xx May 2024

Minister for the Environment
Private Bag 18041
Parliament Buildings
Wellington 6160

via EMAIL: P.Simmonds@ministers.govt.nz

Dear Minister Simmonds,

Thank you for your letter of 15 March 2024, which provided the Otago Regional Council (ORC) with an extension to the deadline for notifying a proposed Land and Water Regional Plan until 31 December 2027. In that letter, you directed Otago Regional Council, under section 27 of the Resource Management Act 1991, to "provide an outline of the costs, benefits, and implications of notifying your plan before the NPS-FM is replaced." The requested report is appended to this letter and helps to explain Otago's unique context.

Otago is proud of both its outstanding natural environment and the primary production which plays a critical part in Otago's economy. The use of freshwater resources guided by appropriate planning and management tools will provide certainty for these activities and the wide range of others that use and interact with our land and freshwater resources, in a manner which sustains Otago's special environment for future generations.

A decision to introduce a new land and water plan for Otago now ensures that important steps are taken to protect our environment, while providing certainty of operation for all plan users, and importantly, also for primary producers. Acting now ensures that Otago is better prepared to transition to future legislation such as a reworked Resource Management Act or National Policy Statement. Otago's existing water plan neither protects and enhances our environment nor provides a framework within which our primary producers can operate with confidence.

With the work invested in the existing land and water plan programme and the significant input from stakeholder groups from across the spectrum, Otago is well placed to take a first step towards an improved planning framework. We look forward to supporting our primary producers to continue thriving in balance with Otago's special environment.

We understand the coalition Government is committed to increasing economic productivity while still ensuring that New Zealand's freshwater resources are protected for the benefit of all New Zealanders. By ensuring a sustainable and balanced approach that attempts to achieve an enabling framework whilst also improving the environmental outcomes for our waterways, the direction proposed in the LWRP will align with the outcomes sought. The Plan will also work towards achieving community expectations for managing freshwater and land, honour our commitment to our iwi partners, and provide certainty to all users of land and freshwater.

Report to the Minister under section 27 RMA

Outline of Costs, benefits and implications of notifying the proposed Land and Water Regional Plan ahead of the NPSFM being replaced

Otago as a region

[1] The following information is a small snapshot of the information contained in the Otago Region Economic Profile for Land and Water1 which was developed as part of the economic work programme to support the section 32 analysis for the proposed Land and Water Regional Plan (pLWRP or LWRP).

[2] The full report should be cited for completeness and can be found at **otago**-economic-profile-for-water-and-land_v9-2.pdf (orc.govt.nz) It provides the context and background for Otago, as a region, and its economy.

[3] The Otago region has some 3 million hectares of area, of which nearly 700,000 hectares (nearly one quarter) are lakes, rivers, and conservation estate mostly in the inland part of Otago in the Queenstown Lakes and Central Otago Districts. The rest of the region's land use is distributed between primary production use (i.e., agriculture, horticulture, viticulture, and forestry) and urban/settlement centres (i.e., public land use, business properties, and residential properties). Primary production takes up around 70% of Otago's total land use.

[4] A little over 2 million hectares of land (or two thirds of total land area) is used for agricultural production and a sizeable amount is either non-pastoral land or very low stocked pastoral land (Moran, 2022). The agricultural land consists mostly of dry stock and dairy production with some horticulture and viticulture properties. While dry stock land use is spread across the region, dairy production is more concentrated in the Clutha and Waitaki Districts. Horticulture and Viticulture operations in Otago are mainly centred around Central Otago with limited operations found in the Waitaki District and Dunedin City. Plantation forestry land use covers around 120,000 hectares (or 4% of the region) and is mainly concentrated in the coastal part of the region (Waitaki District, Dunedin City, and Clutha District). Urban/settlement land use, i.e., public use (churches, schools, cemeteries, etc.), residential use and commercial/industrial land use, make up to around 2.5% of total land use.

Figure 1 below shows the distribution of land uses across Otago.

[1] Yang, Y. & Cardwell, R. (2023). Otago Region Economic Profile for Land and Water. Otago Regional Council (LWRP Economic Work Programme), Dunedin.

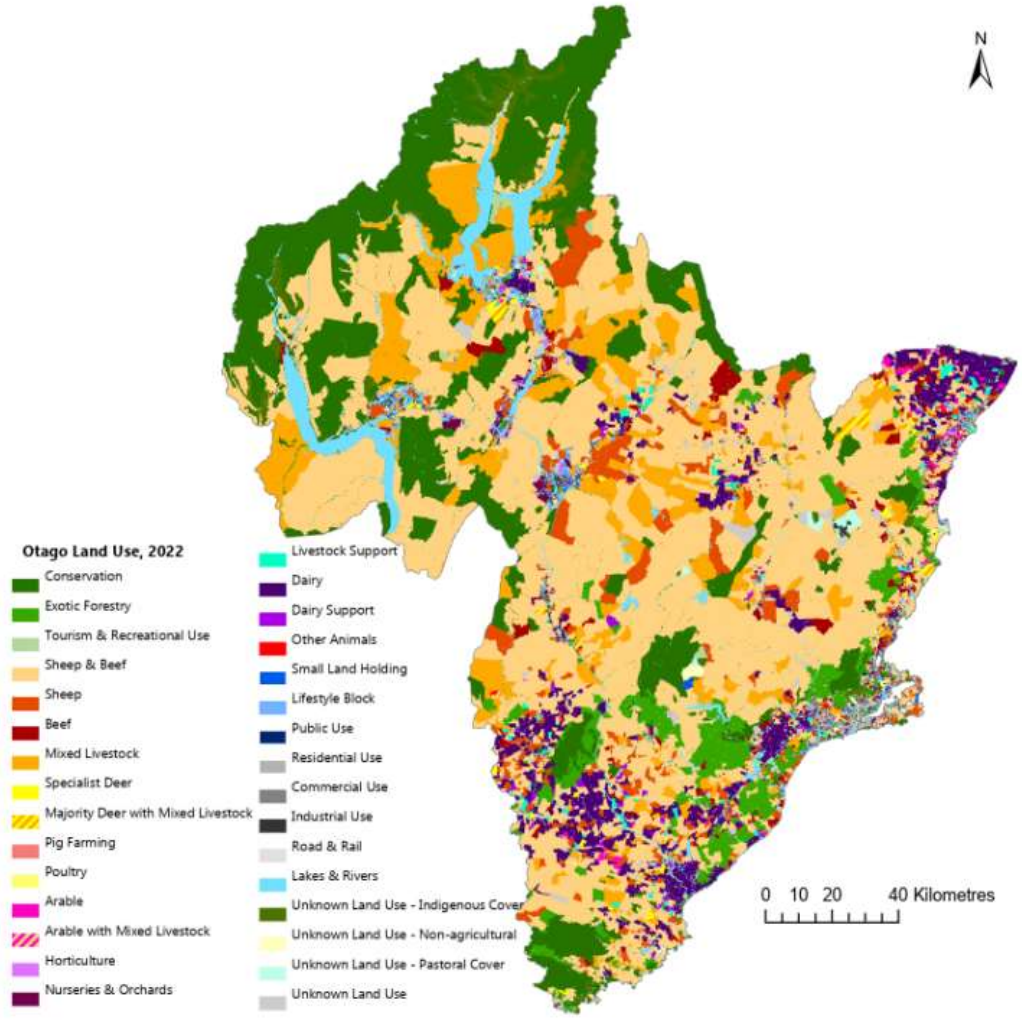

Figure 1. Land use map, Otago, 2022
Source: Data from Couldrey (2022)

[6] Otago has two main river catchments – the Clutha/ Mata-au and the Taieri/Taiari, along with many lakes. In total, Otago's lakes make up to roughly 23% of New Zealand's lake surface area.

[7] While Lakes Whakatipu, Wānaka, and Hāwea are the three renowned lakes (in Queenstown Lakes District), other large lakes include Lakes Waipori and Waihola (in Clutha District), Lake Hayes, constructed lakes Dunstan and Roxburgh and semi-constructed lake Onslow (all in Central Otago District) and many smaller lakes in the region. Lakes Whakatipu, Wānaka, and Hāwea drain into Otago's Clutha River/Mata-Au, New Zealand's largest river by volume and second longest. The major rivers that feed into the Mata-Au include the Cardrona, Lindis, Shotover, Nevis, Fraser, Manuherikia, Teviot, Pomahaka, and Waiwera. As well as providing for direct water use, the Clutha also accommodates two hydroelectric power stations: the Clyde Dam and the Roxburgh Dam. The two power stations provide an estimated combined power supply of 865 MW to the New Zealand power grid. Most years, the Clutha power stations generate about 10% of New Zealand's gross electricity demand (Hunt, 2022).

[8] The Taieri River catchment is the second large catchment in the region. The Taieri River starts from the uplands of Central Otago and runs all the way across the Taieri Plain, where it joins Lake Waipori and Lake Waihola then flows out to the sea at Taieri Mouth. Some other examples of river catchments include the Pomahaka catchment, the Catlins, the Kakanui, Waianakarua, Shag and Waikouaiti Rivers in the northern part of the region, the Tokomairiro River drains between the Taieri and Clutha catchments.

Otago's Economy

[10] As a region, Otago generated approximately $15 billion of regional Gross Domestic Product (GDP) in 2022, which accounted for 4.2% of New Zealand's total GDP that year. In terms of labour force indicators in 2022, Otago had a slightly lower labour participation rate than the New Zealand average (67% compared to 69%), a slightly lower unemployment rate (2.8% compared to 3.3%), a slightly lower Youth NEET rate (NEET is the Not in Education, Employment, or Training) (9% compared with 12%).

[11] Median annual household income ($74,357) is below the national median ($89,127), house values are on average lower, and median disposable income after housing costs is also lower than the national median.

Figure 2 below sets out the relative contributions by industry to Otago's economy.[2]

Industry	Gross output	Value added	Export share	Employment 2020 (MECs)	Employment 2011 (MECs)
Construction	$4,300m	$1,300m	0.5%	14,000	9,500
Agriculture	$2,500m	$1,100m	9.8%	12,000	12,000
Tourism-related industries	$2,200m	$1,000m	19%	19,000	14,000
Agricultural product processing and manufacturing	$2,100m	$420m	38%	5,200	5,200
Electricity generation and on-selling	$1,600m	$440m	0.2%	350	300
Healthcare services	$1,100m	$680m	0.4%	8,800	7,000
Tertiary education	$700m	$500m	4.9%	5,000	5,300
Metal ore and non-metallic mineral mining	$540m	$290m	6.2%	740	570
Other	$13,000m	$7,400m	21%	70,000	59,000
Total	$28,000m	$13,000m	100%	140,000	110,000

Note: Totals may not add due to rounding

[12] In the rural sector, most farms in Otago are pastoral or cropping, with drystock accounting for 60%, dairy 13% and cropping 7%. Horticulture and viticulture combined are 10% and forestry 8%. Farm size varies, with around 48% of farms less than 100 hectares, and another 27% between 100 – 400 hectares.

[2] Yang, Y. & Cardwell, R. (2023). Otago Region Economic Profile for Land and Water. Otago Regional Council (LWRP Economic Work Programme), Dunedin.

Below are short snapshots of each industry, as described in the above cited report, and authored by the relevant industry.

Sheep and Beef Cattle Farming

[13] Otago is considered to be the most diverse region in the country for sheep and beef farming, and it is the predominant land use in Otago, making up 70% of developed land. The industry considers much of this land as having few alternative land uses.

One in five of New Zealand's sheep are in Otago, more than any other region, and 9% of country's beef cattle are in Otago. In Otago and Southland, sheep and beef farming and the meat processing sectors make up 12% of the economic activity and employment.

Over the past 30 years, improvements in productivity have outweighed decreases in livestock numbers and land area, and as a result, production levels are similar, albeit with fewer sheep.

Otago has four types of sheep & beef farms – South Island High Country, South Island Hill Country, South Island Finishing-Breeding Farms, South Island Finishing Farms.

Winter grazing is common practice in sheep and beef farms in Otago and the diversity in the region is reflected in these practices, with wintering in Lower Clutha and Catlins closely aligned to Southland due to similarity in production systems, compared with other parts of the region that are drier and therefore have different wintering systems.

Deer Farming

[14] The deer industry in Otago is considered to be the home of modern deer farming from the 1960s. The industry is based on Red Deer with strains of European and English and the larger North American elk. Deer farming is predominantly in three main areas – the Upper Lakes, South Otago and inland Otago. Overall, there are around 200 deer farms that run approximately 120,000 deer over 53,000 hectares.

Because of their different seasonal requirements to sheep and beef systems, deer are often seen as complementary to these farm systems and many farms will have deer as part of their production system.

Deer products exported have a current value of $300 million and Otago accounts for around 10% of both the deer herd and revenue.

Arable Cropping

[15] Otago's arable cropping sector differs from other regions, in that it has less standalone arable farms, and more integrated livestock enterprises that include arable land. Arable cropping tends to occur in three main areas – North Otago, South Otago and to a lesser extent, Central Otago. The industry broadly describes land where you can operate a tractor as suited to arable cropping.

The main features of arable cropping in Otago are its mix of crop rotations by locality, the integration of livestock with the rotations, connections with winter grazing, and contrasting irrigation verses dryland cropping.

In 2021 New Zealand's arable industry contribution to GDP was $684 million in grains and pulses and $247 million in seeds, but that does not fully account for the flow on contributions. Otago covers approximately 23,000 hectares or around 8% of New Zealand's arable land and growers harvested a total of 53,670 tonnes of wheat, barley, oats and other cereal grains, field/seed peas and other pulses.

Dairy Farming

[16] There are around 440 dairy farms in Otago, spread across the Clutha and Waitaki districts with 46 and 33 % of the region's dairy herd respectively. Dairy has expanded in Otago since 1990s and by 2020-21, Otago had 4% of NZ's total dairy herd, 5.6% of the dairy cows, and 5.4% of its dairy land (effective area not total). Expansion has tailed off recently. Winter management practices are integral to dairy farming in Otago.

In 2020-21 Otago produced just under 11 million kilograms of milk solids or an average of 406 kg/milksolids/cow. The region's milk solids have increased over last 20 years, with a 371% increase during 1995-2015. Of that, 56% was attributed to improved milk production and 316% due to more cows. Dairying creates 5.6% of all employment opportunities in rural Otago which is about 4 times higher than the national average for rural areas. In areas like the Clutha and Waitaki districts, this represents 13.5% and 8.1% of total employment in their districts respectively. Direct combined economic contribution of $525 million in 2019, or 3.9% of regional GDP.

Of the dairy farms in Otago, 398 supply milk to Fonterra and of those 398, 305 have a Farm Environment Plan. Open Country has 30 farms that supply milk and like Fonterra, they have a Farm Environment type plan.

Horticulture

[17] The horticulture industry across Otago produces a range of products – apples and pears, stone fruit, berry fruit, other fruits and nuts, vegetable growing – both under cover and outdoors, floriculture and nursey production.

More recently the horticulture industry has decreased its overall growing area and has seen a reduction in the overall number of growing businesses, possibly due to consolidation.

Viticulture

[18] Central Otago is the fourth largest wine growing region in New Zealand for production and the third largest by vineyard area. The industry had 235 vineyards (2022 data) with a collective total planted area of 2055 hectares. Growing grapes for viticulture started in Otago in the 1970s and accelerated in the 1990s, with around 81% of grapes now for Pinot Noir wine.

[19] In 2018 it was estimated 820 people in Otago were permanently employed in the viticulture industry, with the workforce swelling to over 1000 people during harvest. The ancillary workforce to support the industry includes transportation, warehousing, irrigation, earthworks, trade industries and professional services.

What prompted the plan review?

[20] The existing suite of regional plans that ORC has are all past their legislated review date. The RMA currently requires a review every 10 years and during the early 2000s this work did not happen.

[21] In 2018, ORC developed a long-term work programme to address all its regional plans – waste, water, coast and air, with the waste and water plans proposed to be first.

[22] In October 2018, ORC adopted its Progressive Implementation Programme3 under the NPSFM 2017, to set out a staged approach to reviewing its Regional Plan: Waste and Regional Plan: Water, and to create a revised plan to manage waste, freshwater and land.

[23] In 2019, the then Minister for the Environment exercised their functions under section 24 of the RMA and as a result of that investigation, ORC committed to a work programme that included delivering a short-term plan change to address expiring deemed permits/mining privileges, reviewing and updating the Regional Policy Statement (RPS), and developing a new Land and Water Plan.

[24] The plan review was also prompted to address ~~required because the existing Regional Plan: Water has not stopped~~ land use intensification and the associated water quality impacts arising from both rural and urban activities in Otago. While some areas across Otago may have improving water quality trends, many are degrading, and the current water plan settings have the potential for further degradation to occur. To improve water quality, measures that stop further degradation are required.

Current water quality challenges include water quality below the bottom line in the NPSFM, and degrading trends for *E.coli* in the Dunedin and Coast FMU, many of which are associated with historic urban development and municipal practices. The Manuherekia rohe within the Clutha/Mata-au FMU has water quality below the bottom line and degrading trends for sediment, and the Lower Clutha rohe within the Clutha/Mata-au FMU has quality measuring below the bottom line for Nitrogen, Phosphorus, Sediment and *E.coli* but with improving trends due to significant on farm effort. All of Otago's FMU and rohe have at least one category with either measurements below the bottom lines, or multiple degrading trends that require addressing.

[25] In terms of water quantity, many catchments in Otago have a medium to high ecological risk as a result of water abstraction. These catchments require higher minimum flows and/or lower water allocation to decrease their risk level. The current water plan allows for over 50% of the water in some rivers to be taken during low flow[4] periods for purposes such as irrigation. Historical consenting of stored water has resulted in poor structuring of water

[3] orc-progressive-implementation-programme-january-2019.pdf

[4] A low flow period occurs where the measured flow of a given river is approaching or below its Naturalised Mean Annual 7 Day Low Flow (7 day MALF).

allocation and low levels of water efficiency. The current plan does not have a mechanism that will allow for the effective restructuring of allocation.

What work has been undertaken to support the plan review?

[26] Since 2018, ORC has invested around $18 million on science, monitoring and policy work to support the development of the new planning framework. A portion of this $18 million is associated with what we would consider to be our core work – including collecting State of the Environment data, and undertaking science investigations, however, a considerable part of the overall expenditure is to directly support the new plan framework. This figure includes around $2 million which has been spent on developing a minimum flow for the Manuherekia catchment.

[27] It also includes around $1 million on an Economics Work Programme that included working with an Industry Advisory Group to develop resources that provide detailed understanding of how each sector operates, and therefore to understand the potential impacts of environmental actions for fresh water on rural businesses in Otago. This work has produced two key reports[5] that have been crucial in determining how to minimise the impacts of change on the rural community.

[28] The figure also includes time and costs associated with engagement since 2019. There have been multiple engagement opportunities across Otago associated with both the proposed RPS and the proposed LWRP, most recently in October and November 2023. This has been a critical component of the plan development programme and in relation to the plan, has been essential in determining the content of the Plan. The costs of being involved in plan development processes fall across the community and are not insignificant, especially as sectors engage at multiple points in time, and across a range of activities.

[29] Feedback provided through the most recent community wide engagement resulted in a significant number of changes to the plan around activities including silage storage, fertiliser input, stock exclusion, and use of freshwater farm plans as an alternative to rules and consents. An example is a shift away from a limit on silage storage in the form of volumetric storage to a more flexible framework that will manage the risk from stored silage through freshwater farm plans. Staff are continuing to work with parties to further refine particular parts of the Plan.

[5] Moran, E. (Ed.) (2022). *Farmers and Growers in Otago.* Otago Regional Council (LWRP Economic Work Programme), Dunedin. Available at: https://www.orc.govt.nz/media/15421/farmers-and-growers-in-otago-phase-1.pdf and
Moran, E. (Ed.). (June, 2023). *Otago's rural businesses and environmental actions for fresh water.* Otago Regional Council (LWRP Economic Work Programme), Dunedin. Available at: https://www.orc.govt.nz/media/14894/farmer-grower-phase-2-report-otago-s-rural-businesses-and-environmental-actions-for-freshwater.pdf

What does the plan do?

[30] The intended outcome of the Plan is to enable existing land use activities to operate with certainty while maintaining or improving water quality and quantity outcomes in Otago. As is common in policy development processes, the draft Plan has been progressing through previous iterations of the NPS-FM. This is possible because each version of the NPSFM has sought to maintain good water quality, and improve water quality and quantity where required, -albeit in different ways or with different levels of prescription.

[31] While the plan development has been progressing, ORC has been clear that the proposed LWRP is to be the first step towards establishing an appropriate freshwater framework to manage our land and freshwater resources.

[32] This means for matters such as achieving Target Attribute States (TASs) that are currently contained in the NPSFM, the science has been clear that, while the actions /rules will move us toward better water quality, they will not take us all the way to achieving TASs. The plan represents movement in the direction of improved water quality and quantity where compliance with the bottom lines is not currently achieved but because it does not propose land use change and/or system change, it will not achieve the TASs.

[33] Additional changes – likely a combination of regulation(i.e plan changes) and non-regulatory interventions – were always signalled, alongside future changes to the Plan in response to monitoring.

[34] The proposed LWRP is intending to bring in rules to align with rules that other regional councils have been operating under for some time – such as a rule framework for managing farming. As illustration, Environment Southland introduced Plan Change 13 in 2012 to manage dairy farming. PC 13 was made operative in 2014, which made dairy farming a discretionary activity. Similarly, Environment Waikato notified Plan Change 1 to manage non-point discharges, including from farming activities in 2016 and decisions were adopted in 2020, and Environment Canterbury has managed farming activities for some time.

[35] Some of the other activities in the proposed LWRP that are managed by other regional councils include updated rules for onsite wastewater disposal that provide more environmental consideration, more appropriate water take limits, updated rules for landfills to align with industry best practice, controlling earthworks, and managing cemeteries.

[36] The economic impacts of change have been evaluated through the Economic Work Programme[6]. The economic work programme recognises that one of the biggest influences on cost to plan users is having the ability to implement rules over time. Some examples of this, and examples of enabling aspects of the plan are set out below:

[6] New Otago economic reports a first – ORC | Otago Regional Council

Water quantity

[37] Because many of the historical deemed permits have been replaced under Plan Change 7 but without minimum flows, the draft provisions allow for a transition period to implement new water quantity limits such as minimum flows.

[38] Once the relevant rules are operative, the new minimum flows are proposed to take effect at a date that aligns with when most water permits within a catchment are set to expire and require replacement.

[39] Any water permits that expire beyond this point are intended to be called in and reviewed so that the minimum flow conditions can be imposed. This will create a more equitable outcome for water permit holders, rather than having water permit holders who come in first having lesser restrictions than those that come in later. In addition, some catchments/rivers/aquifers will, as a result of the Plan, have more allocable water available for abstraction as science work has identified either allocation is not as high as previously thought, or the allocation levels were overly conservative, and more water could be extracted via the consent process.

[40] For the Manuherekia catchment where an increase in minimum flow is proposed, the plan intends to have a staged increase in the minimum flow, over approximately 15 years. This staged increase in minimum flows is intended to be clearly signalled in the plan and will allow water permit holders to make decisions in the shorter term with the knowledge of the longer-term outcome. Water users will be able to make investment decisions relevant to their future farming operation which may include infrastructure investment, storage, on-farm management, and/or land use change with greater certainty as a result of the plan framework setting environmental limits. ~~consider how best to invest to ensure improved reliability and resilience in their businesses.~~ The consenting framework will also contribute to better understanding of what run of the river water is available for allocation, which in turn assists with what may be available for current and future storage options.

Rural water quality (farming)

[41] The draft region-wide provisions require farmers to achieve Good Management Practice standards which have been reviewed through the various stages of engagement (involving the community and stakeholders) during the development of the land and water plan. The plan does not promote land use change as further work is required to understand the benefits of widespread good management practice. Many of the good management practices are already being implemented by rural land users in Otago and should not ~~wil~~l not have a significant budgetary impact, while others will need to be factored into annual farming operating budgets.

Urban water quality (stormwater)

[42] The draft provisions require short-term consents for reticulated stormwater systems, so that territorial authorities can determine where all their discharge points are with a view to seeking global consent for stormwater discharges in five years' time. This transitional approach allows time~~s~~ for the territorial authorities to properly understand and plan their stormwater reticulation and then have a longer-term global consent to manage the network as a whole. While there will be a cost associated with a short-term consent, the longer-term outcome will

be certainty for territorial authorities and enable ORC to better manage discharges to water. This oversight is currently lacking due to many stormwater activities being permitted.

Council's decision on notification date

[43] On 27 March 2024, Council approved an option for progressing the proposed Land and Water Regional Plan. The intent is that between late March and 31 October, staff focus additional time on ensuring the draft LWRP accounts for the recently notified decisions on the RPS[7], and further targeted engagement with Clause 3 parties to work through feedback and seek solutions to managing issues that resolve concerns, as far as practicable. The Clause 3 feedback process was open to a wide range of parties, including relevant Ministers of the Crown, industry, iwi, territorial authorities, and environmental and advocacy groups.

What are the costs of notifying ahead of the NPSFM changes?

[44] The costs of notifying the plan before the NPS-FM is replaced relate to the following matters:

- over time there is a risk that the Plan may regulate some matters that are no longer 'required' to be regulated by a new NPS-FM,
- the draft plan relies on the current Freshwater Farm Plan system as an alternative to a resource consent – changes to that system may mean that we can no longer use these alternative pathways and must develop an Otago-specific solution and more rules.

[45] Council intends to manage the risks described above by ensuring that the LWRP has suitable transitional provisions, particularly when there is a significant change to the regulatory framework. Some examples of the transitional provisions are set out earlier. Providing people time to adjust their practices to accommodate a new framework is important and as a regulator, we appreciate that time is one of our levers.

[46] In addition to the costs of notifying before changes to the NPSFM, as with any plan, there are costs associated with activities that have previously not required consent, to either require a consent or require adjustments to meet permitted activity criteria. There is a suite of activities that, unlike most regional councils, ORC has not traditionally managed that the plan will introduce. These include effluent storage, which was introduced through Plan Change 8 in 2021, farming activities, cemeteries, and forestry. Inevitably the industries impacted by these activities being managed incur costs. Those costs range from the costs associated with adjusting approaches to an activity (direction of grazing on slopes for intensive winter grazing for example), costs associated with meeting permitted activity criteria, and costs of obtaining consent and ensuring ongoing compliance.

[47] The economic programme has worked to understand these costs, and how they might impact rural industries. As noted earlier, enabling clear transition pathways and time to adjust to any new rules are both critical to ensuring land users can adjust to new provisions.

[7] Note that Council made decisions on the Proposed Otago Regional Policy Statement on 27 March 2024.

[48] Table 1 below[8] is an example of the analysis being undertaken to support the section 32 assessment of the Plan. The table is predicated on some aspects of the plan that are still under review so is illustrative. The intent of providing it as part of this report is to demonstrate the economic analysis that is being undertaken. The example below highlights the costs that might fall to a landowner under the rule scenarios outlined.

Arable 2 is a large mixed arable (i.e., non-irrigated) model farm closely based on a real farm in Otago. The model farm is mostly grain and specialist seed cropping (biased towards grain), selling some feed as cut and carry off-farm as well as contract grazing. The farmer owns no livestock but contract grazes lambs over winter, and has a smaller proportion of higher stocking rate dairy cows that winter graze. Most of the feed is available through the winter and prior to grass seed crops being shut up in the spring. There are no livestock on the property from mid-October to the end of February and any surplus pasture is sold off-farm as silage. It is a dryland farm with an average annual rainfall of 850 millimetres.

Numerous studies have shown that setbacks can be effective in reducing sediment delivery to streams by decreasing the velocity of runoff and allowing particles to settle. In some instances, adding to the buffer area can be more efficient but in others it was not as efficient as modifying in-field practices (e.g., implementing appropriate tillage, land-shaping, and in-field buffer practices) (Dosskey et al., 2002; Barling & Moore, 1994). A common theme in the studies is that a flexible approach based on an appropriate risk assessment is likely to result in better outcomes for the farm and the environment than a unilateral approach.

Carrying out a risk assessment to identify where other actions may be appropriate is best carried out on a farm-by-farm basis as one size rarely fits all situations. It is likely that there will be areas where setbacks need to be greater than five metres. Other actions that fit the scale and character of the risk would be identified from a tool kit of mitigation-type environmental actions (interception drains, culverts, diversion bunds, benched headland, swales, sediment traps, silt fences etc).

Arable 2 is a steady state model to represent the farm's two crop rotations. The model was first adjusted to implement recent policy changes (where there was a three-metre setback of permanent fences from the edge of waterways). It was then used to test an additional two metre setback from waterways and critical source areas with 1) a 'fixed' approach and 2) a 'risk assessment' approach.

The two metre setback based on fixed conditions resulted in a need for a total of 21.7 kilometres of additional permanent fencing. The total cost of fencing was budgeted at $346,000 and the annual cost of the permanent fencing (over a 10-year period, undiscounted) was budgeted at $34,600. The total effective farm area reduced by 21 hectares (in addition to the 1.3 hectares lost to bring the steady state up to meet recent policy). Profitability decreased by 4.3 per cent to adjust the farm from 'steady state' to 'meeting recent policy' and a further 8 per cent to get from there to achieve the fixed approach.

The two metre setback based on a risk assessment increased the setback width from three metres to a 5-metre permanent set back from a waterway. This increase resulted in a total of 12.5 kilometres of additional permanent fencing. The total cost of fencing was budgeted at $225,000 and the annual cost of the permanent fencing (over a 10-year period) was budgeted at $22,500. The farm's effective area was reduced by 2.7 hectares (in addition to the 1.3 ha lost to adjust the farm from 'steady state'

[8] Moran, E. (2024). Primary Production: Farming – analysis of costs and benefits. Draft internal paper for LWRP s32 report, Otago Regional Council.

to 'meeting recent policy'). Profitability decreased by 4.3 per cent to move from the steady state to being brought up to meet recent policy and a further 1.2 per cent to move on to achieve the risk assessment approach.

[49] There are also costs associated with retaining the existing Regional Plan: Water and Regional Plan: Waste for longer. Costs include:

- the requirement and costs to obtain consents for diffuse discharges under ORC's Plan Change 6A/6AA. The rules relating to diffuse discharges come into effect in April 2026 and have been determined to be uncertain and unenforceable. It is not efficient to consent these activities knowing they are unenforceable and uncertain.
- water permit holders being limited to a short-term consent due to the rules introduced by the Environment Court through Plan Change 7. Plan Change 7 was predicated on a fit for purpose planning framework being in place before permit holders needed to renew their consents again. Evidence from farmers during Plan Change 7 was that short term consents were not economically viable and did not allow farm expansion. Without a new planning framework in place to manage expiring water permits, consent holders will be limited to 6 years, compounding the existing frustrations with short term permits;
- challenges managing freshwater quality and quantity under the existing framework, and the potential for more stringent restrictions being required in the future to manage water quality if water quality deteriorates and bigger solutions are needed;
- the cost of delaying implementation of the balance of national direction. For example, the pLWRP will implement the National Policy Statement for Renewable Energy Generation (NPS-REG), and delays in notification mean delays in implementing a framework that enables renewables. There are multiple pieces of national direction the plan will implement, and delays impact them all.

[50] As outlined above, Plan Change 7 [water permits] and Plan Change 6AA [delay to diffuse discharges provisions] were both prepared on the basis that a new plan would be in place by 2026. These two examples are discussed further below.

Water permit replacements

[51] Provisions that were introduced to the operative Regional Plan: Water by PC7, limit replacements to deemed permits (for both water taking and damming) and all other water permits, and new surface water takes to a six-year duration. Many of these will expire / require renewal prior to 2027.

[52] During PC7, many submitters spoke to the challenges of financing infrastructure with short term permits, and expressed concern that the Plan may not be notified in the timeframe required. They highlighted that having to obtain one short term would be challenging for their business model, and more than one cycle of short-term consents will compound these issues and limit their ability to achieve economic growth and/or diversification.

[53] The current draft Plan is proposing a longer term (the plan proposed 10-year consent

duration for Clause 3 consultation), with exceptions, and has a pathway for considering intensification, including irrigation expansion. A longer term being available for consent holders reduces the economic limitations associated with short term permits.

[55] Without a new planning framework in place, the six-year duration will remain in place for the next cycle of permit renewals, which exacerbates the financing pressures outlined through the extensive PC7 hearings.

Diffuse discharges

[55] The 'un-implementable' provisions in the operative Water Plan for managing diffuse discharges (that were introduced by PC6A) are due to come into effect on 1 April 2026. These provisions are unenforceable, uncertain and ambiguous. The intent of PC6AA was that these rules would not take effect, i.e., they would be superseded by enforceable clear rules in the LWRP. If these rules come into effect in 2026, they will create practical challenges for both land users and Council. For example, because of the drafting of the rules, a diffuse discharge may comply with permitted activity criteria on one day, and not the next. This creates challenges and significant regulatory uncertainty. In a practical sense, this may mean that all landowners who produce diffuse discharges need to obtain consents.

What are the benefits?

[56] The benefits of notifying the plan before the NPS-FM is replaced are that Council:

- maintains momentum of the Plan development work already completed with our community, ensuring that this investment is not wasted,
- addresses the issues with the current planning framework as described earlier in this report,
- provides greater certainty about the regulatory requirements so that investment by landowners is not curtailed. This is a critical aspect in the drier parts of Otago.
- ensures that our communities have as much lead-in time as possible to make the necessary changes to maintain and improve freshwater and land management,
- brings Otago's freshwater and land planning framework in line with those for other areas of New Zealand, which have more oversight of risk activities,
- reduces the risk that irreversible effects on habitats or ecosystems do not occur in the meantime,
- can create rules that respond to issues and risks for Otago, and also within Freshwater Management Units. This enables the pLWRP to have different rules for different parts of Otago, rather than having national standards applying.
- Implements the community visions that were consulted on as part of the RPS.

[57] An example of creating rule frameworks that respond to risk is with Intensive Winter Grazing (IWG). With the IWG management reverting back to regional councils, this enables ORC to develop rules that reflect the risk and variability across the region. For example, the Lower Clutha and Catlins FMU tend to have farming systems that more closely align with Southland and hence IWG provisions that are modelled on Southland provisions are likely to be more

appropriate[9]. Contrast that with North Otago which has a drier climate, needing some differences in the rule framework for IWG.

What are the implications?

[58] Council intends that ORC's new freshwater framework will be reviewed and updated as legislation changes, and as new information becomes available. This provides future opportunities, already signalled in the Long-Term Plan, for both the proposed LWRP and the proposed RPS to be updated as and when required, including to respond, if necessary to a new NPSFM.

[59] The Freshwater Planning Process under section 80A of the RMA, as it currently stands, also provides opportunities for any new national direction to be incorporated into a plan during the hearings process. This means changes to the RMA and/or NPS or any other national direction while the hearings process is underway can be managed by the Panel.

[60] Managing legislative changes through regional plans is a common part of plan making and can be accommodated.

Conclusion

[61] The above report provides a high-level outline of the costs, benefits and implications of notifying the pLWRP ahead of changes to the NPSFM. It is important to note the report is not an analysis of the efficiency and effectiveness of the plan itself, as required under section 32 of the RMA.

The aim of the Plan is to set a framework for managing Otago's land and water in the short to medium term, and it is accepted that, over time, the Plan will change, as legislation and community expectations, along with science and information, changes.

[9] Moran, E. (Ed.) (2022). *Farmers and Growers in Otago.* Otago Regional Council (LWRP Economic Work Programme), Dunedin. Available at: https://www.orc.govt.nz/media/15421/farmers-and-growers-in-otago-phase-1.pdf and