified ahead of *cultivation* activities and:
 - (a) are not cultivated with forage crops for *intensive winter grazing*; and
 - (b) sediment detention is established prior to *cultivation*; and
- (4) conditions (1) and (3) do not apply if:
 - (a) the *cultivation* is undertaken by direct drilling of seeds or *fertilisers* or no tillage practices, or is tree planting; or
 - (b) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated and the following conditions are met:
 - (i) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (ii) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) and (3); and
 - (iii) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

FMU4-R1-PER2

The use of *land* with a *slope* greater than 20 degrees for *cultivation* for the purpose of renewing or establishing pasture and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* is undertaken using no-tillage or direct seed drilling *cultivation* practices; and
- (2) *cultivation* does not take place within 10 metres from the outer edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse*, or open drain, or the edge of a *natural inland wetland*; and
- (3) *cultivation* does not take place more than once in any 5-year period; and
- (4) *cultivation* is for the purpose of renewing or establishing pasture and is not undertaken to establish a crop used for *intensive winter grazing*, even as part of a pasture renewal cycle; and
- (5) *critical source areas* are identified ahead of *cultivation* activities and sediment detention is established prior to *cultivation*; and
- (6) conditions (1) to (5) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and

- (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) to (5); and
- (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

FMU4-R1-DIS1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* that does not meet the conditions of Rules FMU4-R1-PER1 and FMU4-R1-PER2 is a discretionary activity.

Method

FMU4-M1 – Monitoring site review

ORC may from time to time undertake a review of the target *attribute* state monitoring sites provided in the *FMU* chapters to determine which sites are required for effective and efficient monitoring of the *environmental outcomes* of the plan.

FMU5 – Catlins freshwater management unit

Overview

The Catlins *FMU* is located along the southern coast of Otago. The boundaries of the *FMU* are those shown on MAP1 of the PORPS 2021. This *FMU* contains Otago’s portion of the Catlins Conservation Park. The coast is dominated by sandy bays and cliffs and from there, the *land* rises steadily from the south-east to north-west, reaching its maximum altitude (720 m) at Mt Pye, in the headwaters of the Tahakopa and Catlins/Pounaweia Rivers, and then it falls again, through rolling country, towards the Mataura River (in Southland) and the Clinton lowlands. The *FMU* contains many unmodified river, coastal and estuarine ecosystems, including an extensive spread of *indigenous* land cover. The landscape is made up of low ridges running in a north-west/southeast direction which supports the *indigenous* forest and high-producing grasslands. The largest urban centres in the *FMU* are Kaka Point and Ōwaka.

Part of the upper reaches of the Mokoreta River, which are subject to the Water Conservation (Mataura River) Order 1997 are located within the Catlins *FMU*.

Table 97 – Sites for Catlins *FMU*

Site	Map/information location
Monitoring sites	Catlins at Houipapa Ōwaka at Katea Road Tahakopa at Tahakopa
Primary contact sites	n/a
Locations of <i>habitats of threatened species</i>	See APP6 – Threatened freshwater-dependent species and MAP[TS] – Threatened species habitat
Outstanding water bodies	See SCHED1 – Outstanding water bodies

Objectives

FMU5-O1 – Catlins ecosystem health

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

FMU5-O2 – Catlins human contact

Water bodies are clean and safe for *human contact activities* and support the health of people and their connections with *water bodies*.

FMU5-O3 – Catlins threatened species (habitat)

The *habitats of threatened species* are protected and restored, to the extent practicable, to support the *recovery of threatened species*.

FMU5-O4 – Catlins threatened species (recovery)

Threatened species are *recovering* throughout their range to be resilient, viable, and functioning.

FMU5-O5 – Catlins mahika kai (condition)

Populations of *mahika kai species* values by Kai Tahu are self-sustaining and plentiful enough to support cultural take.

FMU5-O6 – Catlins mahika kai (access, harvest, and use)

Mana whenua can safely access, harvest and use *mahika kai* resources now and in the future.

FMU5-O7 – Catlins natural form and character

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*.

FMU5-O8 – Catlins drinking water supply (source water)

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

FMU5-O9 – Catlins animal drinking water

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

FMU5-O10 – Catlins wāhi tūpuna

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.

FMU5-O11 – Catlins taoka species

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

FMU5-O12 – Catlins fishing

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.

FMU5-O13 – Catlins cultivation, and production of food, beverages and fibre

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.

FMU5-O14 – Catlins commercial and industrial use

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

FMU5-O15 – Catlins hydro-electricity generation

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.

Policies

FMU5-P1 – Catlins target attribute states

To achieve the *environmental outcomes* set out in FMU5-O1 to FMU5-O15:

- (1) any interim target *attribute* states are achieved by the dates specified in Table 98 to Table 105; and
- (2) all target attribute states set out in Table 98 to Table 105 are achieved by the date specified in the relevant *long term vision*.

Advice note:

In the following tables, *baseline states* are based on state of *environment* monitoring in the period 1 September 2012 to 30 August 2017. Where a target *attribute* state is followed by an asterisk *, the target *attribute* state is the site class target for that *attribute*. A site class target is the target *attribute* state that applies to a wider area using *river* network modelling rather than a site-specific target. This is because no *baseline state* has been identified for this specific monitoring site for this *attribute*. Where a target *attribute* state is followed by two asterisks **, the target *attribute* state is set at the band for this site based on monitoring data from 2017-2022. This occurs when the site class target would be below what the 2017-2022 data indicates for this site.

Table 98 – Ammonia target attribute states (rivers) for Catlins FMU

Site	Ammonia (mg NH ₄ -N/L)			
	Baseline (median)	2035 Target (median)	Baseline (95 th)	2035 Target (95 th)
Catlins at Houipapa	A	A	A	A
Owaka at Katea Road	A	A	A	A
Tahakopa at Tahakopa		A*		A*
Target Attribute States for River Management Classes				
Mountain		A		A
Hill		A		A
Low-elevation		A		A

*Target set using the *river* management class, see advice note above for explanation

Table 99 – Nitrate target attribute states (rivers) for Catlins FMU

Site	Nitrate (mg NO ₃ – N/L)			
	Baseline (median)	2035 Target (median)	Baseline (95 th)	2035 Target (95 th)
Catlins at Houipapa	A	A	A	A
Owaka at Katea Road	B	A	B	A
Tahakopa at Tahakopa		A*		A*
Target Attribute States for River Management Classes				
Mountain		A		A
Hill		A		A
Low-elevation		A		A

*Target set using the *river* management class, see advice note above for explanation

Table 100 – Suspended fine sediment target attribute states (rivers) for Catlins FMU

Site	Suspended fine sediment (visual clarity)	
	Baseline (median)	2035 Target (median)
Catlins at Houipapa		B**
Owaka at Katea Road		A**
Tahakopa at Tahakopa		B**
Target Attribute States for River Management Classes		
Mountain		A
Hill		A
Low-elevation		A

**Target has been set using current state, see advice note above for explanation

Table 101 – E. coli target attribute states (rivers) for Catlins FMU

Site	E.coli (E.coli/100ml)							
	Baseline (median)	2035 Target (median)	Baseline (95 th)	2035 Target (95 th)	Baseline (g260)	2035 Target (g260)	Baseline (g540)	2035 Target (g540)
Catlins at Houipapa	D	B	D	B	B	C	C	B
Owaka at Katea Road		C*		C*		C*		C*
Tahakopa at Tahakopa		C*		C*		C*		C*
Target Attribute States for River Management Classes								
Mountain		B		B		B		B
Hill		B		B		B		B
Low-elevation		C		C		C		C

*Target set using the *river* management class, see advice note above for explanation

Table 102 – Dissolved reactive phosphorus target attribute states (rivers) for Catlins FMU

Site	Dissolved Reactive Phosphorus (mg/L)			
	Baseline (median)	2035 Target (median)	Baseline (95 th)	2035 Target (95 th)
Catlins at Houipapa	C	C	A	A
Owaka at Katea Road	C	C	B	B
Tahakopa at Tahakopa		B**		A**
Target Attribute States for River Management Classes				
Mountain		B		B
Hill		C		C
Low-elevation		C		C

**Target has been set using current state, see advice note above for explanation

Table 103 – Periphyton (Biomass), Periphyton (TNTP) target attribute states (rivers) for Catlins FMU

Site	Periphyton Biomass		Periphyton (Total Nitrogen Total Phosphorus)			
	Baseline	2035 Target	Total Nitrogen baseline	2035 Total nitrogen target	Total Phosphorus baseline	2035 Total phosphorus target
Catlins at Houipapa		C*	C	C	C	C
Ōwaka at Katea Road	C	C	C	C	C	C
Tahakopa at Tahakopa	B	B		C*		C*
Target Attribute States for River Management Classes						
Mountain		B		B		B
Hill		B/C		C		C
Low-elevation		C		C		C

*Target set using the river management class, see advice note above for explanation

Table 104 – Macroinvertebrates target attribute states (rivers) for Catlins FMU

Site	Macroinvertebrates MCI score, Average Score per Metric (ASPM)			
	Baseline (MCI)	2035 Target (MCI)	Baseline (ASPM)	2035 Target (ASPM)
Catlins at Houipapa	C	C	C	C
Ōwaka at Katea Road		B**		C*
Tahakopa at Tahakopa		B**		C*
Target Attribute States for River Management Classes				
Mountain				

Hill		C		C
Low-elevation		C		C

**Target has been set using current state, see advice note above for explanation

Table 105 – Fish IBI target attribute states (rivers) for Catlins FMU

Site	Fish IBI	
	Baseline	2035 Target
Catlins at Houipapa	D	
Owaka at Katea Road	A	A
Tahakopa at Tahakopa		
Target Attribute States for River Management Classes		
Mountain		
Hill		
Low-elevation		

Rules

FMU5-R1 – Cultivation in Catlins FMU

FMU5-R1-PER1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* does not take place within:
 - (a) the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain* or within a *natural inland wetland* or a *natural wetland*; and
 - (b) 5 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain, or the edge of any natural inland wetland, on land* with a *slope* of less than 10 degrees; or
 - (c) 10 metres from the edge of the *bed* of any *lake* or continually or intermittently flowing *river, modified watercourse, or open drain, or the edge of a natural inland wetland, on land* with a *slope* between 10 and 20 degrees; and
- (2) *cultivation* does not occur on *land* with a *slope* greater than 20 degrees; and
- (3) *critical source areas* are identified ahead of *cultivation* activities and:
 - (a) are not cultivated with forage crops for *intensive winter grazing*; and
 - (b) sediment detention is established prior to *cultivation*; and
- (4) conditions (1) and (3) do not apply if:
 - (a) the *cultivation* is undertaken by direct drilling of seeds or *fertilisers* or no tillage practices, or is tree planting; or

- (b) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated and the following conditions are met:
 - (i) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (ii) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) and (3); and
 - (iii) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

FMU5-R1-PER2

The use of *land* with a *slope* greater than 20 degrees for *cultivation* for the purpose of renewing or establishing pasture and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* is a permitted activity if the following conditions are met:

- (1) *cultivation* is undertaken using no-tillage or direct seed drilling *cultivation* practices; and
- (2) *cultivation* does not take place within 10 metres from the outer edge of the *bed* of any *lake* or continually or intermittently flowing *river*, *modified watercourse*, or open *drain*, or the edge of a *natural inland wetland*; and
- (3) *cultivation* does not take place more than once in any 5-year period; and
- (4) *cultivation* is for the purpose of renewing or establishing pasture and is not undertaken to establish a crop used for *intensive winter grazing*, even as part of a pasture renewal cycle; and
- (5) *critical source areas* are identified ahead of *cultivation* activities and sediment detention is established prior to *cultivation*; and
- (6) conditions (1) to (5) do not apply if:
 - (a) the use of *land* is undertaken in accordance with a *Freshwater Farm Plan* that applies to *cultivation* of the area to be cultivated; and
 - (b) the *Freshwater Farm Plan* includes that the farm operator intends to rely on the *Freshwater Farm Plan* to meet the requirements of this rule; and
 - (c) a certifier has certified, in accordance with APP26 – Freshwater farm plans, that the risk of adverse environmental *effects* are no greater than that allowed for by conditions (1) to (5); and
 - (d) where the *Freshwater Farm Plan* has been audited, the most recent report of the auditor’s findings show that the farm achieves compliance with the *Freshwater Farm Plan* as it relates to *cultivation*.

FMU5-R1-DIS1

The use of *land* for *cultivation* and any incidental *discharge* onto or into *land* where a *contaminant* may enter *water* that does not meet the conditions of Rules FMU2-R1-PER1 and FMU2-R1-PER2 is a discretionary activity.

Method

FMU5-M1 – Monitoring site review

ORC may from time to time undertake a review of the target *attribute* state monitoring sites provided in the *FMU* chapters to determine which sites are required for effective and efficient monitoring of the *environmental outcomes* of the plan.

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