# Introduction

This is a submission by Greenpeace Aotearoa, on the Otago Regional Council’s Regional Policy Statement review which is the first step in giving effect to Te Mana o te Wai under the Government’s 2020 Essential Freshwater Management reforms.

Greenpeace is a global, independent campaigning organisation that acts to protect and conserve the environment and to promote peace. Greenpeace is one of the world’s largest and oldest environmental organisations, operating for half a century, since 1971, and now works in more than 55 countries. The New Zealand branch of Greenpeace (Greenpeace Aotearoa) was founded in 1974 and has grown to represent 35,000 financial donors and many tens of thousands of supporters.

Greenpeace has an interest in the Essential Freshwater reforms, Te Mana o te Wai and the RPS review. This is because degraded freshwater, polluted drinking water, biodiversity loss and climate change are all results of accelerated intensive land use practices such as dairy conversions, and affect the ability of current and future generations of people and nature to survive and thrive.

Our vision is a world where people and nature are thriving - where our homes, schools, business and transport are powered by clean energy from the sun, wind and water; where our food is grown in ways that regenerate the land, store carbon in the soil, clean up rivers and bring back wildlife; where both the ocean and native forests are rebounding and teeming with life. Our vision is an Aotearoa where our children, grandchildren and generations to come can grow up safe from the threat of polluted drinking water, where the ecosystem is not degraded from polluted and diminished freshwater, and where climate change no longer brings threats of sea level rise and extreme weather.

Greenpeace welcomes the opportunity to submit on the Otago Regional Council Regional Policy Statement. We wish to be heard on our submission. We have no trade competition interests which may conflict with our ability to submit. This submission represents and includes the views of 1259 supporters who have also submitted directly to ORC via our online submission form.

# Our submission

Addressing New Zealand’s freshwater crisis has never been more urgent. Irrigation extraction has depleted stream and river flows so they can no longer sustain diverse indigenous biota.  What water remains in our rivers and streams is affected by contamination. Greenpeace Aotearoa’s particular interest in this instance relates to the impacts of intensive dairy farming, facilitated by synthetic nitrogen fertiliser. These impacts include nitrogen/nitrate contamination of waterways and the atmosphere, and other impacts on land, air, sea, ecosystems and the climate. Low river flows from water extraction make some of these effects more concentrated.

‘Part 2: Resource Management Overview, Significant Resource Management Issues for the Region’ of the draft RPS states that many rivers and streams in Otago are so degraded that they no longer have life-supporting capacity for flora and fauna distinctive to Aotearoa-New Zealand or Otago in particular.[[1]](#endnote-1) Many streams, rivers and lakes are so polluted that they are a risk to human health. Extraction, diversion, and use have left once fulsome water bodies depleted. Land use conversion to intensive and extensive horticulture - and particularly agriculture - intensive dairy farming - and the application of synthetic nitrogen fertiliser, have left freshwater bodies uninhabitable for freshwater fish, and groundwater toxic and dangerous for people to drink.[[2]](#endnote-2) Because of nitrate contamination due to excess synthetic nitrogen fertiliser applied to land, and too many cows producing excessive nitrates via feces and urine, our water exceeds biological and public health guidelines.[[3]](#endnote-3) Because of the lag time in nitrates making their way through the ground to freshwater, worse effects may yet be seen.

In the hierarchy of values within Te Mana o te Wai, the role of freshwater in providing for communities’ social and economic wellbeing comes third. However, in reality, private economic benefits have trumped communities’ social wellbeing, their health, and the wellbeing of water bodies and freshwater ecosystems. Otago Regional Council, must by law, invert the current prioritisation pyramid and put the integrity and mana of water first. This will require working against current entrenched interests. It will be challenging, but the work must start now. New Zealanders value life supporting freshwater, but it also has ecological, and intrinsic values. The evidence of nitrogen/nitrate contamination means the new regulations under Te Mana o Te Wai, are overdue.

Degraded freshwater is already affecting endemic and native species, habitats and ecosystems. Drinking water polluted by nitrates is already affecting people’s health. Benefits of water extraction and nitrate pollution accrue to a few but the costs are externalised and widespread, and nature and people suffer.

### **Greenpeace Aotearoa submits that ORC should:**

-Put Te Mana o te Wai first, so that all other objectives in the Regional Policy Statement are informed by the priority to care for water and keep it healthy

- Commit to phasing out synthetic nitrogen fertiliser by 2024 and lowering cow stocking rates - as the use of synthetic nitrogen fertiliser, and intensive dairy farming are incompatible with protecting Te Mana o te Wai

- Tackle the climate crisis by lowering cow stocking rates and phasing out synthetic nitrogen fertiliser.

- Consider cumulative effects of pollution such as intensive dairying and too much synthetic nitrogen fertiliser, rather than simply in each individual catchment. What happens upstream affects people, plants and animals downstream.

- Act according to the National Policy Statement, which identifies limits based on environmental impacts. In order to do this, councils must phase out synthetic nitrogen fertiliser.

- Apply the precautionary principle to freshwater management. Intensive dairying and synthetic nitrogen fertiliser have long-term effects on water, climate and human health. With emerging research showing links between nitrate contamination from intensive dairying in drinking water and health effects including, but not limited to bowel cancer, the Council must act now to protect the health of our communities.

- Invest in regenerative organic farming that works with nature, not against it, to help mitigate the climate crisis and prevent water degradation.

### **Specific comments**

1. Our particular interests in the draft RPS relates to climate change, biodiversity loss, freshwater pollution, drinking water contamination and ecological health. Our specific comments on the RPS content are below, with suggested amendments to the text in *italics*
2. We support the objectives of the RPS to achieve healthy, resilient, safeguarded natural systems; recognising the environment as an integrated system; and preserving the environmental integrity form, function, resilience and life supporting capacities of air, water, soil and ecosystems for future generations.
3. We support the recognition that climate change responses are integral to outcomes
4. We support the statement that all decisions shall 1. secure the long-term life supporting capacity and mauri of the natural environment, 2. promote the health needs of people and 3. safeguard the ability of people and communities to provide for social, economic and cultural wellbeing now and into the future. This hierarchy of priorities reflects the mandate of Te Mana o te Wai. However, we cannot and must not trade off life supporting capacity for economic gain as has been our history. The second and third goals can only work in the long term if the first goal is met.
5. We support the recognition of mana whenua cultural values, Kāi Tahu, kaitiakitanga, the active participation of mana whenua in decision making and implementation of solutions, mātauraka Māori, connections to wāhi tūpuna, water and water bodies.
6. We support policy IMP4 - planning framework - to protect intrinsic values through a long term strategic approach (which) recognises and provides for ecosystem complexity and connection and anticipates and responds swiftly to changes, pressures and trends.
7. However, the RPS and subsequent rules will need to include triggers and benchmarks to respond ‘swiftly to changes, pressures and trends’. As the Manuherikia river management process shows, this is easier said than done. IMP4 must be followed by instruments that include triggers for action against current ecological benchmarks, and pathways so that necessary responses are timely and foreshadowed to affected communities whose interests may conflict with the overriding objectives to put the integrity of freshwater and ecosystems first.
8. IMP5 - We support the objective to achieve ‘Coordinated management and integration of natural and physical resources beyond immediate boundaries, and effects of activities’, beyond the freshwater management subunits, and on other values and environments.
9. Consideration of subunits should sit within catchments and within broader ecosystems, including the impacts on and of freshwater management (or mismanagement) also impacting marine (ref SRMR 16, 17 & 18) and terrestrial ecology and broader systems such as the climate.
10. IMP9 - We support the need to ‘recognise, anticipate and provide for climate change impacts’. Because agriculture is New Zealand’s main cause of climate change, creating more greenhouse gas emissions than domestic air or land travel, this RPS must seek to reduce the impacts of dairying on ecosystems and the climate (ref SRMR-12).
11. We recommend the introduction of controls on synthetic nitrogen fertiliser, so that synthetic nitrogen fertiliser is phased out by 2024. A sinking-lid nitrogen cap is climate change action, as well as freshwater, ecology and public health action.
12. IM10 - We support the objective to ‘minimise the effects of climate change processes’, and to prioritise ‘avoiding new activities in areas at risk of climate change....’. As above, phasing out synthetic nitrogen fertiliser and intensive dairy farming will be most effective at minimising coming risks of climate change and water pollution.
13. IMP11 - We support the objective to enhance environmental resilience to the adverse effects of climate change by facilitating activities that reduce human impacts on the environment. Greenpeace Aotearoa would like to see objectives, policies and rules that support regenerative-organic farming, riparian planting, reducing dairy herd stock numbers and a phase out of synthetic nitrogen fertiliser to ensure this objective is achieved.
14. IMP12 - discretionary non-compliance for climate change mitigation. This seems like a benign proposition at face value, but we are wary of ‘wolves in sheep’s clothing’. What might look like climate change mitigation on the one hand, might look like disruption to ecological systems on the other hand. For example, floodbanks, diversion and coastal defences may all impact on natural systems and are designed to protect human values. As recent floods across the country show, managed retreat of activities from (even recently established activities such as grazing braided river margins) in areas at risk from the impacts of weather driven by climate change, are essential. We cannot build our way out of climate change. But we can and must stop its momentum. To do this we must phase out synthetic nitrogen fertiliser, reduce pressure on natural systems (reduce the dairy herd and water extraction), and return river and coastal margins to wild buffers as they once were.
15. IMP13 - We support the consideration of cumulative effects, including the cumulative effects of intensive dairy farming, water extraction, greenhouse gas emissions, biodiversity loss, sedimentation and nitrates/nitrogen to air, water and soil, within and across catchments.
16. IMP14 - Preserve opportunities for future generations. We support this objective, and its intention to identify the limits to growth and adverse environmental effects. We are already beyond global limits regarding nitrogen and biodiversity, and local/regional tipping points (ref SRMR -I11) so this RPS must acknowledge, and seek to limit, reduce and phase out the resource inputs and uses that drive this overstretch (specifically synthetic nitrogen fertiliser and intensive dairy farming).
17. IMP15 - we support the adoption of the precautionary approach. That’s why the RPS needs to go hard, and phase out synthetic nitrogen fertiliser, improve river flows, to reclaim wild river margins from farming and support regenerative agriculture.
18. Methods - We support the establishment of clear thresholds and limits on activities that have the potential to adversely affect healthy ecosystem ‘services’ and submit the inclusion of additional text ‘*and ecosystems themselves*, *and intrinsic values’*.
19. We support the method suggested that encourages practices that enable businesses to function in a net zero economy, to advocate and incentivise activities that reduce, mitigate or eliminate risk of environmental degradation. A cap to eliminate synthetic nitrogen fertiliser by 2024 and the development and funding of regulatory tools and incentives to replace intensive dairying with regenerative-organic farming will be critical methods to achieve this goal.
20. We note commentary in the methods explanation section which includes ‘...resource management decision making and changes are made where necessary to ensure the environment’s life supporting capacity continues to support peoples’ health and wellbeing now and into the future. However, we suggest this be amended to correctly and fully reflect the priorities of Te Mana o te Wai - *to ensure the health and wellbeing of freshwater is protected, and human health needs are provided for, before enabling other uses of water.*
21. We support the anticipated environmental results in IMAER1 - monitoring shows limits and thresholds set for human activities are adhered to and result in environmental wellbeing and resilience.
22. IMAER2 - Environmental wellbeing and resilience results in sustainable community and economic, and social wellbeing - support
23. IMAER3 - Communities are aware of potential climate change impacts and there are observable changes in community behaviour toward more sustainable lifestyles. We support this. Rules and other tools will be essential to encourage and incentivise this anticipated environmental result. At the moment, policy settings and economic instruments incentivise the destruction and extraction of freshwater resources, biodiversity and elements of the planetary commons. These same policy settings encourage short term, self-interested actions as we have seen in the rush to dairy intensification, and it’s important that this RPS and subsequent policy documents affect and direct these settings to drive action that meets the objectives of Te Mana o te Wai.
24. LF-WAI P01 - 04 - support
25. LF-VM-M3 - add *Support community transition and phase out of practices and approaches that degrade freshwater and groundwater systems and contribute to climate change, through a range of tools including rules (to phase out synthetic nitrogen fertiliser by 2024 and intensive grazing), financial instruments and other means to raise environmental standards beyond currently diminished ecological states and to achieve the objectives of the Government’s Essential Freshwater reforms, the NPS-FM and Te Mana o te Wai.*
26. LF-FW08 - Objectives - 1. We suggest this be amended from ‘the health of the wai supports the health of people and thriving mahinga kai’, to ‘the health *and wellbeing* of the wai must be restored within *specified (legislated) timeframes* *for its intrinsic and ecosystem values, and* to support the health of people and thriving mahinga kai…
27. Objective 2. ‘Water flow is continuous throughout the system’, is currently inadequate. Continuous flows per se are essential, but low flows that starve ecosystems of habitat and water do not fulfill the priorities of Te Mana o te Wai (ref SRMR15 - Freshwater demand exceeds capacity in some places). We recommend instead ‘water flow is continuous *and at volumes and levels that support ecosystem health, habitat, and resilience as measured by biological thresholds and ecological and biological community health’.*
28. Add Objective 6. *Restore and enhance degraded freshwater ecosystems through management of adverse activities and inputs*
29. LF-FW 07 - We support the objective ‘that overallocation is phased out and future overallocation is avoided (so that) freshwater is allocated within environmental limits and used efficiently’, and add ‘*so that ecological values are prioritised in keeping with Te Mana o te Wai’*.
30. LF-FW 09 - Wetlands - add ‘*Restore and enhance degraded wetlands through management of adverse activities and inputs such as synthetic nitrogen fertiliser and intensive farming.*
31. LF-FW P9 We have concerns about the policy ‘to avoid reduction in values except for ...scientific research, ‘sustainable’ harvest of sphagnum moss, infrastructure development (inter alia)’. Because there are so few wetlands left, these exceptions are untenable.
32. LF-FW P10 - ‘Restoring degraded wetlands’ - remove ‘where possible’. We support the exclusion of stock - but this does not go far enough. Add or amend to include ‘*prohibit intensive grazing, phase out synthetic nitrogen fertiliser by 2024 and support regenerative-organic agriculture’,* and add *‘revegetation and the creation of planted buffers and margins’.*
33. LF-FW-M6 & M7 inclusive - support
34. LF-FW-AER - support, plus add ‘*wetlands and freshwater systems are restored to protect and enhance their ecology and ecological functions, first, and to protect human health’.* And *‘Improve the extent and quality of Otago’s wetlands’.*
35. LF-LS-P17 - soil values - support. Intensive farming is incompatible with these values.
36. LF-LS-P21 -Land use and Freshwater - support. Intensive farming and the use of synthetic nitrogen fertiliser are incompatible with these values
37. LF-LS-M11 - Regional Plans 1. Add *Phase out synthetic nitrogen fertiliser and intensive dairy farming to reduce impacts on soil, freshwater, ecosystems and the climate.*
38. LF-LS-M12 - District Plans 1. Manage land use by -add ‘*control dairy intensification, including through phasing out synthetic nitrogen fertiliser by 2024, via a sinking cap on synthetic nitrogen fertiliser use over time’,* and *‘develop and apply controls to remove regulatory permissions to intensified farming, including in high country ecosystems’.*
39. LF-LS-E4 - Other methods - add ‘*Other methods include a sinking cap on synthetic nitrogen fertiliser to phase it out by 2024 and phasing out intensive dairy farming’.*
40. LF-LS-E4 Explanation - intensive dairy farming can lead to erosion and degradation of soil causing sedimentation, contamination and pollution of soil from overstocking, pugging and monoculture. We support a framework that drives regenerative-organic farming which restores the life supporting capacity of the soil.
41. LF-LS-AER 12-13 - Life supporting capacity of soils are maintained - we support.
1. <https://www.stats.govt.nz/indicators/river-water-quality-nitrogen> [↑](#endnote-ref-1)
2. <https://www.rnz.co.nz/news/national/436088/drinking-water-nitrate-limit-11-times-higher-than-it-should-be-health-expert>

<https://blogs.otago.ac.nz/pubhealthexpert/nitrate-contamination-in-drinking-water-and-adverse-birth-outcomes-emerging-evidence-is-concerning-for-nz/> [↑](#endnote-ref-2)
3. <https://www.stuff.co.nz/environment/125861168/concern-as-nitrate-levels-rise-in-half-of-wells-tested-in-canterbury>

<https://www.orc.govt.nz/media/3811/groundwater-2007-quality-low-res.pdf> [↑](#endnote-ref-3)