

**IN THE ENVIRONMENT COURT
AT AUCKLAND**

**I TE KŌTI TAIAO O AOTEAROA
KI TĀMAKI MAKĀURAU**

Decision [2025] NZEnvC 170

IN THE MATTER OF

appeals under Clause 14 of Schedule 1
of the Resource Management Act 1991
against the decision of the Waikato
Regional Council on Proposed Plan
Change 1 to the Waikato Regional Plan

BETWEEN

OJI FIBRE SOLUTIONS (NZ)
LIMITED

(ENV-2020-AKL-000083)

FONTERRA CO-OPERATIVE
GROUP LIMITED

(ENV-2020-AKL-000084)

WAIPĀ DISTRICT COUNCIL

(ENV-2020-AKL-000085)

TAUPO DISTRICT COUNCIL

(ENV-2020-AKL-000086)

HORTICULTURE NEW
ZEALAND

(ENV-2020-AKL-000087)

IWI OF HAURAKI

(ENV-2020-AKL-000088)

WAIKATO RIVER AUTHORITY

(ENV-2020-AKL-000090)

HAMILTON CITY COUNCIL

(ENV-2020-AKL-000091)

SOUTH WAIKATO DISTRICT
COUNCIL

(ENV-2020-AKL-000092)

ROYAL FOREST AND BIRD
PROTECTION SOCIETY OF NEW
ZEALAND INCORPORATED



(ENV-2020-AKL-000094)

DIRECTOR-GENERAL OF
CONSERVATION

(ENV-2020-AKL-000096)

DAIRY NZ LIMITED

(ENV-2020-AKL-000097)

WAIRAKEI PASTORAL LIMITED

(ENV-2020-AKL-000098)

BEEF + LAMB NEW ZEALAND
LIMITED

(ENV-2020-AKL-000099)

WAIKATO AND WAIPĀ RIVER
IWI

(ENV-2020-AKL-000100)

AUCKLAND/WAIKATO AND
EASTERN FISH AND GAME
COUNCILS

(ENV-2020-AKL-000101)

FEDERATED FARMERS OF NEW
ZEALAND

(ENV-2020-AKL-000102)

CNI IWI LAND MANAGEMENT
LIMITED

(ENV-2020-AKL-000103)

LANDCORP FARMING LIMITED

(ENV-2020-AKL-000147)

PUKEKOHE VEGETABLE
GROWERS ASSOCIATION

(ENV-2020-AKL-000148)

LOCHIEL FARMLANDS LIMITED

(ENV-2020-AKL-000149)

Appellants

AND

WAIKATO REGIONAL COUNCIL

Respondent

Court:	Chief Environment Court Judge David Kirkpatrick Alternate Environment Judge Te Kani Williams Environment Commissioner Jim Hodges Environment Commissioner Mark Mabin
Hearing:	25 – 29 September 2023: Environment Court, Auckland 2 – 6 October 2023: Distinction Hotel, Hamilton 16 – 20 October 2023: Distinction Hotel, Hamilton 24 – 25 October 2023): Environment Court, Auckland (Point Source Discharge Hearing) 6 – 10 November 2023: Distinction Hotel, Hamilton 5 December 2023: Environment Court, Auckland
Last case event:	28 April 2025
Appearances:	<p>Main hearing</p> <p>M Conway, T Fischer, and L Chai for Waikato Regional Council V Tumai and M Hooper for the Director-General of Conservation S Ongley for Auckland/Waikato and Eastern Fish and Game Councils P Anderson for the Royal Forest and Bird Protection Society of New Zealand Incorporated D Minhinnick and A Gilbert for Fonterra Co-operative Group Limited B Matheson and N Edwards for Federated Farmers of New Zealand C Thomsen and C Luisetti for Beef + Lamb New Zealand Ltd P Majurey for Iwi of Hauraki J Ferguson for CNI Iwi Land Management Limited and Waikato and Waipā River Iwi G Chappell for OJI Fibre Solutions (NZ) Limited T Mijatov, L Ford, and N Buxeda for Horticulture New Zealand and Pukekohe Vegetable Growers Association J Forrett and C Muggeridge for Lochiel Farmlands Limited B Carruthers for Wairakei Pastoral Limited G Pinnell for himself T Ryan and C Bulow for Waikato River Authority</p> <p>Point source discharge hearing</p> <p>M Conway, T Fischer, and L Chai for Waikato Regional Council V Tumai and M Hooper for the Director-General of Conservation S Ongley for Auckland/Waikato and Eastern Fish and Game Councils D Minhinnick and A Gilbert for Fonterra Co-operative Group Limited G Chappell for OJI Fibre Solutions (NZ) Limited T Ryan and C Bulow for Waikato River Authority</p>

A Green and T Cassidy for Ōtorohanga District Council and
Matamata Piako District Council
C Malone for Waipā District Council
N Garvan and R Te Rito for Genesis Energy Limited
L Muldowney and S Thomas for Hamilton City Council, Taupō
District Council and South Waikato District Council, Waikato
District Council

Date of Decision: 28 May 2025

Date of Issue: 28 May 2025

INTERIM DECISION OF THE ENVIRONMENT COURT

- A: The Environment Court makes the findings in the appeals on Plan Change 1 to the Waikato Regional Plan as set out in the Summary of Findings and makes the directions as set out in Part J for the reasons set out in this decision.
- B: WRC is to respond to the directions set out in Part J within 40 working days of the date of issue of this decision.
- C: All parties are invited to consider whether there are any matters remaining that are in dispute and not addressed by this decision. Any submissions are to be made by the parties within 20 working days of the date of issue of this decision.
- D: Costs are reserved.

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Preliminary matters

[1] Plan Change 1 to the Waikato Regional Plan (**PC1**) is the first stage in a programme to restore and protect the Waikato and Waipā river catchments by 2096 and give effect to Te Ture Whaimana, which is the primary direction-setting document for the programme. To achieve Te Ture Whaimana will require substantial reductions to be made in the quantities of nitrogen, phosphorus, sediment and microbial pathogens discharged from land use activities in the region, which will require major changes in the way farms are managed.

[2] It is not yet known how that is to be achieved and the social and economic effects are not yet well understood. As the first stage, PC1 must provide a firm foundation on which future stages can build and ensure that clear and equitable policy direction sets out what must be achieved in the expected 10-year life of the plan change, taking into account practicability, and the need to provide flexibility to respond to an improving knowledge base.

[3] Development of PC1 started more than twelve years ago and was first notified eight and a half years ago, at a time when the statutory and regulatory frameworks were largely settled. The management of diffuse sources of nitrogen was an important part of PC1 and, consistent with accepted practice in New Zealand at the time, Overseer modelling of nitrogen losses was required. In the intervening period, both frameworks have changed multiple times and the appropriateness of using Overseer for regulatory purposes came under serious challenge.

[4] The provisions of PC1 have had to change each time in response to the statutory and regulatory changes and change fundamentally in response to the concerns about using Overseer. Overall, PC1 has had to be amended in response to around ten material changes during the appeal period. Parties actively participated in the change process, with many different views expressed.

[5] Many changes were made to the Notified Version by the Council's Hearing Panel, some of which had significant implications. Further changes were proposed by Waikato Regional Council (**WRC**) in its Final Proposal, during the hearing and

subsequently, some of which also had significant implications. In a number of cases, changes were not supported by robust evidential justification and/or an appropriate s 32AA evaluation in accordance with the Resource Management Act 1991 (**RMA**) and/or demonstration of scope.

[6] Some of the proposed changes introduced imprecise language and risks to the coherence and internal consistency of the plan change bringing with it the potential to adversely affect its efficiency and effectiveness. A key requirement is to ensure that the provisions are as clear on their face, certain, workable, practicable, enforceable and as equitable as possible, despite the challenging combination of circumstances. Unless that is achieved, PC1 will likely be subject to on-going disputes.

[7] A number of the proposals put before the Court do not satisfy these criteria and will require further work by WRC with input from the parties. This will unavoidably add to the time before all provisions can be operative.

[8] We have considered the possible implications of recent changes made to s 107 and proposed to be made to s 70 of the RMA. Rather than calling for further evidence at this time, we will await the outcome of the legislative process before finalising our determination in relation to permitted activities. In view of the urgency to make progress on PC1 we have retained in this interim decision our evaluation of the permitted activity provisions to date which was largely completed before s 70 was raised as an issue.

[9] WRC has identified that the addition of s 107(2A) and the proposed amendments to s 70 may not be sufficient to enable consent to be granted for the discharges of diffuse discharges.¹ Once the final form of the amendments to the RMA are known, we will work with parties to determine the most appropriate way forward.

¹ Memorandum dated 28 April 2025.

[10] A summary of abbreviations used in the decision is included in Attachment 3 for ease of reference.

[11] It will be seen through this decision that we refer often to proposals made by Mr Urlwyn Trebilco, who is the principal WRC planning advisor for the purposes of PC1. By way of background, Ms Tracey-Lee May, as WRC Director Science Policy and Information, issued a memorandum dated 23 June 2022 to ensure that those representing Council in the Plan Change Appeals process had the necessary delegations to expedite matters to resolution. This stated:

In accordance with provision (vix)(b) of the delegation to the Director Science Policy and Information, the delegation to negotiate and agree outcomes of appeals is delegated to Urlwyn Trebilco, Principal Policy Advisor.

Policy document decision appeal proceedings

- (d) To negotiate and agree outcomes of appeals on policy decisions, for matters that are consistent with the policy direction set by Council
- (e) That should the Director Science, Policy and Information be unable to attend mediations that the Director delegate this authority to their representative in proceedings
- (f) That the exercise of this delegation is reported by to Council through the appropriate committee at the earliest possible opportunity.

[12] This was consistent with her own delegated authority.

[13] In setting out our findings below, we have not attempted to address all matters and WRC will need to make such consequential and other amendments to the provisions in WRC's Final Proposal as are necessary to ensure the efficiency and effectiveness of the provisions.

Summary of findings

[14] Based on the evidence, dairy farming activities in particular have been enabled through current plan provisions with limited controls on their effects on the environment. Reversing the effects will take much longer than the term of PC1 and will not be achieved without significant social and economic consequences for farmers and growers, their families, staff and communities and the regional economy, the extent of which are not yet known.

[15] PC1 must deliver environmental improvements that will contribute to the achievement of the vision and strategy of Te Ture Whaimana. It will be the first stage of many. Mitigation measures to be implemented in accordance with PC1 will require time for investigations, planning, consenting or other authorisation, financing, implementation and monitoring.

[16] Any timeframes set in PC1 must be realistic in terms of both practicality and affordability and the expectations for environmental improvements must recognise this. It is appropriate to have a general requirement that improvements be made as soon as practicable, but necessary to allow up to five years for priority mitigations to be put in place and longer for others, subject to steady progress being made over time.

[17] It will be essential that WRC provides the best available information on the indicative long-term reductions in loads of the four contaminants that could be required in each sub-catchment. This information is a necessary component of the catchment context required by the Farm Plan Regulations but should be provided independently of any national regulatory requirements applicable at the time, prior to FEP preparation and/or consent applications being made. We will require WRC to provide further information on how this will be addressed.

[18] The use of the terms “property”, “enterprise” and “single operating unit” to describe individual farm activities is confusing and should as far as possible be replaced by a single definition that includes leased land and provides greater overall clarity, as discussed in Part F24. WRC is to propose a response in consultation with other parties for final determination of the Court.

[19] Farming and Commercial Vegetable Production (**CVP**) activities are to be managed as single operating units, generally as defined by Mr Trebilco but subject to final determination by the Court in response to a final proposal by WRC after consultation with parties.²

² Mr Trebilco, EIR, Additions to Glossary of Terms.

[20] Currently available information is insufficient to enable the adverse effects on the environment of diffuse discharges of nitrogen, phosphorus, sediment and microbial contaminants from individual farms to be assessed. For that reason, PC1 requires the management of the risk of such discharges occurring based on the intensity of land use.

[21] All land use activities that result in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water³ must demonstrate a general improvement in farming practice⁴ and demonstrate through their Farm Environment Plan that either the risk of diffuse discharges to water is already as low as practicable given the current land use or will be reduced to be as low as practicable over an appropriate specified period.⁵

[22] Five yearly reporting of activities is to be undertaken to demonstrate what progress has been made.⁶

[23] All farming and CVP activities authorised in accordance with PC1 must be carried out in accordance with Good Management Practices (**GMP**), including those required by relevant industry organisations for the current land use or do so within an appropriate specified period, to the extent that the practices would pro-actively contribute to the achievement of Te Ture Whaimana.⁷

[24] The efficiency and effectiveness of the PC1 provisions will be assisted if there is on-going collaboration between WRC and industry organisations in relation to GMP. Consideration could be given, to the extent appropriate, to the inclusion of

³ Including all cases referred to in this decision where a contaminant is discharged onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water: RMA s 15(1)(b).

⁴ Policy 1a of the Notified Version and WRC's Final proposal, which must apply to pastoral farming and commercial vegetable production activities.

⁵ Policy 2a. and Memorandum of WRC dated 5 April 2024 at [5]: WRC and Federated Farmers agreed to amend Schedule D1, Part D(2)(a), which applies to permitted activities to require demonstration that diffuse discharge risk is reducing over time or is already as low as practicable.

⁶ Part F8 of this decision.

⁷ Parts E22 and H5 of this decision.

any continuous improvements in GMP demonstrated to be effective by those organisations to the satisfaction of WRC to be a requirement of PC1 without the need for a formal review of consents.⁸

[25] Subject to any changes to s 70 of the RMA, permitted dairy farming activities with a low risk of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water, including after application to land, will be determined based on Nitrogen Risk Scorecard (**NRS**) assessments. For reasons set out in Part E24, we do not consider a s 293 process will be required to enable that change.

[26] Dairy farming activities with more than a low risk of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water will be controlled activities. They will be required to produce an Overseer Nitrogen Leaching Loss Rate (**NLLR**) assessment at the time of resource consent application and then at five-yearly intervals to monitor changes in the NLLR.⁹ They must take a tailored, risk-based approach to define any additional mitigation actions over and above GMP required on the land to reduce those diffuse discharges to the lowest practicable level within an appropriate specified period. The mitigation actions must be determined in accordance with an amended policy 2 and specified in a Farm Environment Plan and, to the extent appropriate, in conditions of any resource consents granted.¹⁰

[27] Policy 2B)b of WRC's Final proposal is to be amended to include dairy farming activities with a high risk of diffuse discharges and Policy 2B)c is to be deleted. Other consequential amendments must be made to reflect this decision.

[28] A new policy is to be drafted by WRC after or in consultation with other parties to sit alongside Policy 2a. It is to set out the policy direction by which the risk of diffuse discharges of nitrogen to water is to be reduced proportionate to the level of risk represented by the farm and to the level of water quality improvement

⁸ Part E22 of this decision under the sub-heading "Good management practices".

⁹ Part E22 of this decision.

¹⁰ Part E22 of this decision under the sub-heading Setting the appropriate policy.

required in the sub-catchment.¹¹ Reference must be made in the policy to the potential for further mitigations and/or possible land use change in subsequent plan changes where necessary to ensure farmers can make properly informed decisions.

[29] It will be seen from Part E22 that there will be limitations when applying the policy in PC1 because of insufficient data and the lack of a clear road map as to how Te Ture Whaimana will be achieved. Nevertheless, our current view is that policy along the lines outlined in Part E22 or an appropriate alternative is necessary to ensure clarity on the way contaminants will be managed in the future and there is a need for clarity as to how WRC will process consents in the interim. We direct WRC to set out its proposed policy.

[30] Matter of control iv in Controlled Activity Rule 3.11.4.4 in WRC's Final proposal is to be amended to read:

Measures, including measures to address the effects of rainfall, topography, soil and erosion characteristics and/or clean water irrigation, to ensure that the risks of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens will be reduced to be as low as practicable over an appropriate specified period, which generally shall not exceed 10 years¹² of PC1 becoming operative, as determined in accordance with Policy 2.

[31] We find it necessary to include specific reference to “erosion characteristics” to ensure discharges of sediment are considered as well as diffuse discharges of nitrogen to assist in ensuring equity between dairy and drystock farming activities. We find it necessary to include specific reference to “clean water irrigation” as a potential contributor to increased nitrogen loss but this may be constrained by scope.

¹¹ As submitted in Memorandum of WRC dated 10 May 2024, being consistent with Policy 2d. of the Notified Version “Requiring the degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to be proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and proportionate to the scale of water quality improvement required in the sub-catchment;” and as discussed in Part E22.

¹² Part E22 of this decision

[32] As stock exclusion was identified by WRC as one of the most important tools in PC1 to achieve Objectives 1 and 2 and give effect to Te Ture Whaimana,¹³ stock exclusion from water bodies on land on slopes of up to 10° is to be completed as soon as practicable and in all cases within five years of an activity being permitted or authorised by a resource consent (subject to limited exceptions as discussed in Part F31). The fencing of water bodies on slopes of between 10° and 15° is to be completed as soon as practicable and within 10 years of an activity being permitted or authorised by a resource consent, except in the event of exceptional circumstances. Steady progress must be made over time.

[33] The provisions relating to fencing set-back distances and riparian planting must be broadly in line with the minimum requirements set out in national regulations, except in the case of named lakes and wetlands, which must be 10 m. The evidence in support of increased set-backs and riparian margins included no assessment of practicality or effectiveness in a region-wide working environment, or of the costs. These were shown to be substantial as a result of further expert conferencing directed by the Court, meaning such increased set-backs cannot currently be justified in accordance with s 32AA of the RMA.

[34] We will direct WRC to consult with parties to seek their views and propose a methodology or clear framework for demonstrating that nitrogen risk from CVP activities is reducing and/or is as low as possible, for final determination by the Court.¹⁴

[35] We consider it reasonable to expect WRC will have considered how it proposes to address s 107(2A) of the RMA in relation to CVP and farming operations and will direct it to inform the Court of its intentions.

[36] Provision must be included to enable a start to be made to the development of Tangata Whenua Ancestral Land (**TWAL**) as restricted discretionary activities within the term of PC1 in accordance with a new policy to be drafted by WRC to

¹³ WRC Closing submissions at [15.3].

¹⁴ Part F9 of this decision.

take account of the matters raised in Part F28 of this decision. The policy is to be drafted after or in consultation with other parties, for final determination by the Court.

[37] The objectives and policies of the Decisions Version relating to the Whangamarino Wetland in the Decisions Version of PC1 are appropriate without amendment.

[38] In view of the large numbers and high overall costs involved, and there being no evidence demonstrating what environmental benefits will result, if any, it has not been established that the blanket protection of wetlands other than those required by the Resource Management (Stock Exclusion) Regulations 2020 (**Stock Exclusion Regulations**)¹⁵ is the most appropriate way to achieve the objectives of PC1. In accordance with s 290 of the RMA, we do not accept the Council decision to protect wetlands other than those requiring protection in accordance with the Stock Exclusion Regulations.¹⁶

[39] The determination of additional Freshwater Management Units and attribute states requires consideration of wider issues and more complete evidence than was provided to the Court and is a matter for WRC using a Schedule 1 process.

[40] The amendments to the Farm Environment Plans (**FEPs**) provisions proposed by WRC in its memorandum dated 27 March 2025 are accepted, subject to the matters raised in Part F21.

[41] The definition of critical source areas proposed by WRC in its memorandum dated 27 March 2025 is accepted, subject to the matters raised in Part 22.

[42] The WRC is to propose new provisions relating to intensive winter grazing to take into account our preliminary evaluation in Part F23.

¹⁵ All stock must be excluded from any natural wetland that is identified in a regional or district plan or a regional policy statement that is operative on the commencement date.

¹⁶ Part F20 of this decision.

[43] Policy 7 relating to the duration of consents is to be amended generally as follows:¹⁷

Notwithstanding Policy 6 of the Waikato Regional Plan:

- (a) Land use activities in sub-catchments where the interim target attribute states are exceeded, including those draining to the Whangamarino Wetland or in a sub-catchment draining to lakes named in Table 3.11.3 or in a sub-catchment draining to wetlands listed in Table 3.7.7 of the WRP, will generally be granted consent for a duration up to 10 years and in no case for a duration exceeding 12 years.
- (b) Land use activities in sub-catchments where interim target attribute states are met may be granted consent for a duration of up to 15 years and ending no later than 31 December 2040.
- (c) The term of consent may be reduced where insufficient mitigation measures will be implemented to ensure diffuse discharges are reduced to be as low as practicable within 10 years of the PC1 becoming operative.

[44] Non-complying activity status in Rule 3.11.4.9 is the most appropriate way to meet the objectives for land use change with an increased risk of diffuse discharges occurring after the date of notification of PC1, except in the case of Tangata Whenua Ancestral Land.

[45] Rule 3.11.4.9 is *intra vires*.¹⁸

[46] The statutory requirements and PC1 provisions that apply to the Wairakei Estate, including the provisions of ss 139 and 20A(3)(c) relating to certificates of compliance, are clear on their face and no determination by the Court was sought or is required.

[47] The provision for alternative models to Overseer for comparing nitrogen loss rates, but not as a drafting gate, now proposed to be deleted from Schedule B in WRC's Final Proposal, is to be reinstated to take into account the matters raised in Parts E1, E17, F9 and F25 of this decision. The requirement to demonstrate that an

¹⁷ Part F33 of this decision.

¹⁸ Part F24 of this decision.

alternative model can produce comparable modelling outputs to those of Overseer, as inserted by the Hearing Panel, is not accepted for the reasons stated by WRC.¹⁹

[48] The reference to offsetting and compensation is to be removed and replaced with a requirement for a clear net benefit in accordance with the amendments proposed by WRC.²⁰

[49] When addressing the best practicable option requirements of Policy 12, the continued operation and development of regionally significant infrastructure must be located as far as practicable to avoid adverse effects on the relationship tangata whenua as Kaitiaki have with water and their taonga such as waahi tapu and sources of mahinga kai identified in the locality of the point source discharge. Where adverse effects cannot be avoided, they should be remedied or mitigated to the extent reasonably practicable. Policy 12(a)(ii) is to be reworded by WRC accordingly and to ensure it is consistent with WRP Policy 3.5.3.6.²¹

[50] Zones of reasonable mixing cannot be avoided unless the quality of a point source discharge is better than the quality of the receiving environment and Policy 12d.vii. requires amendment to ensure they are assessed in accordance with Policies 3.2.3.8, 2.3.4.18 and 2.3.4.19 of the WRP.²²

[51] While we understand the reasons for including interim water quality targets, based on the evidence, they cannot be anything other than aspirational, their achievability is uncertain and reliable monitoring is unlikely to be possible in the case of nitrogen at least. They do not form an appropriate metric for measuring the success or failure of PC1 and need to be seen as representing a best-endendeavours target only.²³

[52] The need for WRC to exercise reasonable discretion cannot be avoided because the information currently available is insufficient to provide certainty of

¹⁹ Memorandum dated 28 April at [37].

²⁰ Part F26 of this decision.

²¹ Part F27 of this decision.

²² Part F27 of this decision.

²³ Part F35 of this decision.

outcomes with the wide array of issues that will have to be considered when certifying FEPs and issuing resource consents.

Part A Introduction

A1 General background to Plan Change 1

[53] PC1 is the first step in an 80-year programme to restore and protect²⁴ the water bodies in the Waikato and Waipā River catchments as shown on Map 3.11.1 in Attachment 1, including rivers, streams, lakes and wetlands. It must address many complex and inter-related issues and was complicated further because of the many and wide-ranging changes to the statutory and regulatory provisions and other national guidance which occurred mainly after the Council decision was notified and appeals were lodged. Part A of this decision provides an overview of the background to PC1 and some of the principal matters that had to be considered as context to our subsequent evaluation and findings.

[54] PC1 regulates the discharge of four major contaminants in the catchments: nitrogen, phosphorus, sediment and microbial pathogens (**primary contaminants**). The evidence of WRC is that the water bodies are generally degraded, with the degree and type of degradation varying throughout the catchment.²⁵

[55] Development of the notified version of PC1 commenced in 2012. The reasons for its development included the requirements of Treaty settlement legislation and national policy statements, findings of independent reviews of the Waikato Regional Plan (**WRP**)²⁶ and stakeholder and community expectations responding to deteriorating trends in water quality.²⁷

A2 Te Ture Whaimana o Te Awa o Waikato

[56] Legislation was enacted to give effect to the Treaty settlements and co-management deeds were entered into between the Crown and the five river iwi, being Waikato-Tainui, Ngāti Tūwharetoa, Ngāti Raukawa, Te Arawa and Ngāti

²⁴ By way of example, the overarching purpose of the Waikato-Tainui Raupatu claims (Waikato River) Settlement Act 2010 is to restore and protect the health and wellbeing of the Waikato River for future generations.

²⁵ Dr Scarsbrook EIC at [18].

²⁶ Including a review conducted by the Office of the Auditor-General.

²⁷ Ms May EIC at [9] and [10].

Maniapoto.²⁸ Collectively, the overarching purpose of this river settlement legislation includes restoration and protection of the health and wellbeing of the Waikato River, and restoration and maintenance of the quality and integrity of the Waipā River. The legislation binds the Crown.²⁹

[57] Under the legislation, the Council shares co-governance and co-management responsibilities with the five Waikato and Waipā River iwi, not including Hauraki whose claim has not yet been settled. These arrangements provide for Joint Management Agreements between river iwi and local authorities, which are in effect. They cover preparation, review, change or variation of RMA planning documents, including the regional plan.

[58] The following vision for the Waikato River, known as Te Ture Whaimana o Te Awa o Waikato (**Te Ture Whaimana**), was developed by the Waikato River Authority (**WRA**)³⁰ and included in schedules to the legislation:

- (1) Tooku awa koiora me oona pikonga he kura tangihia o te maataamuri.
The river of life, each curve more beautiful than the last
- (2) Our vision is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come.

[59] The full text of the vision and strategy is set out in Attachment 2. The vision and strategy is intended by Parliament to be the primary direction-setting document for the Waikato River and activities within its catchment affecting the Waikato River. It prevails over any inconsistent provision in a national policy statement, a New Zealand Coastal Policy Statement and a national planning standard.

²⁸ Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, Ngāti Tūwharetoa, Raukawa and Te Arawa River Iwi Waikato River Act 2010, and the Nga Wai o Maniapoto (Waipā River) Act 2012.

²⁹ Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, ss 5(1) and 7, for example.

³⁰ The WRA has 10 members appointed by the river iwi and Ministers of the Crown primary purpose is set the primary direction to restore and protect the rivers.

[60] In accordance with the legislation, Te Ture Whaimana was directly inserted into the Waikato Regional Policy Statement (**WRPS**) without progressing through a Schedule 1 process. The advent of Te Ture Whaimana placed a statutory imperative on WRC to progress a resource management framework that sought to improve water quality for the Waikato and Waipā Rivers.³¹ The longer-term goal is to restore the Waikato and Waipā rivers and their catchments over time and protect them so they are safe for people to swim in and take food from, and the 80-year target attributes states set out in PC1 are achieved by 2096 at the latest.

[61] The objectives and policies of Te Ture Whaimana are set out in Appendix 2 of this decision and must be pursued to achieve the vision and strategy. In addition to objectives relating to the restoration and protection of the Waikato River, they require the restoration and protection of Waikato River iwi according to their tikanga and kawa, including their economic, social, cultural and spiritual relationships with the Waikato River. When giving effect to Te Ture Whaimana in accordance with the RMA, we must consider all of the objectives of both Te Ture Whaimana and PC1 when considering the most appropriate way to meet them.

A3 Development of Plan Change 1

[62] PC1 was the product of a collaborative plan development process in which the WRC and river settlement iwi worked alongside stakeholders and the community. The process included considerable sector and community engagement. The process and the reasons for it are described in the evidence-in-chief (**EIC**) of Ms May, who is the Director of Science, Policy and Information directorate at WRC. We do not repeat that.

[63] PC1 was notified on the 22 October 2016, and a variation to the plan change was notified on 10 April 2018. The level of interest in the plan change is evidenced by the approximately 1,100 submissions received.³² WRC hearings occurred between March and September 2019. The Hearing Panel's Recommendation Report was

³¹ Ms May EIC at [17].

³² Mr Trebilco EIC at [16] and [17].

dated 17 January 2020. WRC accepted all recommendations of the Hearing Panel and publicly notified its decision on 22 April 2020.³³

[64] PC1 is proposed as a new Chapter 3.11 of the WRP to apply specifically to the Waikato and Waipā River catchments. The WRP became operative in September 2007³⁴ and currently has limited controls to manage the effects of farming on water quality.³⁵ The provisions in PC1 complement those contained in the remainder of the WRP.³⁶

[65] As development of PC1 progressed through the Schedule 1 process under the RMA, many changes were made to its objectives, policies and rules and overall plan framework. We refer to the following different versions of the plan change in this decision, namely:

- (a) the version originally notified (**Notified Version**);
- (b) Variation 1 to the Notified Version (**Variation 1**);
- (c) the version incorporating changes recommended by the Council hearing panel (**Decisions Version**); and
- (d) the version submitted with WRC's closing submissions dated 1 December 2023, which is WRC's response to the appeals after hearing the evidence (**WRC's Final Proposal**).

[66] WRC submitted in opening:³⁷

There were no consent orders resulting from the mediation process, although it did enable the WRC to better understand the parties' positions and propose a number of amendments through its evidence in chief (dated 26 May 2023) and supplementary evidence (dated 2 June 2023). After considering the

³³ Ms May EIC at [12].

³⁴ Mr McAuliffe EIC at [23].

³⁵ Mr McAuliffe EIC at [10].

³⁶ Mr McAuliffe EIC at [24].

³⁷ At [1.8] and [1.9].

evidence of the parties, WRC proposed further amendments through its rebuttal evidence (dated 25 August 2023).

Following the exchange of evidence, expert conferencing sessions were held for lakes and wetlands, water quality, farm systems, geospatial information systems, economics and modelling, and planning (including a separate session for point source discharges). ... As a result of the expert conferencing, Mr Trebilco has prepared an amended version of the PC1 provisions which he will produce when he is called to give evidence. The amended “post-conferencing” version of the provisions is attached as Appendix 1.

[67] Different versions of PC1 were attached to Mr Trebilco’s three briefs of evidence but we relied on WRC’s Final proposal as being the most up-to-date.

[68] WRC proposed further amendments to provisions in response to matters raised by the Court after the hearing, some of which require inclusion in the final plan change in appropriate forms.³⁸

[69] The extended development time-frame, the many external changes that have had to be considered in the process, the number of different versions of PC1 and the compromises accepted to try to reach agreement have led to a significant lack of clarity and consistency in some of the now proposed provisions. Further work is required by WRC in consultation with parties to make the provisions clearer on their face and as certain, workable, practicable, enforceable and equitable as possible. This will unavoidably add to the time before all provisions can be operative.

A4 Outcomes to be achieved by Plan Change 1

[70] The following are the objectives in the Decisions Version, which were unchanged in WRC’s Final Proposal. Only limited matters remained unresolved by the time of the Court hearing. The objectives in the Final Proposal are:

Objective 1/Te Whāinga 1:

In relation to the effects of nitrogen, phosphorus, sediment and microbial pathogens on water quality, the health and wellbeing of the Waikato and Waipā Rivers, including all tributaries, springs, lakes and wetlands, other than

³⁸ As examples, WRC memoranda dated 5 April, relating to references to rainfall, topography and soil characteristics to be included in PC1 and changes to Schedule D1 to require permitted discharges to be reduced over time unless they are already as low as practicable.

treatment wetlands, within their catchments, are both restored over time and protected, with the result that in particular, they are safe for people to swim in and take food from, and the 80-year target attribute states in Table 3.11-1 are achieved, at the latest by 2096.

Objective 2/Te Whāinga 2:

Progress is made over the life of this Plan towards the restoration and protection of the health and wellbeing of the Waikato and Waipā River catchments in relation to nitrogen, phosphorus, sediment and microbial pathogens by the interim target attribute states in Table 3.11-1 being met no later than 10 years after Chapter 3.11 of this Plan is operative.

Objective 3/Te Whāinga 3:

Waikato and Waipā communities are assisted to provide for their social, economic, spiritual and cultural wellbeing through staging the reduction of the discharges of nitrogen, phosphorus, sediment and microbial pathogens necessary to restore and protect the health and wellbeing of the Waikato and Waipā River catchments, and by the encouragement of collective community action for that purpose.

Objective 4/Te Whāinga 4:

Tangata whenua values are integrated into the management of the rivers and other water bodies within the Waikato and Waipā River catchments such that:

- a. Tangata whenua have the ability to:
 - i. manage their own lands and resources including tangata whenua ancestral lands, by exercising mana or mana whakahaere, for the benefit of their people; and
 - ii. actively sustain a relationship with ancestral land and with the rivers and other water bodies in the catchments; and
- b. The use and development of tangata whenua ancestral lands should only be restricted to the extent needed to be consistent with Te Ture Whaimana o Te Awa o Waikato; and
- c. Improvement in the rivers' water quality and the exercise of kaitiakitanga increase the spiritual and physical wellbeing of iwi and their tribal and cultural identity.

Objective 5/Te Whāinga 5:

Restoration and protection of the health and wellbeing of the Whangamarino Wetland, over time and in relation to nitrogen, phosphorus, sediment and microbial pathogens at the latest by 2096, consistent with its status as an outstanding waterbody with significant values, including habitat for threatened species and sensitive raised bog ecosystems.

[71] When considering the meaning of “progress” as used in Objective 2 of the Decisions Version, the water quality limits in objective 1 of the Notified Version were “aspirational” 80-year targets from the “current state monitored in 2010-2014,” consistent with the vision and strategy. They were intended to be used to characterise the water quality of the different Freshwater Management Units

(**FMUs**) when the effectiveness of the objective is assessed.³⁹ Then Objective 3 (current Objective 2) required a 10% change towards the long-term water quality improvement targets by 2026.

[72] There were a large number of submissions seeking both shorter and longer timeframes for taking action to improve water quality. The Hearing Panel considered that “[i]f the catchment is to stay on track towards achieving the long-term objective by 2096, we consider that this first stage needs to be a 20% improvement compared with the 80-year outcomes, rather than 10%”. They considered that Dr Doole’s modelling, including his assessments of costs to the region, remain reasonably applicable to a 20% water quality improvement required in the period from then until ten years after PC1 is operative.⁴⁰

[73] We return to this issue in our evaluation in Part F33 because of the difficulties in knowing if compliance is being achieved and the consequences of this in terms of future management of diffuse discharges.

A5 The management of contaminants in Plan Change 1

[74] PC1 includes policies which require the management of all four of the primary contaminants from both diffuse and point source discharges. Diffuse discharges of nitrogen are the main focus of controls in PC1 as approximately two thirds of nitrogen reaching the river systems comes from anthropogenic sources, with the remaining third coming from natural sources, which cannot be controlled through PC1. Approximately 90% of anthropogenic sources of nitrogen come from diffuse discharges, predominantly from pastoral farming, and 10% from point source discharges from community and industrial wastewater treatment plants.

[75] The provisions provide no meaningful guidance on the likely extent of reductions in the four primary contaminants that might be required by individual land use activities in future plan changes. Mr Bruce McAuliffe advised that WRC had completed two rounds of community engagement on the next plan change at

³⁹ Variation 1, Reasons for adopting Objective 1.

⁴⁰ Recommendation Report at [812], [825] and [828].

the time of the hearing, provisions were still to be drafted and considered by the Council.⁴¹ While we acknowledge that WRC could not provide further clarity under those circumstances, it raises uncertainties for farmers making important decisions about their future farm management as they could spend significant sums on physical works to comply with PC1 that could later become stranded assets. For equity and economic reasons, controls need reasonable flexibility to accommodate this.

[76] The extent of different reductions required in each of the four contaminants is a matter to be determined by WRC and tested through a Schedule 1 process, meaning the requirements may not be known for possibly five to ten years or longer. However, a general indication of water quality improvements required in relation to nitrogen and phosphorus was provided by Dr Michael Scarsbrook, the Science Manager at WRC. He referred to the combined loads of total nitrogen (**TN**) and total phosphorus (**TP**) in the Waikato-Waipā catchment over the period 2011 to 2020.⁴² The information was conveniently summarised by Dr Olivier Ausseil, who is a scientist giving evidence on behalf of the Waikato and Waipā River Iwi, in the following Table 1, reproduced from Table 2 of his EIC.

Table 1
Indicative Total Nitrogen and Total Phosphorus load reductions required to meet the 80-year attribute states

	Catchment load (t/y)		Anthropogenic load (t/y and as % of total catchment load)			Improvement required over 80 years		
	Whole catchment	PC1 area	Total	Point source	Diffuse	% total load	t/y	% anthropogenic load
TP	729	706	367 (50%)	108 (15%)	259 (36%)	27	196	53
TN	10,981	10,668	7,326 (66.7%)	682 (6%)	6644 (61%)	24	2,687	37

⁴¹ NOE at 52.

⁴² Dr Scarsbrook EIC from [124], by reference to Bill Vant *Sources of nitrogen and phosphorus in two major catchments in the Waikato Region, 2011–20* (Waikato Regional Council, Technical Report 2022/05, April 2023).

[77] The extent of improvements required in TN and TP varies significantly between sub-catchments, with limited if any improvements being required to meet water quality targets in some and relatively large improvements being required in others. The evidence provided limited information of the extent of improvements likely to be required but clearly, they will be large in the Whangamarino Wetland and some lake catchments and likely in some other sub-catchments as well.

[78] While dairy farming contributes more nitrogen than drystock in the PC1 area, drystock contributes more diffuse phosphorus and approximately 66% of the sediment overall and between 69% and 80% in the high sediment yielding catchments compared to 21% from dairy, based on long-term soil erosion data.⁴³ The different ways in which PC1 treats nitrogen and sediment was a matter of dispute and, in our view, requires further attention in the final plan change, as discussed below. Sediment yields in all sub-catchments in the PC1 area were estimated as part of the PC1 development process⁴⁴ and this should be provided to farmers and growers to assist their planning.

[79] WRC has more limited information available in relation to *E. coli*.⁴⁵ Mr Graham Pinnell, a retired sheep and dairy farmer who participated in PC1 from the time of the initial engagement process, submitted in closing that “[i]n many sub-catchments the 80-year target requires a 10-fold reduction in *E. coli* from current levels”.⁴⁶ This was not challenged by WRC in closing. We note here that Mr Pinnell participated actively in all aspects of the appeal process and we found his easy-to-understand descriptions of the practical aspects of farming, his pragmatic approach and balanced analyses particularly helpful, reflecting his many years of hands-on experience of farming activities. We express our appreciation to him.

⁴³ Dr Depree EIC from [1.7]. Dr Craig Depree is the principal water quality scientist at Dairy NZ and gave evidence on behalf of Dairy NZ and Fonterra.

⁴⁴ Dr Scarsbrook EIC from [132], by reference to Andrew Hughes *Waikato River suspended sediment: loads, sources & sinks* (Waikato Regional Council, Technical Report 2018/65, May 2015).

⁴⁵ Dr Scarsbrook EIC from [137].

⁴⁶ Mr Pinnell closing submissions at [37].

[80] It will be essential that WRC provides the best available information on the indicative long-term reductions in loads of the four contaminants that could be required in each sub-catchment. This information is a necessary component of the catchment context required by the Farm Plan Regulations but should still be provided independently of any national regulatory requirements applicable at the time, prior to FEP preparation and/or consent applications being made. When responding to this interim decision, WRC is to state how it intends to address this requirement.

[81] Currently available information in the PC1 area is insufficient to enable the effects on the environment of individual diffuse discharges of any of the contaminants to be assessed. For that reason, PC1 requires the management of risks arising from such discharges occurring instead and, as it is the only way, is the most appropriate way to achieve the objectives of PC1 in the current circumstances. The risk-based approach was required in the Notified Version. Policy 4c of the Decisions Version and WRC's Final Proposal requires a risk-based approach to be taken to managing land use, including adaptive management, to reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens.

[82] Turning now to the more general management of diffuse discharges in New Zealand over the last 15 years or so, this has been directed towards addressing concerns about the high levels of nitrogen in dairy farm discharges. Nitrogen losses from individual farms were typically estimated using Overseer⁴⁷ as the starting point for controls in various regional plans around the country and PC1 was notified on that basis. There are no established ways for managing the other three primary contaminants in the same way, with the result that PC1 includes a much less specific policy and rule framework for managing them compared to nitrogen.

[83] Specific grounds of Fonterra's appeal included that the approach ignores the fact that the catchment faces water quality issues associated with sediment, phosphorus and *E. coli* that are just as (in fact in many places more) severe and more

⁴⁷ Overseer is a computer software model that estimates nutrient use and transfers and losses within a farm system, primarily nitrogen but also phosphorus.

challenging than those associated with nitrogen. The approach resulted in concerns of equity from the dairy industry and raised the question as to whether greater recognition of sediment losses is required, which we provide for in this decision to the extent reasonably practicable.

A6 Overarching issues

Consent activity status

[84] The gateway tools to be used to set resource consent activity status for farming and CVP activities was a predominant issue throughout the appeal process. The Notified Version required a Nitrogen Reference Point (**NRP**) to be established for the “property or enterprise”.⁴⁸ The NRP was the highest calculated nitrogen loss in the two financial years covering 2014/5 and 2015/6 except for CVP, which was to be the highest annual nitrogen loss rate in any year between 1 July 2006 and 1 July 2016. This applied to all properties undertaking farming and CVP activities with an area exceeding 20 ha. No property was allowed to exceed its NRP in the future and higher dischargers were required to reduce their discharges⁴⁹. Activity status for all types of existing land uses was permitted or controlled except where an activity did not comply with the conditions, standards or terms of the rules, when it became restricted discretionary.

[85] There was broad agreement among most parties to the appeals that the activity status should reflect the intensity of the land use activities, with low intensity uses being permitted, moderate intensity uses controlled so that consent must be granted, and high intensity uses being subject to a consent regime that allows consents to be granted or declined based on the particular circumstances.

[86] Appeals were lodged with the Court in June and July 2020. In August 2021, WRC notified the Court of the central government review that found shortcomings in Overseer’s modelling approach.⁵⁰ As Overseer was a core component of the

⁴⁸ Policy 2, where NRP means a nitrogen loss number kg N/ha/year derived using Overseer.

⁴⁹ Policy 1b.

⁵⁰ Memorandum of WRC dated 13 August 2021.

Notified PC1 policy and rule framework, WRC's view was that this was of considerable significance for resolution of the appeals. Its response was that Overseer was no longer an appropriate tool for use in PC1.

[87] Through the Council hearing process, different methods for determining consent activity status had been developed or proposed for dairy, drystock and CVP. The requirement to use Overseer to establish an NRP was proposed to be removed for all types of land use activities, except that the use of Overseer was retained for all dairy farming activities with a requirement to produce a NLLR instead of NRP. This gave rise to concerns among some parties, particularly Fonterra and DairyNZ that the different requirements for different land use activity types may or will result in inequitable treatment.

[88] The main issue remaining in dispute before the Court in relation to activity status was the drafting gate, or the numerical limit at which the activity status changed from permitted to controlled or controlled to restricted discretionary or discretionary, to be used for dairy farms. This revolved around whether Overseer continues to be an appropriate tool in view of its known limitations or whether an alternative based around Fonterra's NRS would be more appropriate.

[89] Resolving the future role of Overseer in PC1 and possible alternatives to it was a fundamental issue before, during and after the hearing, which we address in detail in Part E.

Clarity of plan provisions relating to improvements that must be achieved by individual activities to give effect to the objectives

[90] A number of different terms were used in different versions of PC1 and proposed in submissions to define what level of improvement was required, a number of which involved uncertainty and left significant scope for different interpretations as to what individual farms would be expected to do. The Notified Version required moderate and high-intensity farming activities to reduce their discharges to be proportionate to the amount of current discharges and to the scale of water quality improvement required in the sub-catchment which is a sound policy

approach, but “proportionate” was not defined. In addition, further controls applied to high intensity farming activities that could not reduce their nitrogen loss rate to below the 75th percentile value for dairy farming activities in a FMU.⁵¹ Neither the amount of a current discharge nor a 75th percentile value could be defined for individual farms with any certainty at the consent application stage, which presents serious difficulties for plan implementation.

[91] The provisions were amended in the Decisions Version to require an activity with a moderate nitrogen loss rate to demonstrate that it was already as low as practicable or would reduce to be as low as practicable over an appropriate specified period. Activities with high nitrogen loss rates were required to make “significant reductions”, which was not defined further. Other subjective wording used in different versions or proposed included “disproportionately large amount of sediment, phosphorus and microbial pathogens”, “significant or disproportionate”, “material increase” and “reduce the risks proportionately to the magnitude of the risks and where they are high, greater reductions are expected, which “shall be meaningful with respect to the size of the risk”.

[92] These and other terms did not provide the clarity necessary for plan provisions. The 75th percentile value, while supported by all parties, cannot be quantified with the certainty needed to form a limit above which resource consents could be declined because of uncertainties associated with Overseer and the NRS, as discussed later.

[93] This remained an issue of serious dispute through to the end of the appeal process and was the subject of various judicial conferences and submissions following the closing of the hearing.

Farm Environment Plans (FEPs)

⁵¹ Definition added to the Glossary.

[94] There was broad agreement among parties that FEPs will be the key tool for effecting change in farm management practices. Issues to be addressed associated with FEP included:

- (a) new nationally applicable Farm Plan Regulations introduced in June 2023 and changed significantly late in 2024, which we describe in Part B5;
- (b) content and whether separate types of FEP are required for permitted and consented activities, which we have determined is appropriate;
- (c) the avoidance of duplication between the requirements of PC1 and those of the Farm Plan Regulations; and
- (d) certification and auditing requirements.

[95] Resolving the FEP provisions of PC1 was particularly challenging. The FEP provisions in the Decisions Version initially required amendment to better align with the Resource Management (Freshwater Farm Plans) Regulations 2023, which came into force on 1 August 2023. These were promulgated in accordance with s 217M of Part 9A of the RMA. In accordance with s 47 of new Part 7 inserted into Schedule 1 of the RMA in the Resource Management (Freshwater and Other Matters) Amendment Act 2024 (**Freshwater Amendment Act**), s 9A ceased to apply from 25 October 2024. This required a further significant change to the provisions, which WRC submitted to the Court on 27 March 2025. We return to this in Part F21.

Tangata Whenua Ancestral Land

[96] Change of use of TWAL to allow higher intensity activities to be undertaken was provided for in all versions of PC1 as a non-complying activity. A less restrictive activity status was sought and became a matter of significant dispute.

Other land uses

[97] The primary issues to be addressed included the definitions of property and “single operating unit” and how the provisions would apply to the diverse activities

undertaken by Wairakei Pastoral Limited (**WPL**).⁵² While matters in dispute relating to CVP activities at the start of the Court process were largely agreed by the parties as the appeal progress progressed, the lack of any agreed method for monitoring nitrogen losses from such activities is a matter that still requires resolution.

Environmental considerations

[98] Overarching issues included:

- (a) the protection and restoration of lakes and wetlands, particularly the Whangamarino Wetland, was identified as priority by a number of parties and generally accepted by all parties;
- (b) provisions relating to the extent of fencing of and set-backs from waterbodies and requirements for riparian planting; and
- (c) ensuring there is a general improvement in farming practices that impact water quality.

Ensuring land users are aware that further contaminant reductions will be required in some catchments in the future

[99] Policy 10 identifies the need to prepare for further diffuse discharge reductions and any future management regime, “including potentially the allocation of diffuse discharges of contaminants” in subsequent regional plans by collecting information about existing discharges. As noted in Part A5, the provisions provide no meaningful guidance on the likely extent of future reductions in the four primary contaminants that might be required by individual land use activities in future plan changes. This results in uncertainties for farmers making important decisions about their future farm management and related investment decisions.

[100] While further information as required by Policy 10 will be needed before the extent of contaminant reductions can be determined, it will be important that as

⁵² Wairakei Pastoral Limited Notice of Appeal at [7f].

much guidance as possible is provided to affected land users before they prepare their FEPs and/or apply for resource consents.

A7 Areas of uncertainty

[101] Key uncertainties include by how much the four primary contaminants will need to be reduced in each sub-catchment to meet the objectives and how that might be achieved. At a more fine-grained level, information available in relation to a number of important aspects of the existing environment is limited in extent and/or of uncertain reliability. Examples of particular relevance include the lengths of different types of streams and the number of wetlands of different sizes, which are of relevance to fencing and riparian planting rules. The extent of mitigation measures already in place, what further mitigations might be possible without land use change and their practicability are largely unknown for planning purposes.

[102] There are no reliable and widely applicable tools for assessing nitrogen losses, with those that exist subject to variability of 30% to 50% for individual farms or possibly more, meaning there is limited up-to-date information available on farm-specific (including CVP) nitrogen losses. Even less certainty exists in terms of estimating reductions in the losses of other contaminants resulting from mitigation measures. There is currently no way to assess the effects of individual discharges on the environment. Despite significant environmental improvement programmes having been implemented over a number of years, parts of the river environments continue to degrade and the reasons are not fully understood. There is uncertainty and variability in the time it takes from when nitrogen is applied to land to when it reaches the receiving waters.

[103] We were presented with expert evidence on research undertaken in relation to different contaminant loss mitigation options, in particular riparian planting of water bodies, but with no assessment of their practicability and effectiveness in actual on-farm situations. The consistent evidence of farming witnesses based on their hands-on practical experiences of farm environments painted a different picture, requiring us to exercise considerable caution in the way such evidence is applied when making decisions on what are effectively region-wide plan provisions.

[104] The above limitations affect the reliance that can be placed on economic modelling estimates, which were based largely on models developed more than eight years ago using data that are now 13 years old. This is no reflection on the modellers, but it results in uncertainties about the robustness of s 32 evaluations under the RMA for use in 2025.

A8 Changes in national policy direction and guidance since the Council Decision on PC1 was notified

[105] We are required to make our decision in accordance with current statutory and regulatory requirements. In addition to the amendments to s 107 and s 9A of the RMA and the proposed amendment to s 70 referred to above, there were a significant number of changes to regulations and other relevant matters after the Council decision was notified and after appeals were lodged, which we address later in our decision. We address the five changes of greatest significance in Parts B2 to B6 respectively. These were:

- (a) National Policy Statement for Freshwater Management 2020 (**NPSFM**);
- (b) Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (amended 2022) (**NESFW**);
- (c) Resource Management (Stock Exclusion) Regulations 2020 (version as at 5 January 2023) (**Stock Exclusion Regulations**);
- (d) Resource Management (Freshwater Farm Plans) Regulations 2023 (**Farm Plan Regulations**); and
- (e) Resource Management (Freshwater and Other Matters) Amendment Act 2024 (**Freshwater Amendment Act**).

[106] In addition, prior to the Court hearings, other changes included:

- (a) An amendment to the National Policy Statement for Freshwater Management 2020 in February 2023;

(b) National Policy Statement for Highly Productive Land 2022 (**NPS-HPL**);
and

(c) Natural and Built Environment Act 2023 (**NBEA Act**) and the subsequent repeal of most of it.

[107] The Resource Management (Consenting and Other System Changes) Amendment Bill was introduced to Parliament on 9 December 2024, and will amend s 70 of the RMA, which will be necessary before permitted activities can be enabled in PC1. Based on advice from WRC, further amendments to s 107 will be required before consents can be granted for discharges of the four primary contaminants in sub-catchments.⁵³

[108] For completeness, we note that the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 are also currently being revised although it is not known when this will be completed.

[109] At the same time as the PC1 appeal process was underway, WRC commenced the Freshwater Policy Review process in accordance with the NPSFM 2020 and a full review of the Waikato Regional Coastal Plan (**WRCP**) was in progress. The proposed WRCP was publicly notified on 18 August 2023. Matters relating to the coastal environment were not in dispute in PC1.

[110] A recent decision of the Court of Appeal quashed cl 3.33 and Appendix 5 to the NPSFM, which relates to the Pukekohe specified vegetable growing area.⁵⁴

[111] The Ministry for the Environment (**MfE**) is developing a risk index tool for on-farm nutrient management that could help inform freshwater farm plans or resource consent processing as a part of a multi-evidence approach. We were advised in May 2022 that Phase one of the tool was on track to be available for use by the

⁵³ Memorandum dated 28 April 2024 from [14].

⁵⁴ *Muaūpoko Tribal Authority Inc v Minister for the Environment* [2023] NZCA 641.

end of 2022⁵⁵ and was anticipated to be relevant to matters relating to resource consent activity status. It is now expected to be released in June 2025.⁵⁶

[112] Developing a plan change in such a continually evolving regulatory framework was an immensely challenging task for the WRC and all parties submitting or lodging appeals in relation to PC1. It was equally challenging for the Court, particularly when significant changes to the RMA occurred late in 2024 and proposed new provisions responding to earlier amendments to Part 9A of the RMA were submitted on 27 March 2025. We addressed the changing environment by:

- (a) acknowledging that Te Ture Whaimana is the primary direction-setting document for the Waikato and Waipā Rivers and their catchments;
- (b) ensuring no inconsistency with the NPSFM, but not seeking to give effect to it as that is the role of the WRC; and
- (c) ensuring that PC1 stands alone to the extent possible, addresses the particular circumstances that exist in the PC1 area and best meets the requirements of s 32 of the RMA.

A9 The significance of PC1 and the importance of avoiding further delays in making it operative

[113] An independent review of the policy effectiveness of the then operative Regional Plan and Regional Coastal Plan was completed by GHD Limited in 2011. The report found that “[t]he most important matter to deal with is the regional plan approach to managing the effects of agriculture on water bodies. No other matters really match this in terms of urgency and importance”.⁵⁷ That was almost 14 years ago.

[114] Pastoral farming dominates the Waikato-Waipā catchment, particularly in the Upper Waikato FMU. Dr Scarsbrook gave evidence that there is a strong link

⁵⁵ MfE letter attached to Memorandum of WRC dated 3 May 2022.

⁵⁶ MfE website accessed 22 April 2025.

⁵⁷ Ms May EIC at [23].

between the extent and intensity of pastoral agriculture and degraded water quality. Levels of contaminants tend to increase with the extent and intensity of pastoral farming.⁵⁸

[115] Water quality trends along the mainstem of the Waikato River over the period 1991 to 2020⁵⁹ showed important improvements in concentrations of ammonia, chlorophyll *a* and total phosphorus. Conversely, important deteriorations occurred in *E. coli* and total nitrogen concentrations. Intensification of pastoral farming in the Waikato catchment was considered the most probable cause of the deterioration in total nitrogen concentrations in the river. The greatest levels of change occurred in the concentrations of *E. coli*, but NIWA was unable to identify clear reasons for the change.⁶⁰

[116] It is more than 12 years since work on the Notified Version of PC1 started. The time remaining to achieve the 2096 target date for restoring and protecting the Waikato and Waipā Rivers is likely to have reduced from the 80 years originally set to just over 70 years by the time PC1 becomes operative, at the earliest. For these and other reasons, there is a clear need for PC1 to be made operative with a minimum of further delays.

[117] Nevertheless, the uncertainties and complexities of the issues to be considered through the appeal process, coupled with the lack of clarity in numerous provisions, mean that care was and still is required. There is a need to minimise the potential for different interpretations of the PC1 provisions, for unforeseen consequences and for road-blocks to arise and to ensure that the provisions are as clear on their face, certain, workable, practicable, enforceable and equitable as possible in the circumstances. Further work remains to be done in these regards.

[118] An important further consideration is that the regulatory framework will change when PC1 becomes operative from one of enablement, or even a degree of

⁵⁸ Dr Scarsbrook EIC at [19].

⁵⁹ Dr Scarsbrook at [86] by reference to WN (Bill) Vant *Trends in river water quality in the Waikato Region, 1991-2020* (WRC, Internal Report 2021/16, September 2021).

⁶⁰ Dr Scarsbrook, EIC at [87] and [101].

encouragement of farming activities with limited consideration of or controls on their associated diffuse discharges, to one requiring much more stringent controls on many activities. The scale and significance of the social and economic consequences of this change on the farmers and growers, their families, staff and communities are not well understood but can be expected to be significant.

[119] While there is an understandable desire for environmental improvements in water quality to be achieved as soon as possible, this will need to be tempered by a recognition of the significant social and economic consequences. In the interests of fairness to all parties, realistic implementation timeframes need to be set in PC1, which is consistent with Te Ture Whaimana's acknowledgement of an aspirational date of 2096 to achieve the objectives. Pragmatism will be needed when determining the most appropriate way to meet the objectives and finalising the provisions of PC1.

A10 Structure of this decision

[120] The next three parts of this decision provide general background information relating to the planning framework, the catchment area over which PC1 applies and the Court process.

[121] We then address the primary issue in dispute through the appeal process, which was whether Overseer or a NRS or both should be used as the most appropriate drafting gate and decision support tool for managing nitrogen and determining activity status for dairy farms. Strong views were held by parties on both sides of the dispute and, despite a comprehensive evaluation process over a period of approximately 18 months, no agreement was reached. Our determination will be critical to the effectiveness and success of PC1 and we considered its significance to be such that it needed to be addressed first in our decision. We describe the issues and process followed in considerable detail in Part E.

[122] We then address the many other issues in dispute in Part F, after providing further background of relevance to them.

PART B The planning framework

B1 Resource Management Act 1991

[123] PC1 was prepared in accordance with s 65 and Schedule 1 RMA.

B2 National Policy Statement for Freshwater Management (NPSFM)

[124] At the time PC1 was notified it had to give effect to the NPSFM 2014. Ms May noted that WRC has a historic policy framework that does not fully give effect to the NPSFM 2014 with regard to water quality management.⁶¹

[125] Since the date of notification, two subsequent versions came into effect in 2017 and 2020 and a further amendment took effect in February 2023. WRC was required to publicly notify a freshwater planning instrument to give effect to the NPSFM 2020 by 31 December 2024. However, the Fresh Water Amendment Act requires that a new regional plan giving effect to the NPSFM 2020 must not be notified earlier than the sooner of the date on which a new national policy statement for freshwater management replacing the NPSFM 2020 is published or 31 December 2025.⁶²

[126] It is WRC's role to give effect to the NPSFM in whatever form it takes and it is outside the scope of PC1 to attempt to do so. As noted above, the approach taken by the Court was to ensure no inconsistency with the current version.

[127] The NPSFM 2020 required WRC to make changes to its regional policies and plans to incorporate the following provisions without using the Schedule 1 process of the RMA, in accordance with s 55(2A) of the RMA:

(a) clause 3.22(1) (Natural inland wetlands)

(b) clause 3.24(1) (Rivers)

⁶¹ Ms May EIC at [18].

⁶² Subject to an exemption in accordance with clause 42 of Schedule 12, subsection (4A).

(c) clause 3.26(1) (Fish passage).

[128] WRC incorporated the required policies into the WRP in June 2021 in accordance with s 55(2A) of the RMA⁶³ and are now operative.

[129] The Freshwater Amendment Act also amended s 104 of the RMA by inserting 104(2E) as follows:

When considering an application and any submissions received, a consent authority must not have regard to clause 1.3(5) or 2.1 of the NPSFM 2020 (which relates to the hierarchy of obligations in the NPSFM 2020).

[130] A similar amendment was included in relation to Schedule 4 of the RMA.

[131] Further, as noted in Part A5, a recent decision of the Court of Appeal, quashed clause 3.33 of and Appendix 5 to the NPSFM, which relates to the Pukekohe specified vegetable growing area.⁶⁴

B3 Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (amended 2022) (NESFW)

[132] These regulations came into force on 3 September 2020. The standards regulate activities that pose risks to the health of freshwater and freshwater ecosystems. PC1 must not contain a rule that duplicates or conflicts with the provisions of the standards.⁶⁵ A regional rule or resource consent may be more stringent than these regulations.⁶⁶

[133] Subpart 2 of Part 2 of the standards for farming activities sets out temporary standards for agricultural intensification of farms and conversion of plantation forestry to pastoral activities. These apply until WRC has publicly notified the amendments required to give effect to the NPSFM 2020. We do not consider the

⁶³ Mr McAuliffe EIC at [31].

⁶⁴ *Muaupoko Tribal Authority Inc v Minister for the Environment* [2023] NZCA 641.

⁶⁵ RMA, s 44A.

⁶⁶ RMA, s 43B and NESFW at 6(1).

provisions materially affect our decision relating to PC1 and we do not refer to them further in this decision.

[134] The Freshwater Amendment Act replaced Subpart 3 of the NESFW relating to intensive winter grazing and critical source areas as follows:

Subpart 3—Intensive winter grazing

26 Minimum setback for land used for intensive winter grazing

An area of land that is used for intensive winter grazing on a farm must be located at least 5 m away from the bed of any river, lake, wetland, or drain (regardless of whether there is any water in it at the time).

27 Critical source area

The following requirements apply in relation to any critical source area that is within, or adjacent to, any area of land that is used for intensive winter grazing:

- (a) the critical source area must not be grazed; and
- (b) vegetation must be maintained as ground cover over all of the critical source area; and
- (c) maintaining that vegetation must not include cultivation or harvesting of annual forage crops.
- (d) Revoke regulation 45D(7) and (8).

[135] Other provisions relate primarily to the application of synthetic nitrogen fertiliser to pastoral land, natural inland wetlands and different activities that might be associated with them and fish passage.

B4 Resource Management (Stock Exclusion) Regulations 2020

[136] These regulations came into force on 3 September 2020 and apply to a person who owns or controls stock. They were amended in the Freshwater Amendment Act including by revoking the definition of low slope land and removing the requirement relating to stock exclusion on low slope land. The updated regulations of particular relevance to PC1 are:

- (a) Regulation 8 requires that stock must not be allowed closer than 3 m to the edge of the bed of a lake or wide river (*3-metre setback rule*), except in specified circumstances;

- (b) Regulation 12 requires that beef cattle that are intensively grazing on any terrain must be excluded from lakes and wide rivers (except when crossing);
- (c) Regulations 16 and 17 require that all stock must be excluded from any natural wetland that is identified in a regional or district plan or a regional policy statement that is operative on the commencement date and from any natural wetland that supports a population of threatened species as described in the compulsory value for threatened species in the NPSFM 2020.

[137] Regulation 19 provides that a more stringent rule in a regional plan prevails over a provision in the regulations that relates to the same matter. We address PC1-specific provisions relating to stock exclusion on sloping land in Parts F11 and F14.

B5 Resource Management (Freshwater Farm Plans) Regulations 2023 and inter-relationships with Farm Environment Plans required by PC1

[138] The regulations came into force on 1 August 2023. FEP were legal requirements under Part 9A of the RMA. Their purpose⁶⁷ was to better control the adverse effects of farming on freshwater and freshwater ecosystems within specified districts, regions, or parts of New Zealand through the use of certified freshwater farm plans. The Regulations provided further requirements for the contents of freshwater farm plans for the purposes of Part 9A of the Act.

[139] The regulations came into effect in the Waipā FMU on 1 August 2023 and in the Lower, Middle and Upper Waikato FMUs on 1 August 2024. FFPs were required to be submitted for certification by 1 February 2025 in the Waipā FMU and 1 January 2026 in the others.⁶⁸

[140] On 25 October 2024, the Freshwater Amendment Act came into force and revoked the Resource Management (Application of Part 9A—Freshwater Farm

⁶⁷ RMA, s 217A.

⁶⁸ Freshwater Farm Plans | Waikato Regional Council.

Plans) Order 2023 so that Part 9A of the RMA ceases to apply, meaning that farms in the Waikato Region are no longer required to submit FFPs for certification by the above dates. If any have been certified or audited, they will cease to have effect.⁶⁹

[141] It is unclear if or when the regulations will apply at some time in the future, but the 2023 regulations required that a farm must have a certified FFP which applies to the entire farm if:

- (a) 20 or more hectares of the farm is arable land use; or
- (b) 5 or more hectares of the farm is horticultural land use; or
- (c) 20 or more hectares of the farm is pastoral land use; or
- (d) a prescribed area of the farm is other agricultural land use prescribed in regulations made under s 217M(1)(b); or
- (e) 20 or more hectares of the farm is a combination of any 2 or more of the land uses described above.

[142] A farm operator of a farm that is required to have a certified FFP must:

- (a) prepare a FFP in accordance with Part 9A of the RMA and the regulations; and
- (b) submit the plan to a certifier for certification; and
- (c) ensure that the farm operates in compliance with the certified FFP; and
- (d) arrange for the farm to be audited in accordance with this Part and regulations for compliance with the certified FFP.

⁶⁹ New Part 7 inserted into Schedule 12, s 47(2).

[143] PC1 requires FEPs to be prepared, which are also intended to manage the effects of farming activities on the environment but with different requirements to FFPs. FEPs are required for farms operating under resource consents and under permitted activity Rule 3.11.4.3. Small and very low intensity farming activities with winter stocking rates of less than 12 stock units are not required to prepare FEPs.

[144] WRC provided supplementary evidence in June 2023 proposing changes to address misalignment between the farm plan regimes under PC1 and the Regulations.⁷⁰ The effect of the proposed amendments was to require FEPs to first satisfy the requirements of Part 9A and the Regulations, and then to satisfy the additional requirements in PC1 for FEPs. The amendments were intended to ensure that farmers, certifiers, auditors and regulators have a clearly integrated set of provisions for FEPs.

[145] As Part 9A no longer applies, WRC advised the Court by memorandum dated 19 November 2024 that it considered further amendments were required to reverse the changes proposed in the supplementary evidence so that the PC1 regime for FEPs operates independently and proposed a programme to do this.⁷¹ The Court accepted the proposal and the proposed amendments were provided to the Court on 27 March 2025. We discuss them further in Part F21.

[146] We note that a number of concerns were raised during the appeals process about the differences between the requirements of the Regulations and PC1 and how they would work together, including the need to avoid duplication of certification and audit procedures and inter-relationships with resource consent processes and term of consents. As any concerns will not need to be addressed unless and until any future requirement to comply with the Regulations takes effect, we do not consider most of them further in this decision.

[147] We note for the avoidance of doubt that s 68(2) of the RMA provides for regulations to prevail over a rule in a regional plan and the Farm Plan Regulations

⁷⁰ Mr Smith EIC at [40].

⁷¹ Memorandum of WRC dated 19 November 2024.

do not provide for a rule in a regional plan to be more stringent, which could require amendments to be made to the PC1 provisions in due course.

[148] All FEPs for permitted activities must be submitted to WRC within one year of PC1 becoming operative.⁷² Some parties were concerned about the time that will elapse before these FEPs will be certified by WRC in some sub-catchments. Any such delays will occur in less sensitive catchments and the activities will need to be undertaken in accordance with the submitted FEPs in the meantime. The concern could be addressed by relying on certification by industry organisations.

B6 Operative Waikato Regional Policy Statement (WRPS)

[149] We considered all relevant objectives and policies of the WRPS but do not reproduce them in our decision.

B7 Operative Waikato Regional Plan (WRP)

[150] We also considered all relevant objectives and policies of the WRP but do not reproduce them in our decision.

B8 Other statutory and regulatory requirements

[151] We considered other regulatory changes summarised in Part A8 to the extent relevant. While we note that significant further changes have been signalled following the change of Government, until they are finalised, we cannot take them into account.

B9 Iwi Management Plans

[152] Iwi management plans in the Waikato and Waipā River catchments include the following:⁷³

⁷² Memorandum of WRC dated 27 March 2025, Annexure C, Rule 3.11.4.3.7.d.

⁷³ Proposed Waikato Regional Plan Change 1, Waikato and Waipā River Catchments Section 32 Evaluation Report, page 15 (A.2.3.5 Iwi Management Plans)

- (a) Ngāti Tūwharetoa Environmental Iwi Management Plan 2003;
- (b) Ko Tā Maniapoto Mahere Taiao; Maniapoto Environmental Management Plan 2016;
- (c) He Mahere Ika; Maniapoto Upper Waipā River Fisheries Plan 2015;
- (d) Te Rautaki Taiao a Raukawa; Raukawa Environmental Management Plan 2015;
- (e) Raukawa Fisheries Plan 2012;
- (f) Waikato-Tainui Environmental Management Plan; Tai Timu Tai Pari, Tai Ao 2013;
- (g) Te Aranga Ake i te Taimahatanga – Rising above the Mist – Ngāi Tahu – Ngāti Whaoa Iwi Environmental Management Plan 2013;
- (h) Te Arawa River Iwi Trust Environmental Management Plan 2015; and
- (i) Te Arawa River Iwi Trust Fisheries Plan 2015.

[153] We have not reproduced relevant parts in this decision.

[154] A report on factors affecting food gathering, swimming and special characteristics on the Waikato and Waipā Rivers and their tributaries from a Māori perspective was prepared in 2015 for the Healthy Rivers – Waiora whakapaipai project.⁷⁴ The report outlined that:⁷⁵

Most river iwi have prepared or are in the process of completing iwi management plans that set out their values, principles and views with regard to a range of environmental matters including water bodies. These plans should be read in conjunction with this report. This report identified several areas where there was a lack of information or relevant data. This included:

⁷⁴ Mātauranga Māori Knowledge Networks Report – Te Onewa Consultants, July 2015.

⁷⁵ Mātauranga Māori Knowledge Networks Report, at 4.

1. Information regarding a range of lakes;
2. The location and condition of popular swimming places;
3. The location and condition of wai tapu and wāhi tapu, and four specific measures and limits for mātauranga Māori or cultural attributes/indicators.

[155] The executive summary of the report stated that the river iwi identified numerous mahinga kai species as being significant and contributing to environmental, social and cultural wellbeing. The decline in numbers and quality of mahinga kai species was recognised as being a significant concern. River iwi also identified a number of threats to the swimability of rivers, including poor water quality (algae blooms, bacteria, presence of heavy metals and increased sediment levels), loss of access, hydro dams affecting flow, presence of weeds and bank erosion.⁷⁶

[156] There was no evidence presented by Iwi of Hauraki about their management plans for the Waikato River and Waipā River catchments. Given the status of negotiations regarding the settlement of the iwi of Hauraki claims this is unsurprising. As with the iwi of Hauraki, there was no evidence led by CNI iwi about specific management plans for the Waikato and Waipā catchments. However, CNI iwi indicated that they are supportive and committed to the objectives and strategies outlined in Te Ture Whaimana as well as the protection and restoration of the health and wellbeing of the awa.⁷⁷

B10 Changes made to s 107 and proposed to be made to s 70 of the RMA as the Court was finalising its decision on PC1 and effects on timing

[157] During 2024, two decisions of the High Court relating to ss 107 and 70 of the RMA were issued.⁷⁸ The matters of appeal addressed in the decisions were similar to matters of relevance in PC1, but not the subject of any appeals in PC1. In view of the potential significance of the matters of law addressed in the decisions, and because our decision must be based on the law at the time of the decision, we

⁷⁶ Mātauranga Māori Knowledge Networks Report, at XXXVII.

⁷⁷ CNI Iwi Land Management Limited Notice of Appeal at 3.

⁷⁸ *Southland Regional Council v Southland Fish and Game Council* [2024] NZCA 499 and *Environmental Law Initiative v Canterbury Regional Council* [2024] NZHC 612.

issued a minute dated 29 November 2024 inviting parties to comment before we issued our interim decision. We start by providing brief backgrounds to the High Court decisions.

Section 107

[158] The Environmental Law Initiative (**ELI**)⁷⁹ applied to the High Court to judicially review a decision of an independent hearings commissioner acting under delegated authority from the Canterbury Regional Council. Ashburton Lyndhurst Irrigation Ltd had applied for a resource consent to discharge nutrients onto or into land from farming activities between the Hakatere/Ashburton and Rakaia Rivers and consent was granted.

[159] Briefly, Mander J concluded that:

[76] The Commissioner found past and current land use practices in the scheme Discharge Area have contributed to “*significant adverse cumulative effects on aquatic life in the lower reaches of the Hakatere/Ashburton River and hapua*”. That evidential conclusion regarding the effects of the existing discharge permit cannot be reconciled with compliance with s 107(1). The Commissioner herself recognised that a continuation of this state of affairs would prevent the grant of a discharge permit because of the s 107 prohibition.

[160] The decision of the Council granting the discharge consent was set aside and the application remitted back to the Council for reconsideration.⁸⁰

[161] The decision is subject to an appeal to the Court of Appeal.⁸¹

[162] The Freshwater Amendment Act took effect on 23 October 2024 and included an amendment to s 107 of the RMA, which we anticipate was in response

⁷⁹ ELI is an incorporated charitable trust board. Its charitable purposes are stated as including the preservation, conservation, protection and enhancement of natural and cultural resources in order to prevent their harm, misuse, depletion, unsustainable use and destruction. ELI describes its main activities as researching and reviewing environmental legislation and policy, and funding scientific research. It states its specialist areas include law and policy affecting New Zealand’s wetlands and freshwater.

⁸⁰ *Environmental Law Initiative v Canterbury Regional Council* [2024] NZHC 612 at [216].

⁸¹ *Southland Regional Council v Southland Fish and Game Council* [2024] NZCA 499 at [25].

to Mander J's decision. The following new s 107(2A) was inserted in the RMA by way of the Freshwater Amendment Act.

A consent authority may grant a discharge permit or a coastal permit to do something that would otherwise contravene section 15 or 15A that may allow the effects described in subsection (1)(g) if the consent authority—

- (a) is satisfied that, at the time of granting, there are already effects described in subsection (1)(g) in the receiving waters; and
- (b) imposes conditions on the permit; and
- (c) is satisfied that those conditions will contribute to a reduction of the effects described in subsection (1)(g) over the duration of the permit.

Section 70

[163] In *Federated Farmers Southland v Southland Regional Council*,⁸² Dunningham J considered whether s 70 applied to both point source and diffuse discharges, whether the Environment Court was correct in saying that it did and whether the Court was right to conclude that s 70 could be contravened by Rule 24 in the proposed Southland Plan. Rule 24 relates to incidental discharges from farming and, briefly, required that to be permitted, an activity had to ensure that the requirements of s 70(1)(c) to (g)⁸³ are met. The Environment Court had found that the discharge of contaminants incidental to farming and other activities is resulting in significant adverse effects on aquatic life.

[164] We do not consider it necessary to set out the reasons, but Dunningham J confirmed that she was satisfied that the Environment Court was correct when it said that s 70 applies to the type of discharges that Rule 24 authorises.

[165] A further question arose as to whether the Environment Court had jurisdiction to approve Rule 24. This was said to arise because the appellants, Forest and Bird and Southland Fish and Game Council (**Fish and Game**), submitted that

⁸² *Federated Farmers Southland v Southland Regional Council* [2024] NZHC 726.

⁸³ (c) the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials:
 (d) any conspicuous change in the colour or visual clarity;
 (e) any emission of objectionable odour;
 (f) the rendering of fresh water unsuitable for consumption by farm animals;
 (g) any significant adverse effects on aquatic life.

the Court did not have jurisdiction to confirm Rule 24 as it stood because the Rule permitted the discharge of contaminants in contravention of s 70 of the RMA. The High Court recorded that:⁸⁴

The appellants say that the Environment Court had no scope to do that as no party challenged the permitted activity status of the activities described in Rule 24.

[166] Dunningham J recorded that all parties supported a permitted activity rule, including Fish and Game and Forest and Bird who sought that an additional permitted activity condition be included.

[167] Her Honour confirmed and all parties agreed “that the appeals do not provide scope to approve Rule 24 *in toto*, nor is there scope to change the activity status”.⁸⁵ Again, we do not consider it necessary to set out the reasons but she referred to *Waitakere City Council v Estate Homes Ltd*,⁸⁶ in which the Supreme Court said the Environment Court is charged with considering the matter that was before the Council, and its decision, “to the extent that it is in issue on appeal”.⁸⁷

[168] Southland Regional Council appealed the High Court decision to the Court of Appeal. In its decision dated 3 October 2024,⁸⁸ Whata J for the Court recorded that the Council says:⁸⁹

... that this rule complies with s 70 because it only permits activities that do not give rise to the effects listed in s 70(1)(c)–(g) (the specified effects). Both the Environment Court and the High Court disagree, observing in short that SRC must first show, **before** the rule is included in the regional plan, that none of the specified effects will likely arise in the receiving waters.

(our emphasis)

[169] Whata J for the Court then stated:⁹⁰

⁸⁴ *Federated Farmers Southland v Southland Regional Council* [2024] NZHC 726, at [39].

⁸⁵ *Federated Farmers Southland v Southland Regional Council* at [59].

⁸⁶ *Waitakere City Council v Estate Homes Ltd* [2006] NZSC 112.

⁸⁷ *Waitakere City Council v Estate Homes Ltd* at [29].

⁸⁸ *Southland Regional Council v Southland Fish and Game Council* [2024] NZCA 499.

⁸⁹ *Southland Regional Council v Southland Fish and Game Council* at [2].

⁹⁰ *Southland Regional Council v Southland Fish and Game Council* at [19] and [23].

... the central issue is whether the s 70 threshold criteria for a permitted activity rule have been met.

...

Given this statutory context, it seems to us beyond serious dispute that SRC had to be satisfied that proposed Rule 24 would operationally ensure the permitted activities would not likely give rise to the specified effects on receiving waters after reasonable mixing. Section 70 mandates an outcome and that outcome must be assured by the proposed rule **before** it is included in the regional plan. Plainly, whether that outcome is achieved by the rule, whatever its precise terms, is an evaluative matter upon which SRC must be satisfied, before the rule's inclusion. There may be cases where a rule of this type will be self-evidently effective. Nothing in this judgment should be taken to presume that a particular form or type of evaluation is needed. But in the present case the Environment Court is not presently satisfied that the mandated outcome will be achieved and considers that further evidence is needed. We can see no basis for reaching a different view.

[our emphasis]

[170] The appeal was dismissed.

Evidence relating to the effects on aquatic life in the PC1 area

[171] While evidence was not presented in relation to whether the requirements of either ss 107 or 70 were met, the following is a brief summary of some of the evidence that requires consideration:

- (a) Dr Scarsbrook stated⁹¹ that the surface water quality of the Waikato-Waipā River catchment can be characterised as generally degraded and that water quality is generally excellent in the upper reaches of the Waikato River but becomes degraded with increasing distance downstream. He also stated that:
 - There is a strong link between the extent and intensity of pastoral agriculture and degraded water quality. Levels of contaminants tend to increase with the extent and intensity of pastoral agriculture.
 - By the time the river reaches the Lower Waikato FMU, water quality attributes are in C or D bands (D being below the national bottom-line).
 - Lakes are generally of poor water quality, with most peat and riverine lakes having D band attribute states for Total N (TN), Total P (TP) and chlorophyll *a* (i.e., below the national bottom line).

⁹¹ Dr Scarsbrook EIC at [18], [19] and [40].

- (b) Dr Ausseil stated that Total Nitrogen (**TN**) seems to have continued degrading across the Waikato catchment since PC1 notification.
- (c) Dr Adam Daniel, who is the Fisheries Manager for the Auckland/Waikato Fish and Game at the Hamilton office, stated that trout do not spawn in the lower Waikato River due to the degraded water quality in many of the tributary streams;⁹²
- (d) Mr David Klee, who is the Game Bird Manager for the Auckland/Waikato Fish and Game Council stated that:⁹³
- Most shallow lakes in the Region have gone through trophic shifts from clear-water macrophyte to turbid algal dominated systems.
 - Recent SOE monitoring data indicates that almost all monitored shallow lakes in the region are below national bottom lines (NPSFM 2020) for at least one attribute.
 - Sediment deposition rates in the Whangamarino wetland are at levels which can seriously impact aquatic invertebrate production.
 - In my opinion, high levels of sediment accumulation are having a deleterious impact on invertebrate community composition and abundance within parts of Whangamarino Wetland.
- (e) Dr Hugh Robertson, who is a principal science advisor employed by the Department of Conservation and New Zealand's National Science and Technical Focal Point for the Ramsar Convention on Wetlands stated in relation to the Whangamarino Wetland that a "... significant 'blackwater' event occurred (very low dissolved oxygen levels) that was influenced by the very poor-quality water (high sediment, nitrogen and algal concentration) flowing into the wetland receiving environment".

[172] Based on the above evidence, the Court cannot conclude that the discharge of nitrogen and phosphorus, in particular, or sediment or microbial pathogens from farming and CVP activities in the PC1 area would not, after reasonable mixing, either by themselves or in combination with the same, similar or other

⁹² Dr Daniel EIC at [3.3.1].

⁹³ Mr Klee EIC at [3.9], [9.7], [6.9] and [6.11].

contaminants, result in any significant adverse effects on aquatic life or some of the other criteria set out in ss 107 and 70. That is not to say that significant adverse effects will occur from such discharges in all parts of the PC1 area but it appears unlikely to us that such effects would not be occurring in the Whangamarino Wetland and some lake catchments, as examples. Sub-catchments where significant adverse effects are occurring will need to be identified before resource consents can be granted.

Development of provisions relating to permitted activities in PC1

[173] In the Notified Version, Policy 1a was “[e]nabling activities with a low level of contaminant discharge to water bodies provided those discharges do not increase”. Permitted activity Rule 3.11.5.2 required no increase in stocking rate or the NRP, depending in whether the property was less than or equal to or greater than 20 ha respectively.

[174] At the Council hearing, the Hearing Panel considered s 70 and was persuaded by a submission from Federated Farmers that the “*receiving waters*” did not extend downstream from a diffuse discharge⁹⁴ and “will apply section 70 on that basis”. The Panel stated it: “is satisfied that the permitted activity rules that we have recommended provide for farming at a scale that would ‘satisfy’ section 70 of the RMA”.

[175] In the Decisions Version, Policy 1 required “...a general improvement in farming practice to reduce diffuse discharges” of the four primary contaminants and enabled “through permitted activity rules, low intensity farming and horticultural activities (not including commercial vegetable production), with low risk of diffuse discharge of contaminants to water bodies ...”. Permitted activity Rule 3.11.4.3 set a maximum winter stocking rate required for drystock farming and for dairy farming activities, the NLLR had to be low in accordance with limits set out in Table 1 of Schedule B. The rule also required compliance with minimum farming standards set

⁹⁴ Recommendation Report at [451], by reference to Board of Inquiry decision on the King Salmon application in which the Boards stated that “*receiving waters*” are “*well understood to be the waters at the point of discharge*”.

out in Schedule C and with standards set out in Schedule D1 and the preparation of a FEP in accordance with Schedule D1.

[176] There were no appeals relating to the application of s 70 of the RMA to the PC1 provisions.

[177] The provisions relating to the NLLR remained largely unchanged in WRC's Final Proposal, including the requirement for a general improvement in farming practice to reduce discharges and for stocking rate and NLLR limits not to be exceeded. Further provisions that would allow the use of the NRS as an alternative to the NLLR were included, without addressing issues of scope.

Submissions from parties in response to the Court's minute dated 29 November 2024

[178] The Court issued the minute because of the potential significance of the issues relating the ss 107 and 70 for PC1 and considered it important that parties had the opportunity to comment before we issued our interim decision. WRC agreed with Federated Farmers and Beef and Lamb (**the Joint Farming Parties**) that PC1 is consistent with s 107(2A) and amendments to PC1 are not required as a result of the new subsection (2A). Horticulture NZ Limited (**HortNZ**) also agreed.⁹⁵

[179] WRC also agreed with the Joint Farming Parties that further evidence (and potentially a hearing) may be required if the Court has concerns about s 70 constraining the permitted activity rules in PC1 as the Court is required to determine the most appropriate provisions for PC1 on the basis of the legislation as it applies at the time of its decision.

[180] However, the submissions noted that the Resource Management (Consenting and Other System Changes) Amendment Bill was introduced to Parliament on 9 December 2024, and the Government's stated intention is to pass the Bill into law by mid-2025. The Bill as introduced proposes amendments similar

⁹⁵ Memorandum of HortNZ dated 13 December 2024.

to those previously enacted in relation to s 107. Clause 15 of the Bill proposes to amend s 70 as follows:

- (1) In section 70(1), replace “Before” with “Except as provided in subsection (3), before”.
- (2) After section 70(2), insert:
- (3) A regional council may include in a regional plan a rule that allows as a permitted activity a discharge described in subsection (1)(a) or (b) that may allow the effects described in subsection (1)(g) if—
 - (a) The decision-maker is satisfied that there are already significant adverse effects on aquatic life in the receiving waters;
 - (b) The rule includes standards for the permitted activity; and
 - (c) The decision-maker is satisfied that those standards will contribute to a reduction of significant adverse effects on aquatic life over a period of time specified in the rule.

[181] WRC considered it problematic for the Court to anticipate or presume that s 70 has changed or will change when it makes its interim decision. It also considered it would be inefficient to proceed with an evidence process based on the current version of s 70 in circumstances where there is a Bill before Parliament to amend s 70 and requested that the Court make an interim decision on as much of PC1 as possible, while deferring matters affected by s 70 until the Parliamentary process has concluded.

[182] The Joint Farming Parties sought that the Court adopt a pragmatic approach to PC1, which could involve issuing an interim decision only on those parts of PC1 which do not relate to permitted activity rules, while the law relating to s 70 is clarified. The parties noted that even if there was sufficient evidence to conclude that certain activities cannot be authorised as a permitted activity, there are likely to be scope limitations in that no party sought wholesale changes to permitted activity rules in PC1. They also noted the significant administrative hurdle and burden which would arise from a requirement for all farms (or significantly more farms) to obtain consent, especially in circumstances where the primary tools for achieving reductions (minimum standards and farm plans) would be the same regardless of whether the activity is permitted or consented.

[183] HortNZ sought a short deferral of any court determination relating to s 70. WPL agreed with and endorsed the response filed by the Joint Farming Parties.

[184] In relation to s 70, Fish and Game agreed with WRC, the Joint Farming Parties and HortNZ that an exchange of further evidence and/or a s 293 process would be required in light of the Court of Appeal’s decision in *Southland Regional Council v Southland Fish and Game Council*.⁹⁶ It does not oppose the submissions of these parties that a more efficient way forward may be to defer the Court’s Interim decision on matters where s 70 is at issue, given the recent introduction of the Resource Management (Consenting and Other System Changes) Amendment Bill.⁹⁷

[185] In relation to s 107, Fish and Game submitted that the regime put in place by PC1 must enable *reductions* to occur within the duration of consents granted. For lakes and the Whangamarino wetland catchments, it considered there is a lack of evidence before the Court that the proposed controlled activity status for ‘high leachers’ and for farms in the Whangamarino catchment would enable consenting in accordance with s 107(2A):⁹⁸

Under the new s107(2A) there is doubt as to whether changes sought by parties to the Decisions Versions’ controlled activity status would enable the consent authority to be satisfied that consent conditions contribute to a reduction of the effects described in subsection (1)(g) “*over the duration of the permit*” for these waterbodies.

[186] We address the issue of reductions that are required to occur in contaminant discharges within the duration of consents granted in part below and return to it in Parts E18 and E22.

[187] Fish and Game referred to the evidence of Ms Marr that there should be an ability to decline consents because it is necessary to “enquire into” whether farming

⁹⁶ [2024] NZCA 499.

⁹⁷ Memorandum of Fish and Game dated 13 December 2024.

⁹⁸ Memorandum of Fish and Game dated 13 December 2024, [7].

activities are appropriate, submitting that under a controlled rule, WRC could not grant a consent for different activity to the one applied for:⁹⁹

This raises a question whether a controlled activity could reserve as matters of control, more fundamental matters relating to farming type e.g. stock numbers/scale or intensity of the operation.

[188] Forest and Bird advised the Court that it supported the position adopted by Fish and Game.

[189] The River Iwi submitted that:¹⁰⁰

... in the interests of continuing to make progress and, so far as reasonably possible, bringing some certainty to other aspects of the Court's decision on PC1, the River Iwi endorse the request of the Joint Farming Parties and WRC for the Court to issue an interim decision on as much of PC1 as possible, while deferring a final decision on matters affected by section 70 until the Parliamentary process has concluded.

Submissions from parties in response to the Court's minute dated 13 March 2025

[190] Prior to finalising this interim decision, we advised parties that we would not make any final determinations in relation to s 70 in the decision and invited parties to comment on whether they saw any issues arising from s 107(2A) and s 70 that would need determination by the Court.¹⁰¹ WRC was the only party submitting and, in relation to s 107(2A), submitted:

... the provisions of PC1 enable, and where necessary require, the imposition of conditions that reduce adverse effects over the duration of the permit and amendments to PC1 were not required as a result of the new subsection (2A).

⁹⁹ Citing, among other cases *Aqua King Ltd v Marlborough District Council* (1998) 4 ELRNZ 385 where the application was for marine farming for "standard long line" methods and it was held that altering the structures to subsurface was a fundamental change to the proposal (the type of structure used being a fundamental aspect of a marine farm), it could not impose a condition requiring that the structure be "subsurface" when the application had been for a surface structure, because that in effect would decline consent;

¹⁰⁰ Memorandum dated 17 December 2024.

¹⁰¹ Minute dated 13 March 2025.

[191] We agree with that submission subject to satisfactory resolution of the matters raised in Part F9 relating to the monitoring of nitrogen reductions from CVP activities. It would assist the Court's understanding if WRC can advise if it currently has sufficient monitoring data to determine which sub-catchments will need to comply with the provisions of s 107(2A) and to any subsequent amendments that may be required to that section of the RMA for the reasons summarised in the following paragraph.

[192] WRC also submitted that while s 107(2A) provides a consenting pathway under subs (1)(g):

WRC considers that many Waikato Region waterways (or parts of them) may already be subject to conspicuous change in colour or visual clarity – under subsection (1)(d) – or are unsuitable for consumption by farm animals – under subsection (1)(f). This could conceivably prevent resource consent being granted, but it is a matter of statute and not something that can be addressed by the Court in determining appeals on PC1.

[193] WRC took no issue with the Court's proposed approach to addressing s 70, subject to it being subject to review once any changes become law. However, WRC noted that it saw the same issues arising in relation to s 70 and it does for s 107(2A). While we understand the concerns, they are not matters that can be addressed by the Court in this decision.

Implications of s 107 for our determination of PC1

[194] Based on the evidence referred to above relating to the effects on aquatic life in the PC1 area and any other relevant data available to WRC, it appears that significant adverse effects on aquatic life will be found occurring in the general locality of some activities for which consents will be applied for. In that case, s 107(2A) will apply and WRC must then be satisfied of the matters in s 107(2A)(a) and (c) so that the conditions imposed on the discharge permit will contribute to a reduction in effects on aquatic life. We observe here that s 107(2A) does not set how much of a reduction must be demonstrated, just that there is a reduction. This may present difficulties where the discharges are already as low as reasonably practicable, depending on the any further changes made to s 107.

[195] We are satisfied, in general, that this determination will be possible under Controlled Activity Rule 3.1.4.4. First, any applicant for a resource consent will be required to demonstrate a general improvement in farming practice to reduce diffuse discharges of the four primary contaminants in accordance with Policy 1a of the Decisions Version. In addition, they will be required to demonstrate that the risk of diffuse discharges to water is already as low as practicable given the current land use or will be reduced to be as low as practicable over an appropriate specified period in accordance with Policy 2b of WRC's Final Proposal, which we accept as the most appropriate way to meet the objectives. Further, a new policy setting out how the extent of mitigations required is to be determined is to be included in PC1 as discussed in Part E22. In combination, we are satisfied that the provisions of PC1 will enable sub-clauses (b) and (c) of s 107(2A) relating to significant effects on aquatic life to be met for activities consented as controlled activities. However, a new standard must be added to Rule 3.11.4.4 requiring compliance with the relevant policies. It may also be necessary to review the provisions depending on whether further amendments are made to s 107.

[196] We are satisfied that the condition of the controlled activity rule requiring a reduction in the risk of discharges of the four contaminants will be able to be met without requiring a fundamental change to the activity consented. We do not accept Fish and Game's submission that stock numbers and the scale or intensity of an operation represent a fundamental change to the nature of the operation sufficient to nullify the grant of consent. Such considerations are a normal part of farm management and an accepted component of managing adverse effects on the environment. For the same reason, we do not consider that compliance with s 107(2A) is a relevant matter when determining consent activity status, particularly compared to the other matters considered in our evaluation in Part E.

Implications of s 70 for our determination of PC1

[197] We have already indicated that the evidence does not enable us to conclude that the requirements of s 70(1) of the RMA would be met. While the Hearing Panel stated it: "is satisfied that the permitted activity rules that we have recommended

provide for farming at a scale that would ‘satisfy’ section 70 of the RMA”.¹⁰²

Dunningham J’s finding has shown that was incorrect.

[198] In view of Dunningham J’s finding that s 70 applies to diffuse discharges and confirmed by the Court of Appeal, the scope for the Court to consider the retention of permitted activities in PC1 in catchments where significant adverse effects on aquatic life are or are likely to be occurring, depends on there being submissions on the relevant provisions of the Notified Plan and appeals against the provisions of the Decisions Version. There were submissions on the Notified Plan opposing permitted activity status for farming activities with a FEP under a Certified Industry Scheme¹⁰³ because they did not meet the requirements of s 70¹⁰⁴ but none in relation to permitted activity status for small and low intensity farming activities or “other farming activities”.

[199] The Director General of Conservation (**Director General**) sought the retention of Policy 1 in her submission:

Enabling, through permitted activity rules, low intensity farming and horticultural activities (not including commercial vegetable production), with low risk of diffuse discharge of contaminants to water bodies, and requiring resource consents for all other activities...

[200] In their appeal, the Waikato and Waipā River Iwi sought the reduction of stock number thresholds in Rules 3.11.4.1 (small and low intensity farming) and 3.11.4.3 (low intensity farming) but did not challenge the retention of permitted activities.

[201] Neither Forest and Bird nor any of the other submitters pursued their submissions relating to Rule 3.11.4.3 in the Notified Version through an appeal. There was overall support by the parties for the permitted activity provisions in PC1 and no party sought their deletion.

¹⁰² Recommendation Report at [1640].

¹⁰³ DoC, Fish and Game, J Lawson, Oji Ltd and V and N van der Voorden.

¹⁰⁴ Section 42A Report at [795].

Our findings in relation to s 70

[202] We find that:

- (a) the available evidence does not enable us to determine if the effects on aquatic life in the receiving waters as a result of a permitted discharge, either by itself or in combination with the same, similar, or other contaminants, would or would not be significant in some parts of the PC1 catchment;
- (b) there is no scope for the Court to determine the issue, even if the evidence was available;
- (c) even if there was scope, we anticipate it would take at least four months and possibly longer to obtain, hear and determine the issue; and
- (d) that time frame would likely exceed the indicated time by which s 70 would be amended and the constraints on providing for permitted activities in the current version of s 70 could be removed.

[203] Our overall finding is that we should await the outcome of the legislative process before finalising our determination in relation to s 70.

[204] There was general support for this approach by parties and no stated opposition. We note that if a permitted pathway was not to be available, potentially an additional 2,800¹⁰⁵ individual farming activities (give or take) would require consents, which would add cost, result in delays and introduce a significant administration burden with limited, if any, environmental benefit.

¹⁰⁵ Part C3 of this decision.

[205] As this Court has stated previously in relation to the Bay of Plenty Regional Council Rotorua Lakes Plan Change 10 (**PC10**):¹⁰⁶

We are also particularly concerned to ensure that, as far as reasonably practicable, resources should be used for environmental improvements on-farm, not for unnecessarily high regulatory and monitoring costs.

[206] In view of the urgency to make progress on PC1, we have retained our evaluation of the permitted activity provisions in this interim decision, which was largely completed before s 70 was raised as an issue. If the amendments to s 70 are made as we understand the intention to be and expanded to address ss 70(1)(c) to (g), it would enable the permitted activity rules to be made operative within a minimum of delay after the finalised form of the amendments is known and they come into force. If that is not the case, we will work with parties to determine an alternative way forward.

¹⁰⁶ *Federated Farmers of New Zealand Incorporated v Bay of Plenty Regional Council* [2019] NZEnvC 136 at [116].

PART C The Waikato and Waipā catchment area over which PC1 applies

C1 The catchment over which PC1 applies

[207] The area is shown on the map in Attachment 1.

C2 The significance of the Waikato and Waipā Rivers

[208] The rivers are a taonga to iwi, who have long been concerned about their management. Tangata whenua view effects holistically, including cumulative effects on the mauri of air, the whenua and the moana and the mauri of people. In Te Ao Māori, tangata whenua and their taiao (environment) are inseparable, meaning that the restoration and protection of the Rivers cannot be achieved without the restoration and protection of tangata whenua and vice versa. This means that all objectives of Te Ture Whaimana must be achieved, including objectives b, c and d.

[209] An integrated approach to managing the PC1 area is required to fully recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga. While that is recognised by regional planning provisions, a much more complete understanding of the PC1 area is required before it will be possible.

[210] The rivers are also significant to the wider community for a range of uses, and concern about river water quality was one of the reasons WRC proceeded with PC1. Successful outcomes of PC1 are of considerable importance for the environmental, social, economic, and cultural wellbeing of the Waikato and Waipā River catchments and their communities.

C3 Land uses in the catchment

Land use information for management zones within the PC1 area

[211] We note there was some variability in the information provided in evidence. We do not see this as being of particular significance for our decision, as our main

requirement was to ensure we have a broad understanding of catchment characteristics.

[212] The following Table 2 was reproduced from the opening submissions on behalf of Federated Farmers and Beef and Lamb, their Table 1.

Table 2
Land use by land area (hectares) for each FMU in PC1 catchment

Land Use	Upper Waikato	Waipā	Middle Waikato	Lower Waikato	Total
Dairy	170,146	119,864	18,482	87,622	396,114
Dairy Support	13,163	11,621	3,797	12,064	40,644
Sheep and Beef	70,436	10,6932	12,659	108,042	298,069
Arable	954	16,93	1,288	1,450	5,384
Horticulture (non-CVP)	239	532	786	693	2,250
Horticulture (CVP)	44	27	664	5,073	5,807
Forestry	96,583	7,567	0 ⁶⁴	10,282	114,432
Other	83,208	61,049	18,898	65,209	228,364
Total	434,772	309,286	56,573	290,434	1,091,064

[213] The percentages of different land uses in each FMU are shown in the following Table 3:¹⁰⁷

Table 3
Percentages of different land uses in each FMU

	Upper Waikato	Central Waikato	Lower Waikato	Waipā
Forestry	29.3	1.1	4.8	3.9
Horticulture and cropping	0.6	2.7	2.7	0.6
Indigenous	12.7	4.4	13.3	19.3
Other/no data	2.8	17.4	8.1	2.3
Pasture	54.7	74.4	71.1	73.9

¹⁰⁷ M. Norris, H. Jones, M. Kimberley, D. Borman *Riparian characteristics of pastoral waterways in the Waikato region, 2002-2017* (WRC Technical Report 2020/12, November 2020), at Table A1-1, Appendix 1. Relied on by experts during expert conferencing on fencing and riparian planting costs.

[214] The percentages of different farm types in each FMU are shown in the following Table 4:¹⁰⁸

Table 4
Percentages of different farm types in each FMU

	Percentage of farms in each zone			
	Upper Waikato	Central Waikato	Lower Waikato	Waipā
Sheep	37.3	36.2	40.7	33.8
Beef and lower stocked dairy	27.2	25.9	23.8	23.0
Mid-range dairy	22.6	15.9	16.6	21.5
Higher stocked dairy	12.8	22.0	18.9	21.6

Estimated numbers of different farming and growing activities

[215] Mr Sinclair, who is the Director of Resource Use at WRC, considered there could be as many as around 5,000 farms greater than 20 ha which will be affected by PC1. At the November 2023 expert conference, the experts provided a table showing the estimated number of dairy and drystock farms using three different databases, based on the PC1 Decisions Version.¹⁰⁹ On the assumption that the WRC and Agribase data used may include multiple rating units, the table indicated that there could be around 2300 dairy farms. We were told that Fonterra is supplied by approximately 1660 dairy farms in the PC1 area, accounting for around 80% of the dairy production in the area.¹¹⁰ On this basis, the total number of dairy farms could be in the order of 2,100.

[216] The table indicated there could be around 2,000 drystock farms, of which around 150 farmed horses, deer, pigs and specialist livestock, and that there were

¹⁰⁸ M. Norris, H. Jones, M. Kimberley, D. Borman *Riparian characteristics of pastoral waterways in the Waikato region, 2002-2017* (WRC Technical Report 2020/12, November 2020), at Table A1-2, Appendix 1. Livestock classes are defined as sheep (< 10.5 SU/ha), Beef and lower-stocked dairy farms (≥ 10.5 – 17.5 SU/ha), Mid-range of dairy farms (≥ 17.5 – 24.5 SU/ha), Higher-stocked dairy farms (> 24.5 SU/ha).

¹⁰⁹ Rating valuation information from Valuation NZ (VNZ) which includes land use category codes with valuation IDs over 20 ha (forestry removed), WRC's farm dairy effluent monitoring information, and a comparison with Agribase for the total PC1 catchment. A key difference in the data comes down to what the "farm" is considered to be, as both the WRC and Agribase data may include multiple rating units.

¹¹⁰ Mr Allen EIC at [3.1].

73 arable farms. Ms Sands advised there are over 200 commercial vegetable growers in the Waikato region, but we were not told how many are in the PC1 area.

[217] We adopted the following indicative breakdown of farm numbers based on various evidence. The numbers do not add up to the 5,000 farms greater than 20 ha in area referred to by Mr Sinclair, but they provide a guide for the purpose of our decision.

Dairy	2,000 to 2,400
Drystock	2,000
Arable	70 to 80
CVP	Up to 200

[218] The number of higher stocked dairy farms is relevant to our consideration of consent activity status for reasons set out later in this decision. From Table 4, around 20% of all farms are higher stocked dairy, suggesting there could be around 1,000 such farms based on Mr Sinclair's total farm numbers. If 25% of dairy farms were to be classified as high-risk (a percentage referred to in the evidence), the number of farms could be between 500 and 600. This brings into question the appropriateness of adopting percentages with limited evidential justification and also, how much reliance should be placed on them, which we return to later.

[219] Mr Sinclair's estimated there could be between 2,200 and 3,300 permitted activities and between 1,700 and 2,100 activities requiring consents.¹¹¹ As he also considered there could be as many as 5,000 farms greater than 20 ha in area, we assume for general assessment purposes later in this decision that there could be around 2,800 permitted activities and around 2,000 consented activities.

C4 The significance of farming in the regional economy

[220] Mr Andrew McGiven, a dairy farmer and past president of Waikato Federated Farmers, gave the following evidence on its behalf:¹¹²

¹¹¹ Mr Sinclair EIC at [11].

¹¹² Mr McGiven EIC at [58] to [64].

The Waikato region is New Zealand's fourth largest region economically, making up 9% of New Zealand's gross domestic product (**GDP**). In the year to March 2022, GDP for the Waikato region was \$31 billion.

In the Waikato, primary industries make up 12.7% of GDP and 10.3% of employment (compared with primary industries contributing towards 5.8% of GDP and 5.7% of employment nationally). Goods producing industries make up 23.1% of GDP and 23.0% of employment (compared with 18.5% of GDP and 20.3% of employment nationally).

Agriculture, forestry and fishing contribute \$3,230 million or 10.4% and manufacturing contributes \$3,084m or 9.9% of Waikato's GDP. Manufacturing is the second largest employer (10.9%), and agriculture, forestry and fishing is the fourth largest employer (9.7%) in the Waikato region.

The Waikato region is renowned for dairy farming due to its favourable climate, soils and topography. In 2021/22, dairy farming in the Waikato accounted for 28.3% of dairy herds nationally, 22.3% of the dairy cow numbers nationally (almost twice as many as the next largest region) and 21.6% of milk solids nationally.

...

Dairy cattle farming is the largest employer in the Waikato. ... In the year to March 2022, this industry employed 10,029 people or 4.2% of the total jobs in the region.

[221] Based on Mr McGiven's evidence, Federated Farmers and Beef and Lamb submitted that:¹¹³

The importance of the farming sector to the local and regional economy is also illustrated by the number of dairy companies (six), number of meat processing sites (six), number of farm supply stores (including 11 Farmlands, 14 Farm Source and 14 PGG Wrightson's stores) and number of stock saleyards (including six PGG Wrightson's saleyards) in the Waikato.

[222] Mr Andrew Burt, who is the chief economist at Beef and Lamb stated that the estimated value of sheep and beef production in the Waikato, Waipā, South Waikato and Matamata-Piako territorial authorities, has been increasing gradually, and roughly doubled to over \$250 m in nominal terms. He also stated that the number of commercial sheep and beef farms has decreased over time while the value of the output from them has increased.¹¹⁴

¹¹³ Opening legal submissions on behalf of Federated Farmers and Beef and Lamb NZ at [4.14].

¹¹⁴ Mr Burt EIC at [47] and [108].

[223] Towns like Te Aroha rely heavily on agriculture to keep them going. Other towns, villages and smaller communities such as Te Awamutu, Putāruru, Ōtorohanga, Hautapu, Gordonton and Ngāhinapouri rely on dairy farming and farming in general.¹¹⁵

C5 Waikato Regional Council water quality monitoring programme

[224] The Regional Rivers Water Quality Monitoring Programme was implemented in 1993 and covers 110 sites across the region, with 60 sites within the PC1 area. A major redesign of the programme was implemented in 2018 to incorporate 10 new sites added as part of PC1. In addition, the Waikato River Monitoring Programme, which was implemented in 1989, monitors water quality at 12 sites along the Waikato main stem. Lake, groundwater and river ecology monitoring programmes are also in place.¹¹⁶

C6 Rivers in the PC1 area

[225] The Waikato River flows 336 km from the outlet of Lake Taupō to the Tasman Sea at Port Waikato.¹¹⁷ It is considered a lake-fed river, reflecting the major influence of Lake Taupō on its hydrology and geomorphology, but also recognises the influences of impoundments in the upper river. The catchment covers an area of approximately 14,500 km².

[226] There are significant inputs of water to the Waikato system via the Tongariro Power Scheme, for example diversions from the upper Whanganui River, with an average 20% increase of inflows compared with natural. There are eight hydro-electric dams between Lake Taupō and Karapiro, which have increased the travel time for water flowing from the lake to the sea from a pre-dam travel time of five to six days to around 40 days during low flows and 16 days during high flows.

¹¹⁵ Mr McGiven EIC at [72] – [80].

¹¹⁶ Dr Scarsbrook EIC at [122].

¹¹⁷ Dr Scarsbrook EIC at [60].

[227] The Lower Waikato River is predominantly a lowland floodplain interspersed with shallow peat and riverine lakes and wetlands, including the internationally recognised Whangamarino Wetland. The river flows through an extensive delta system below Tuakau before reaching the sea.

[228] The Waipā River is the single largest tributary of the Waikato River and has a catchment area of around 3000 km². By comparison to the upper Waikato River, the lack of any major mainstem barriers to migratory fish passage, along with a relatively flat gradient, enables both migratory native species and non-migratory invasive species such as koi carp and brown bullhead catfish to reach significant distances inland.¹¹⁸

C7 Streams and drains in the PC1 area

Estimates of total natural stream lengths

[229] The lengths of different types of streams and drains discharging to them was not well defined in evidence at the start of the hearing. In view of the large lengths involved and the different mitigation measures proposed by different parties for different stream types, we required more information to enable us to understand the costs, benefits, and time to implement different mitigation options. Expert conferencing was undertaken,¹¹⁹ and while significant uncertainties remain, the conference outcomes represent the best available information, and we are satisfied that it provides an acceptable starting point for setting initial policy direction in PC1.

[230] The Stock Exclusion Regulations require that stock must be excluded from streams and rivers 1 m wide or greater but there are no maps that show stream widths. Experts for WRC and Federated Farmers agreed there are several spatial databases that can be used to estimate stream lengths, which can produce different estimates. They agreed that the NIWA digital network version 3 (**DN3**) is the most

¹¹⁸ Dr Scarsbrook EIC at [60] to [71].

¹¹⁹ WRC, Dr Scarsbrook and Mr Keenan; Director General, Ms McArthur, Dr Robertson, Mr Counsell and Mr Bradshaw; Fish and Game Mr Klee; and Federated Farmers, Dr Le Miere.

up to date source of data and it was used by the experts to provide indicative lengths of streams within the PC1 area.¹²⁰

[231] However, we note that no mapping technique, including NIWA's DN3, will be able to capture all 1st order streams. Thus, the estimate of the length of 1st order streams must be considered to be indicative only and possibly an underestimate, as we do not know what the true length of these streams might be. Ephemeral water courses present a further complication. While 1st order streams will be ephemeral, there will be many unmapped ephemeral watercourses generally upstream of 1st order streams. There will be much less uncertainty regarding the lengths of 2nd and higher order streams as they are much easier to map.

[232] Dr Paul Le Miere, who is the Group Manager Regional Policy at Federated Farmers, estimated the total mapped river lengths by Strahler Order¹²¹ for dairy and drystock land. Tables 5 and 6 show the lengths by Strahler Order on slopes of $\leq 5^\circ$, 5 to 10° , 10 to 15° and $> 15^\circ$ and totals for the PC1 area for dairy and drystock land respectively.¹²²

¹²⁰ Responses to the Court's questions about estimates of costs for stock exclusion from PC1 waterbodies, 14 November 2023 at 1 and Appendix 1.

¹²¹ This is a method for identifying and classifying types of streams based on their numbers of tributaries.

¹²² MfE low and medium slope maps were used to determine slopes $\leq 5^\circ$ and 5 to 10° respectively. Slope of land surfaces above 10° were derived from Maanaki Whenua's NZDEM North Island 25 metre contour maps.

Table 5
Lengths of stream on different slope dairy land in kilometres

Strahler order	Length of stream on different slope land				
	≤ 5°	5 to 10°	10 to 15°	> 15°	Total
1	3,765	799	636	99	5,299
2	1,789	332	303	37	2,462
3	927	165	176	16	1,284
4	481	94	81	12	667
5	212	36	31	5	284
6	79	14	5	1	100
7	4	0	0	0	4
8	1	0	0	0	1
Total	7,258	1,440	1,232	170	10,101

Table 6
Lengths of stream on different slope drystock land in kilometres

Strahler order	≤ 5°	5 to 10°	10 to 15°	> 15°	Total
1	1,713	1,090	1268	437	4,509
2	878	494	545	136	2,053
3	456	245	261	47	1,009
4	252	116	128	24	531
5	103	31	29	6	168
6	30	4	3	1	37
7	2	0	0	0	2
8	0	0	0	0	0
	3,434	1980	2234	651	8,310

[233] The experts for the Director General suggested that a comparison of mapped stream length by kilometre between the DN3 and the New Zealand River Environment REC2.5 classification for each mapped stream order should be provided. Dr Le Miere provided a comparison that satisfied us that the two methods produce broadly similar results, indicating the total estimated length of mapped streams is in the order of 18,000 km and the estimated length of streams on LCDBv5 High Producing Exotic Grassland in the Landcare Research Land Cover database, which we understand is the most commonly used land cover for dairy

farming, is in the order of 10,300 km. We adopted the DN3 data set values as being the conservatively higher of the two estimates and because they were presented in a form that is better suited to our later assessments of costs and benefits.

[234] The experts agreed that approximately 58.1% of total mapped stream length on dairy and drystock land is on land with a slope of 5° or less, 19% are on slopes between 5 and 10° and 19% are on slopes between 10° and 15°. This means 77% of all mapped streams are on land with a slope of less than 10° and 96% are on land with a slope of less than 15°. ¹²³ This is relevant to a discussion in Part F14 in response to Mr Trebilco's proposal to amend the slope below which streams must be fenced.

Estimates of the length of drains

[235] At conferencing, the experts agreed that the estimated lengths of drains were 1972 km on dairy land and 639 km on drystock land based on *Norris et al.*¹²⁴ They recorded that drains are designated as Strahler order 0 in *Norris et al.* Narrow drains were defined as less than 2 m bank-to-bank and wide drains 2 m or greater bank-to-bank. *Norris et al* noted that there were few drains in the PC1 area which were greater than 2 m in width and because there is no practical way to provide clearer definition, we have treated all drains as narrow drains for the purposes of our evaluation, leaving any exceptions to be addressed in FEPs.

[236] Overall, results indicated that the fencing of narrow drains in PC1 zones is largely complete with approximately 10% bank length remaining unfenced or ineffectively fenced.¹²⁵ In 2017, 74% and 64% of effectively fenced bank length was associated with a set-back distance of greater than 1 m for narrow and wide drains

¹²³ Responses to the Court's questions about estimates of costs for stock exclusion from PC1 waterbodies, 14 November 2023 at 4 to 6.

¹²⁴ M. Norris, H. Jones, M. Kimberley, D. Borman *Riparian characteristics of pastoral waterways in the Waikato region, 2002-2017*, (WRC Technical Report 2020/12, November 2020).

¹²⁵ M. Norris, H. Jones, M. Kimberley, D. Borman *Riparian characteristics of pastoral waterways in the Waikato region, 2002-2017*, (WRC Technical Report 2020/12, November 2020). at page 11.

respectively, noting that the minimum set-back distance of 1 m applies only to drains with a bank-to-bank width of greater or equal to 2 m.

[237] Based on the above, we do not see the fencing of currently unfenced drains as a material issue requiring further attention in our decision. We consider that any such fencing required should be addressed in FEPs and, if necessary, taking account of the critical source area provisions.

Classification of streams and rivers for the purposes of PC1

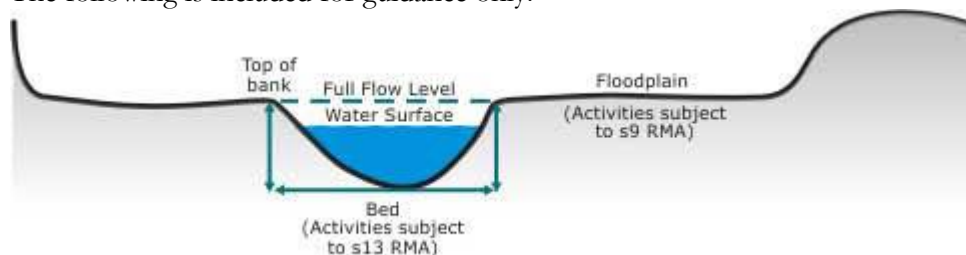
[238] The Stock Exclusion Regulations require fencing of wide rivers, which are defined in the regulations as meaning “with a bed that is wider than 1 metre anywhere in a land parcel”, the same as that in the RMA.

[239] The WRP includes the following definitions of relevance to PC1:

Bed*: ... the space of land which the waters of the river cover at its annual fullest flow without overtopping its banks:

...

The following is included for guidance only.



River*: 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).

[240] PC1 includes the following definition:

Drain: For the purposes of Chapter 3.11, means an artificially created open channel designed to lower the water table and/or reduce surface flood risk but does not include any modified (e.g. straightened) natural watercourse.

[241] The Notified Version defines water bodies from which stock must be excluded as including any river or drain that continually contains surface water, that is, perennial water courses. At the Council hearing, officers recommended that fencing requirements be extended to apply to intermittent but not ephemeral water bodies. The Hearing Panel agreed and included a definition of an intermittent flowing river in the Decisions Version, noting that:¹²⁶

Due to the potential difficulties caused by introducing a definition of river and intermittent river into the WRP through this plan change process, we have recommended that the application of fencing requirements to intermittent rivers be described in the schedule, rather than by introduction of a new definition. We have provided this in the revised Schedule C.

[242] They did not include a definition of ephemeral waterbody, but that is included in WRC's Final Proposal. Clause 5 of Schedule C of WRC's Final Proposal includes the following in advice notes:

For the purposes of Clause 4, an intermittently flowing river or artificial watercourse is one which is not permanently flowing, is not an ephemeral water body, and meets at least three of the following criteria:

- a. it has natural pools;
- b. it has a well-defined channel, such that the bed and banks can be distinguished;
- c. it contains surface water more than 48 hours after a rain event which results in stream flow;
- d. rooted terrestrial vegetation is not established across the entire cross-sectional width of the channel;
- e. organic debris resulting from flood can be seen on the floodplain; or
- f. there is evidence of substrate sorting process, including scour and deposition.

An ephemeral waterbody is a waterbody that:¹²⁷

- a. has a bed that is predominantly vegetated; and
- b. only conveys or temporarily retains water during or immediately following rainfall events; and
- c. does not convey or retain water at other times; and
- d. is not a wetland.

¹²⁶ Recommendation Report at [1678].

¹²⁷ Takes precedence over the definition of ephemeral streams in the WRP: Streams that flow continuously for at least three months between March and September but do not flow all year.

[243] We note that the WRC discussion above contrasts intermittent rivers with ephemeral water bodies. This is confusing as an intermittent river is flowing water, while an ephemeral water body could refer to standing as well as flowing water. Therefore, in PC1, WRC should refer to ‘watercourse’ where flowing water is being discussed, and only use ‘water body’ where the context refers to flowing and/or standing water. We have not amended it but consider that WRC should, to ensure clarity.

[244] A further complication exists because ephemeral streams are already defined in the Operative WRP as “[s]treams that flow continuously for at least three months between March and September but do not flow all year”. This WRP definition clearly fits with the above PC1 definition of intermittent river. Effectively, ephemeral streams under the WRP definition would be intermittent streams under the PC1 definition.

[245] We understand that the above definitions of intermittent and ephemeral water bodies are from the Auckland Unitary Plan.¹²⁸ In our view the WRC definition of intermittently flowing river and ephemeral water body, amended to refer to ephemeral watercourse, are a pragmatic and appropriate way to provide improved clarity for farmers, FEP certifiers, and consent officers when deciding which watercourses must be fenced. We accept the definitions, subject to changing ephemeral water body to ephemeral watercourse and making it explicit in Schedule C that they both apply for the purpose of Clause 4, not the WRP definition. WRC is to propose appropriate wording for final determination by the Court.

[246] We would also expect that if an ephemeral waterbody under the PC1 definition was a significant source of contaminant loss, it would be addressed as a critical source area.

¹²⁸ Recommendation Report at [1677].

C8 Changes in the state of fencing, vegetation, buffer width, waterway crossings and stream-bank erosion at sites on pastoral land across the Waikato region

[247] Information on these changes was not presented in evidence other than by reference to a report by *Norris et al* and relied on by experts for their expert conference relating to the cost of mitigations. Based on the report, WRC conducted four region-wide surveys in 2002, 2007, 2012 and 2017 to establish and track changes in the state of fencing, vegetation, buffer widths, waterway crossings and stream-bank erosion at sites on pastoral land across the Waikato region. Data from the 2017 survey were collected from 432 waterway sites comprising 244 on dairy and 188 on drystock land.

[248] The proportion of surveyed bank length fenced across the Waikato region steadily increased over the monitoring period at a rate of about 2.2% of bank length per year (from 28% in 2002 to 61% in 2017). Approximately 40% of surveyed bank length in pastoral land remained unprotected against stock access at the time of the 2017 survey. Riparian margins in pastoral land across the Waikato region in 2017 were dominated by non-woody vegetation cover (occupying about 76% of bank length and dominated by pastoral grasses).

[249] The proportion of bank length affected by stream-bank erosion across the region fluctuated over the monitoring period ranging from 5% in 2002, 22% in 2007 and approximately 17% in 2017, likely influenced by the magnitude and frequency of storm events. Importantly, there was a significant reduction in pugging (8% of bank length) for the five-year period between 2012 and 2017, which indicates that riparian fencing efforts may be resulting in measurable reductions in soil disturbance.

[250] In 2017, dairy sites had significantly more bank length with effective fencing (87%), no stock access (74%), narrow (< 5 m) buffer widths (68%), and no soil disturbance (82%) compared to drystock sites (with 36%, 25%, 40% and 69%, respectively). In our view, the emphasis placed on improving stock exclusion on dairy farms by the Dairying and Clean Streams Accord (and subsequent Sustainable

Dairying: Water Accord) is likely to have had a positive impact on the amount of riparian fencing observed at dairy sites in the Waikato region.

[251] Most fencing was found to be effective permanent fencing (54%), with effective temporary fencing accounting for only 6% of surveyed bank length across the region. Temporary fencing was defined as fencing that could be moved or removed with relative ease.¹²⁹

C9 Stream lengths still to be fenced

[252] WRC and Federated Farmers agreed the lengths of streams with dimensions 1 m wide or greater anywhere in a land parcel still to be fenced on dairy and drystock land shown in Tables 7 and 8 respectively:¹³⁰

Table 7
Lengths of stream still to be fenced on dairy land

Strahler Order	% Not effectively fenced (Based on 2017 Survey)	Estimated length of waterways still to be fenced (km)
0	14	276
1	21	1113
2	7	172
3	28	360
4	11	73
5	17	48
6	2	2
7	No data	
Total		2044

¹²⁹ M. Norris, H. Jones, M. Kimberley, D. Borman *Riparian characteristics of pastoral waterways in the Waikato region, 2002-2017* (WRC Technical Report 2020/12), November 2020 at 3.1.1.

¹³⁰ Responses to the Court's questions about estimates of costs for stock exclusion from PC1 waterbodies, 14 November 2023 at 2 and 3.

Table 8
Lengths of stream still to be fenced on drystock land

Strahler Order	% Not effectively fenced (Based on 2017 Survey)	Estimated length of waterways still to be fenced (km)
0	11	70
1	67	3021
2	56	1150
3	59	595
4	26	138
5	50	84
6	0	0
7	No data	
Total		5058

[253] Norris *et al* provided an assessment of the fencing requirements as per the Stock Exclusion Regulations and the Decisions Version as follows:¹³¹

Under the proposed national stock exclusion regulations and based on a low-slope threshold of $< 10^\circ$, only a small percentage of surveyed bank length under dairy required effective fencing (6 – 7%), compared to drystock where approximately one third of bank length (28 – 37%) was not effectively fenced in 2017;

For non-low slope land ($\geq 10^\circ$), a greater percentage of bank length required effective fencing in 2017 for both dairy (13 – 16%) and high intensity drystock (56 – 57%) land uses; and

Under Plan Change 1 (PC1) regulations and for low-slope land use ($< 15^\circ$), the percentage surveyed bank length effectively fenced in 2017 for narrow (< 2 m) and wide drains (≥ 2 m) was 90% and 79%, respectively across qualifying management zones (Upper Waikato, Central Waikato, Lower Waikato and Waipā). For streams and rivers (Strahler orders 1 – 6), approximately 79% of bank length was effectively fenced. There were few drain transects sampled on non-low slope ($< 15^\circ$), high stock intensity land ($n = 0 - 1$) and comparably few streams and rivers ($n = 16$). The latter had a high percentage of bank length effectively fenced (96%).

¹³¹ M. Norris, H. Jones, M. Kimberley, D. Borman *Riparian characteristics of pastoral waterways in the Waikato region, 2002-2017* (WRC Technical Report 2020/12, November 2020) at 3.2.3 and 3.2.4.

C10 Critical source areas

[254] Critical source areas were not defined in the Notified Version. In the Decisions Version they were defined as “those areas of farmed land that contribute a disproportionately large amount of sediment, phosphorus and microbial pathogens to surface water”. They were defined in WRC’s Final Proposal as:

Critical source areas: For the purposes of Chapter 3.11, means a landscape feature such as a gully, swale or depression, or infrastructure feature such as a gateway, race or water trough that –

- a) concentrates nitrogen, phosphorus, sediment or microbial pathogens; and
- b) delivers, or is likely to deliver, nitrogen, phosphorus, sediment or microbial pathogens to one or more rivers, lakes, wetlands, or drains, or their beds.

[255] The Resource Management (National Environmental Standards for Freshwater) Regulations 2020 include the following definition:

Critical source area means a landscape feature such as a gully, swale, or depression that—

- (a) accumulates runoff from adjacent land; and
- (b) delivers, or has the potential to deliver, 1 or more contaminants to 1 or more rivers, lakes, wetlands, or drains, or their beds (regardless of whether there is any water in them at the time)

[256] None of the above definitions provided clarity as to what a critical source area is, and we return to this in Part F22. Understandably, no evidence was presented on the extent or overall significance of existing critical source areas as that will require farm-specific investigations.

C11 Water quality in Waikato and Waipā rivers and streams

[257] We addressed this in brief in Part B10. By way of more complete background, water quality data from WRC’s monitoring network for the period 2010 to 2014 inclusive was selected as the current state during the development of PC1. The work used the A, B, C, and D attribute bands within the NPSFM 2014 or,

where they were not available, attribute bands specifically developed by a group of experts. Key findings were:¹³²

- (a) The Upper Waikato River has high water quality (attribute bands A or B) reflecting the high quality of its source, Lake Taupō.
- (b) As one moves downstream, observed water quality in the river declines, primarily reflecting the influence of tributary and groundwater inputs of poor water quality but also contributed to by direct point source inputs.
- (c) By the time the river reaches the Lower Waikato FMU, water quality attributes are in C or D bands (D being below the national bottom-line) and it does not meet the *E. coli* swimmable criteria of the NPS-FM 2014.
- (d) Much of the Waipā River (which joins the Lower Waikato River at Ngāruawāhia) has, and many of its tributaries have, low water clarity and high *E. coli* levels that fail to meet swimmable criteria.

...

[258] Changes in travel time because of the hydro-electric dams on the Waikato River have had significant effects on the ecology of the river, including increased residence time providing for growth of suspended algae, while also reducing sediment and microbial pathogen loads.¹³³

[259] The overall surface water quality of the Waikato-Waipā River catchment can be characterised as generally degraded, with the degree and type of degradation varying throughout the catchment. For several parameters, there is a marked increase in concentrations associated with inputs from the Waipā River.¹³⁴

[260] By way of example, Dr Scarsbrook stated that suspended sediment loads in the Waikato River, measured at Hamilton (Central Waikato FMU) and Rangiriri (Lower Waikato FMU), have been estimated at 66,000 tonnes per year (t/y) and 261,000 t/y, respectively, with much of the change being contributed by the Waipā

¹³² Dr Scarsbrook EIC at [39] and [40].

¹³³ Dr Scarsbrook EIC at [62].

¹³⁴ Dr Scarsbrook, EIC at [18].

River catchment, which supplies around two thirds of the Waikato's suspended sediment load.¹³⁵

[261] He explained that there are several reasons for the elevated concentrations of contaminants in the Waipā relative to the Upper Waikato, including:¹³⁶

- (a) The different geology. Waipā catchment has large areas of soft-rock geology that is more prone to sediment generation via erosion.
- (b) The mitigating effects of the Waikato hydrolakes. Sediment and *E. coli* tend to either settle out or be 'killed off' as they travel through the upper river's hydrolakes.
- (c) Differences in nutrient uptake. Nutrient uptake by plants/algae is likely to be greater along the Waikato River due to increased retention times (in hydro lakes) and reasonable water clarity. In the Waipā, particularly the lower reaches, the low water clarity is likely to constrain plant and algal growth, so nutrient uptake is reduced.

[262] Dr Scarsbrook provided the following information on changes in river water quality over time:¹³⁷

Sixty years ago the water quality of the middle section of the Waikato (central FMU) was poor, mainly as a result of the discharge of inadequately treated sewage and industrial wastewaters. By the late 1970s water quality had improved markedly, with more than ten-fold reductions in *E. coli* between the 1970s and 1980s.

Significant reductions in dissolved colour, biochemical oxygen demand and total ammonia were observed between 1987 and 2007, likely associated with improving point source discharge management. Over the same time period, increasing trends in TP, TN and nitrate were observed. These are likely to be associated with increasing inputs from diffuse (non-point) sources.

Impoundments associated with hydro-electric dams increases travel time and allows time for suspended algae (phytoplankton) to grow in the water column. This can result in harmful algal blooms that restrict recreational uses. At the same time, the impoundments can improve water quality by reducing downstream transport of sediment (via sedimentation within the lakes) and contributing to settlement and die-off of microbial pathogens.

Bill Vant assessed trends in water quality over the period 1991-2020. This is the most recent analysis of trends for the Waikato-Waipā catchment.

Along the mainstem of the Waikato River, Vant identified what he considered important improvements in concentrations of ammonia, chlorophyll *a* and TP. Conversely, important deteriorations occurred in *E. coli* concentrations and in

¹³⁵ Dr Scarsbrook EIC at [80].

¹³⁶ Dr Scarsbrook Supplementary evidence at [9].

¹³⁷ Dr Scarsbrook EIC at [83] – [87].

records of TN. Intensification of pastoral farming in the Waikato catchment was considered the most probable cause of this deterioration in TN concentrations in the river.

C12 Lakes in the PC1 area and their water quality

[263] The Waikato catchment includes 58 shallow lakes 1 ha in area or greater, with the majority of these having formed in extensive areas of peat (i.e. peat lakes). Most of the peat lakes have highly modified catchments. In the northern part of the catchment (Lower Waikato FMU) there are 15 riverine lakes. Historically, these lakes, together with wetlands, including the Whangamarino Wetland, were part of an extensive floodplain of the Waikato River. Flood protection works and land drainage have altered the connectivity between the main river and the lakes.¹³⁸

[264] The Collaborative Stakeholder Group¹³⁹ (CSG) preferred option for the Lake FMUs was:¹⁴⁰

Riverine lakes	15 riverine lakes and their catchments Many riverine lakes such as Waikare, Whangape and Waahi are in the northern parts of the catchments
Peat lakes	35 peat lakes and their catchments Many peat lakes such as Ngaroto, are in the Waipa catchment. Others include a cluster of eight peat lakes north east of Hamilton in Horsham Downs, and Lake Rotoroa (Hamilton Lake)
Dune lakes	4 dune lakes and their catchments, north of Port Waikato
Volcanic lakes	5 volcanic lakes and their catchments, in the south eastern part of the catchment.

¹³⁸ Dr Scarsbrook EIC at [17].

¹³⁹ A collaborative group (with support from an independent Technical Alliance), which was responsible for recommending a draft plan for consideration by the Healthy Rivers Wai Ora Co-governance Committee, in turn for recommendation to full Council; Ms May, EIC at [11].

¹⁴⁰ Dr Scarsbrook EIC at [37].

[265] Lakes generally have poor water quality, with most peat and riverine lakes having D band attribute states for total nitrogen, total phosphorus and chlorophyll *a*¹⁴¹ (i.e., below the NPSFM National Bottom Line). At the time, there was a paucity of data for some lakes, such as Dune and ‘Volcanic’ lakes, and some attributes (e.g. *E. coli*). Dr Scarsbrook stated that there are around 50 shallow lakes in the Lower Waikato FMU and that many have lost their submerged vegetation communities and are now dominated by phytoplankton.¹⁴²

[266] Lake water quality is usually described in terms of its trophic state. This is measured in New Zealand by Lake Trophic Level Index Scores (**TLI**), where:¹⁴³

0 to 2 is Microtrophic and the lake is clean with very low levels of nutrients and algae;

>4 to 5 is Eutrophic and the lake is murky with high amounts of nutrients and algae; and

>5 is Supertrophic, where the lake has very high amounts of phosphorus and nitrogen and often associated with poor water clarity and excessive algal growth. Suitability for recreational purposes is often poor.

[267] Dr Scarsbrook stated that many of the lakes in the Lower Waikato FMU fall into the Supertrophic category, citing examples of Lakes Waahi and Whangape having TLI values between 6 and 7 and Lake Waikare and several small peat lakes having TLI values greater than 7. He went on to say most of these shallow lakes have catchments dominated by pastoral farming, with around 90% on average of nitrogen and phosphorus loads to shallow lakes coming from pastoral sources.

[268] Long term trend analysis at 12 long term monitoring sites indicates a general increase in total nitrogen and total suspended solids (**TSS**) concentrations, and a general decrease in total phosphorus. However, over shorter timescales (three to five years) notable improvements in TLI scores have occurred in six out of 12 long-term monitored SOE lake sites.¹⁴⁴

¹⁴¹ Dr Scarsbrook described *chlorophyll a* as a plant pigment used to estimate algal biomass; Dr Scarsbrook EIC at [77].

¹⁴² Dr Scarsbrook EIC at [40](e) and [89].

¹⁴³ Land, Air, Water Aotearoa (or **LAWA**).

¹⁴⁴ Dr Scarsbrook EIC at [89] – [96].

C13 The Whangamarino Wetland

[269] The following paragraphs describing the Wetland are based on the evidence of Dr Hugh Robertson. In his role as New Zealand's National Science and Technical Focal Point for the Ramsar Convention on Wetlands, he provides scientific advice to the New Zealand Government on the status of wetlands of international importance, which includes the Whangamarino Wetland. He gave evidence on behalf of the Director General, which was not disputed and we accept it.

[270] The Whangamarino Wetland refers to the approximately 7000 ha wetland complex situated on the floodplain of the Lower Waikato River. It comprises extensive freshwater habitats (bog, fen, swamp, marsh wetland types) and is fed by the Whangamarino River, Maramarua River and the Raeo and Pungarehu Streams. In addition, the wetland receives inflows from Lake Waikare via the Pungarehu Canal.

[271] The wetland is the second largest bog and swamp complex in the North Island and one of the best remaining and largest examples of this wetland type in New Zealand. It is a national stronghold for many nationally threatened and at-risk species. The Whangamarino Wetland Ramsar site (wetland of international importance) was officially designated in 1989 under the Convention on Wetlands (Ramsar Convention). The wetland was identified by the Hearing Panel as an outstanding water body with significant values, including habitat for threatened species and sensitive raised bog wetland types. The outstanding status was noted in the evidence of Mr Trebilco and Mr McAuliffe, who is the Manager–Resource Management Policy for WRC.

[272] The extent of representative bog habitat dominated by sedges and wirerush has declined significantly since 1963, which Dr Robertson stated is associated with changes in catchment land use and altered hydrology. The ecological condition of the swamp, fen and marsh wetland types has also declined over the past 50 years, associated with high volumes of sediment, nitrogen and phosphorus entering the wetland system, coupled with an altered hydrological regime.

[273] Data on the nutrient and sediment concentrations from the main tributaries to the wetland identified that contaminants from the Pungarehu Canal are very high relative to other water sources. The canal inflows are part of the operation of the Lower Waikato Waipā Flood Control Scheme (the outlet from Lake Waikare) and is a primary source of water quality contamination in the wetland. Prior to the development of the flood scheme the Waikato River itself was a key source of floodwater for the wetland rather than Lake Waikare. Water quality (total nitrogen, total phosphorus and clarity) of the Waikato River at Rangiriri is considerably better than water now flowing into the wetland.

[274] There has been a substantial increase in the rate of sediment accumulation in low-lying areas of the wetland over the past 50 years. A reduction in nutrient contamination is required to reduce the occurrence of exotic species. A 2008 Environment Waikato Report noted that “[a]ll these remaining wetland areas [in the Waikato River catchment] are highly vulnerable to drainage, damage by pest plants and animals, sedimentation and nutrient runoff”.

[275] Dr Robertson described a recent water quality event as follows:¹⁴⁵

The urgency of addressing water quality contamination at Whangamarino Wetland was apparent during 2022 and 2023. During the summer, and autumn of 2022-2023, a ‘blackwater’ event occurred (resulting from very low dissolved oxygen levels) and then subsequently a botulism outbreak. Dissolved oxygen levels on the Whangamarino River in the wetland were recorded as below 1.0 mg/l (sometimes near 0.1 mg/l) during December 2022, February 2023 and March 2023 [DOC Ranger monitoring data].

The water quality event had a significant impact on the ecosystem health of Whangamarino Wetland. There were more than 1600 bird deaths reported (Fish and Game database from bird recovery field work), including many indigenous species and fish kills, including longfin eel/tuna (DOC Rangers pers. comm).

The water quality event occurred from a prolonged period of high rainfall, with significant storms. This resulted in extensive inundation of Whangamarino Wetland (Figure 8) and input of contaminants and organic matter.

...

It is noted that PC1 is focused on the management and reduction of the four water quality contaminants (nitrogen, phosphorus, sediment, microbial pathogens). However, the blackwater/botulism event highlighted that to be

¹⁴⁵ Dr Robertson EIC at [77] – [79], [83], [90].

effective in protecting and restoring the ecosystem health and well-being of the Waikato river catchment policy and management approaches need to consider altered hydrology where it exacerbates water quality contamination, and effects on other aspects of water quality.

...

While the blackwater event was exacerbated by Cyclone Gabrielle, the wetland has been subject to poor water quality for a prolonged period. In my opinion this cannot be considered a one-off event and without catchment mitigation, can be expected to occur in the future. The internationally significant values of Whangamarino Wetland, for example as habitat for wildlife, are also at risk in my view.

[276] Mr David Klee gave evidence for Fish and Game and, in broad terms, covered much of the same ground as Dr Robertson and while we do not repeat it, we accept it. He explained that:¹⁴⁶

... Whangamarino Wetland is one of the most popular and significant sites for recreational game bird hunting in New Zealand. Whangamarino Wetland is classified as a site of national significance for recreational game bird hunting in the Auckland/Waikato Sports with Fish & Game Management Plan 2021, the highest status available. ...

... Overall production of waterfowl is now lower within Whangamarino Wetland than most other sites in the Waikato (Garret-Walker 2014). ...

Despite the ongoing degradation of Whangamarino and associated loss of habitat, it is still home to an estimated 20,000 waterbirds, 239 wetland plant species and 18 species of fish.

C14 Other wetlands in the PC1 area

[277] Table 3.7.7 in the WRP lists 35 wetlands in the region that are subject to Rule 3.7.4.6., which is a discretionary activity rule relating to the creation of new drains and the deepening of drain invert levels within 200 m of the wetlands. Schedule C(2)(a) of WRC's Final Proposal for PC1 requires the fencing of wetlands listed in Table 3.7.7. The NPSFM 2020, amended October 2024, requires WRC to identify every natural wetland that is more than 500 m² in extent in its region or of a type that is naturally less than 500 m² in extent (such as an ephemeral wetland) and known to contain threatened species. The mapping must be completed within 10 years of the commencement date, namely by 3 September 2030.¹⁴⁷

¹⁴⁶ Mr Klee EIC at [5.5], [5.7] – [5.8].

¹⁴⁷ NPSFM 2020, amended October 2024 at 3.23.

[278] Current information on wetlands in the PC1 area is limited. The experts agreed what is known at their November 2023 expert conference, as follows:¹⁴⁸

...

- The EIC of Dr Robertson (paragraph 31) provides an estimate of the total area of natural freshwater wetlands in the PC1 geographical area at 15,817 ha (FENZ Geodatabase), with the Lower Waikato FMU having the largest extent of wetlands. At Paragraph 33 he estimates the total number of wetlands within the PC1 area at 140.

...

- As noted in the JWS for Wetlands, the estimates provided by Dr Robertson are expected to be underestimates of the total number and area of wetlands within the PC1 area. Given that most of the large wetlands are known, the under-estimate is likely to be greater for the total number of wetlands rather than the total area.

...

MS [Dr Scarsbrook] provides the following summary of wetland extent within the Whangape catchment:

- A total of 1969 wetlands have been identified in Lake Whangape catchment. The majority of these (1509 wetlands) were identified as “exotic grassland/herbfield/rushland” (*Bartlem et al.* 2020) and may not meet the definition of a natural inland wetland under the NPS-FM (2020).
...
- Only 149 wetlands were fenced (9%), 29 partially fenced and the remainder (1472) were not fenced. A higher proportion of wetlands greater than 1 ha were fenced.
- The most up to date information Waikato Regional Council has on wetland extent in the Lower Waikato FMU is around 15,000 ha and more than 3000 individual wetlands greater than 500 m². This mapping is incomplete and preliminary. The metadata for the mapping states “This wetland layer is draft only and has not been validated and only a limited amount of sites have been field checked. Its purpose is for a start point to create a base layer for NPS-FW requirements”.
- We expect to map significant numbers of wetlands in other FMUs, so an estimate of around 10,000 wetlands of a size greater than 500 m² within the PC1 area is reasonable.
- Based on the Whangape case study, an average area of 0.9 ha would seem reasonable to base calculations on areas of land lost via stock exclusion from wetlands.

¹⁴⁸ Responses to the Court’s questions about estimates of costs for stock exclusion from PC1 waterbodies, 14 November 2023 at 10-11.

[279] As will be seen in Part F20, the Decisions Version introduced a requirement to exclude stock from wetland 50 m² in area or greater.

[280] The experts agreed that “[t]he number of wetlands that fall between 50 m² and 500 m² is unknown but likely to be a greater number than for wetlands greater than 500 m²”.¹⁴⁹ In the Joint Witness Statement (**JWS**) dated 14 November 2023, an estimate of approximately 35,000 wetlands greater than 50 m² in area was adopted for the purposes of estimating the costs of fencing and riparian planting. Of these, an estimated 9,000 approximately were greater than 500 m², leaving an estimated 26,000 wetlands between 50 and 500 m² in area. The JWS recorded that “[u]nder cross-examination Dr Scarsbrook suggested a figure in the tens of thousands but this is a guess – not based on available information”.¹⁵⁰

[281] For the avoidance of doubt, we accept that there are unknown numbers of wetlands greater than both 500 m² and 50 m², but there are likely to be many thousands greater than 500 m² and substantially more that are greater than 50 m².

C15 Nitrogen load to come

[282] There is a time lag between when nitrogen enters the groundwater system under a farm and when it reaches surface water. This means there can be a nitrogen “load to come”, many years after nitrogen leaves a farm. WRC commissioned Lincoln Agritech Limited to provide scientific advice on this issue.¹⁵¹

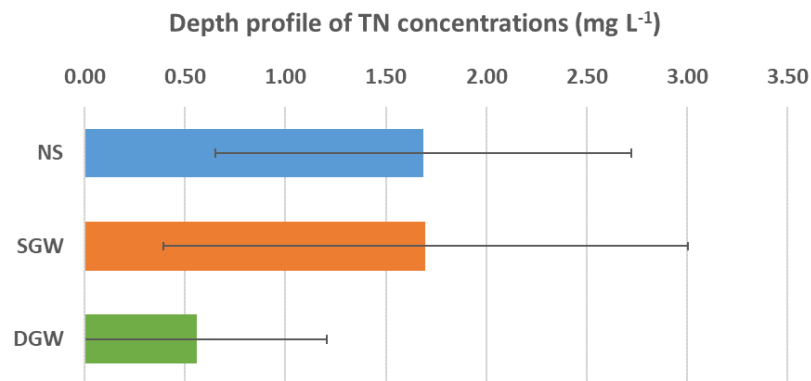
[283] Total nitrogen concentrations were modelled in fast near surface flows (**NS**), medium flow to shallow groundwater (**SGW**) and slow flow to deeper groundwater (**DGW**). Averaged across all catchments, mean total nitrogen concentrations are higher and similar for the near surface and shallow groundwater pathways, while

¹⁴⁹ Responses to the Court’s questions about estimates of costs for stock exclusion from PC1 waterbodies, 14 November 2023 at 12.

¹⁵⁰ Responses to the Court’s questions about estimates of costs for stock exclusion from PC1 waterbodies, 14 November 2023 at 12.

¹⁵¹ Roland Stenger *Nitrogen lag review* (Lincoln Agritech Ltd, Report 1058-14-R1, June 2022).

markedly lower concentrations were typically found for the deep groundwater pathway, as illustrated by the following figure:¹⁵²



[284] Estimating representative quantities and times for diffuse nitrogen loads to appear in surface receiving waters across the 29 catchments studied, with many variables such as the percentages of NS, SGW and DGW in the PC1 area, is not possible based on currently available information for a range of reasons. One of these is that it proved difficult to obtain an integrative measure for the extent of denitrification that may have occurred along the relevant pathways through the catchment.

[285] We do not attempt to summarise the report findings in any detail but consider the following extract to be notable:¹⁵³

... it becomes evident that only rivers with substantial recharge areas in young volcanic geology on the Central Plateau are predominantly fed by deeper groundwater. Consequently, long hydrologic lags are restricted to the Upper Waikato/Lake Taupo sub-region and the Waihou River originating directly north to it. Mean transit times determined in some of the rivers concerned ranged from approx. 30-50 years under low-flow conditions (Figure 18), indicating that the 80-year policy horizon of the Proposed Waikato Regional Plan Change 1 should provide ample buffer to detect initiated improvements even on the deep groundwater pathway.

¹⁵² Roland Stenger *Nitrogen lag review* (Lincoln Agritech Ltd, Report 1058-14-R1, June 2022) at [4.1.5].

¹⁵³ Roland Stenger *Nitrogen lag review* (Lincoln Agritech Ltd, Report 1058-14-R1, June 2022) at [6.1].

[286] We were unable to obtain a reliable sense of average attenuation rates, the extent of load to come, or the lag time before it appeared in other receiving environments from our review of the report because of the many different circumstances and variables. Evidence before the Hearing Panel was that the timeframe for nitrogen to appear in receiving waters would be 10-15 years.¹⁵⁴

[287] As a general observation, near surface and shallow groundwater flows appear to transport most of the nitrogen loads and reach the receiving environments relatively quickly. Based on the Lincoln Agritech Report, lag times are greatest for the deep groundwater, which the modelling predicted would account for 40% of the total load in two of the 29 catchments and less than 10% in all but five of the other catchments. The lower groundwater concentrations were considered to have resulted from the groundwater having been charged at an earlier time when land use intensity was less, and more recent recharge not yet having reached the monitored stream. This indicates the potential for higher loads than the modelled estimates in some catchments.

[288] Without a better understanding of denitrification rates during travel in the groundwater system, it is not possible to gain more than a coarse understanding of the likely nitrogen load to come and the time before it reaches receiving environments. However, in our view, it is sufficient to indicate that monitoring of receiving water quality 10 years after PC1 becomes operative could not be considered determinative of compliance with the 10-year interim nitrogen water quality targets.

C16 Point source discharges

[289] While diffuse discharges contribute most of the nitrogen and phosphorus reaching aquatic environments, the management of point source discharges is also a key requirement if the vision of Te Ture Whaimana is to be achieved.

¹⁵⁴ Recommendation Report at [821].

[290] Dr Scarsbrook identified that there are some 20 consented point source discharges to waterbodies in the catchment, which discharge a variety of contaminants, including nitrogen and phosphorus. These include 12 sewage treatment plants of widely varying size and eight industrial discharges - dairy factories, meatworks, power stations, and a pulp and paper mill. Consent monitoring data were used to calculate the loads of nitrogen and phosphorus from these operations during 2011 – 2020.

[291] The combined load of nitrogen discharged from the point sources was about 682 t/yr, while that of phosphorus was about 108 t/yr. The load of nitrogen was about 7% lower than that discharged during 2003 – 2012 (namely 730 t/yr); while the load of phosphorus was about 37% lower (171 t/yr in 2003 – 2012). These reductions were mostly due to ongoing improvements in wastewater treatment at the sites.¹⁵⁵

[292] As noted above, Dr Scarsbrook provided the following information on changes in river water quality over time:¹⁵⁶

Sixty years ago the water quality of the middle section of the Waikato (central FMU) was poor, mainly as a result of the discharge of inadequately treated sewage and industrial wastewaters. By the late 1970s water quality had improved markedly, with more than ten-fold reductions in *E. coli* between the 1970s and 1980s.

Significant reductions in dissolved colour, biochemical oxygen demand and total ammonia were observed between 1987 and 2007, likely associated with improving point source discharge management. ...

[293] It can be seen from Table 1 in Part A5 that total point source discharges account for 15% of the total phosphorus catchment load, compared to 50% from diffuse discharges. They account for 6% of the total nitrogen catchment load, compared to 67% from diffuse discharges. The remaining contaminant loads come from natural sources.

¹⁵⁵ Bill Vant *Sources of nitrogen and phosphorus in two major catchments in the Waikato Region, 2011–20* (Waikato Regional Council, Technical Report 2022/05, April 2023) at [3] and [4].

¹⁵⁶ Dr Scarsbrook EIC at [83] – [84].

Part D The Court process

D1 Our starting point

[294] As our starting point, we relied on the following key components of PC1 developed by WRC and the River Iwi as part of their collaborative process:

- (a) The delineation of Freshwater Management Units and sub-catchments;
- (b) Target attribute states; and
- (c) Prioritisation of contaminants in each sub-catchment.

[295] We also took into account that a core component of the appeals by tangata whenua is the application of ss 6(e) and 8 of the RMA and tikanga Māori. Tikanga Māori is the foundation of Māori understandings of rights in respect of their land and the natural environment and all things that affect the iwi, hapū and whānau. From a Māori worldview, it underpins what guidelines and rules apply to the use, management and protection of the rohe of a hapū or iwi.

[296] The appeals reminded the Court that these understandings cannot be understated, sidelined, minimalised or undermined.

D2 Appeals and s 274 parties

[297] The Council Decision was publicly notified on 22 April 2020. Twenty three appeals were lodged in June and July 2020. Approximately 40 parties joined the appeals in accordance with s 274 of the RMA. By memorandum dated 2 July 2021, WRC advised the Court that it wished to continue with its direct discussions with appellants. It proposed that a pre-hearing conference be convened sometime in October 2021.

D3 The need to take into account changes in regulation that occurred after the Council Decision was notified and the national debate on the suitability of Overseer for use in regulation

[298] In August 2021, as noted in Part A6, WRC notified the Court of the central government review that found shortcomings in Overseer’s modelling approach. In its October 2021 reporting memorandum, WRC advised the Court that the central government was also considering four changes in national policy directions, which are included in the list in Part A9. The combined effects of the changes presented serious challenges as to how to move forward with PC1 for WRC, all parties to the appeals and the Court.

D4 Factors that influenced the Court’s overall approach

[299] When all aspects of the case and the way it evolved after PC1 and the Council Decision as notified are considered together, the overall complexity is immense and there were no precedents to guide the way forward. The outcome to be achieved remains as before, to restore and protect the Waikato and Waipā Rivers in accordance with Te Ture Whaimana by 2096. It is already 12 years since the legislation that led to Te Ture Whaimana was enacted and work started on developing PC1.

[300] We followed closely the process adopted by WRC over the months following October 2021. By minute dated 7 March 2022, we provided an overview of our understanding of the case and set out our proposed preliminary approach, stating:¹⁵⁷

... It will be important that the process followed is well structured, transparent and efficient, is principles-based and addresses issues in a logical order. It may need to adopt an element of pragmatism to achieve resolution efficiently....

From our preliminary review of the appeals, parties have different expectations as to what PC1 is expected to and/or can achieve. It is important that all expectations reflect what is realistic and reasonable in the particular circumstances that exist in the two river catchments to minimise the potential for PC1 to be perceived as a failure.

...

¹⁵⁷ Minute dated 7 March 2022 at [7] – [8], [13].

... Care needs to be exercised when setting expectations for the extent of reductions that can be achieved within the first 10 years after PC1 becomes operative, as it will take time for all resource consents to be granted and all improvement measures to be implemented and become effective. In the case of nitrogen, there is further uncertainty as to how the “load to come” will affect contaminant loads entering the river systems in the 10-year timeframe.

[301] The different expectations remained throughout the Court process. Mr Pinnell subsequently described them as “two world views”, where the differences were “stark and almost surreal” to him.¹⁵⁸ In one, the focus was heavily on ensuring environmental restoration and in the other, there was agreement that restoration must be achieved, but that social and economic effects must also be considered. Our decision reflects the purpose of the RMA, which is to promote sustainable management, which “means managing the use, development, and protection of natural and physical resources is to be done in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety ...” while securing the matters in s 5(2)(a)–(c).

[302] Looking beyond PC1, the way forward is also unclear because, as at the time of closing submissions, there was no published information on the likely longer-term policy and rule framework that will be proposed to deliver the reductions in the primary contaminants needed to restore and protect the rivers. Further, the amendment to the RMA extending the period before the next plan change can be notified means that PC1 will likely be the primary policy document for longer than originally expected.

[303] In accordance with s 269 of the RMA, the Court must regulate its proceedings in a manner that best promotes their timely and cost-effective resolution and must be consistent with fairness and efficiency. As noted in Part A10, we saw the potential for unforeseen consequences and road-blocks to arise from the provisions as presented to us at the start of the hearing. Consistent with our minute of 7 March 2022, we followed an iterative, structured, transparent, principles-based approach to our determination of the appeals, with participation from the parties at all stages. The time required to resolve the appeals reflected the complexity and

¹⁵⁸ Mr Pinnell, Closing submissions [8].

inter-related nature of the issues, the evolving statutory and regulatory framework over more than a three-year period and the differing and strongly held views of parties on the use of Overseer.

[304] In developing that approach, we considered it prudent to start by looking back to guide us towards the future, consistent with the whakatauki “*Me tiro whakamuri, kia anga whakamua , looking backwards to move forwards into the future*”. We considered this would guide us in understanding the reasons for being where we are today to help us to find an appropriate way forward that is effective in meeting the purpose of the RMA and equitable to all, as far as that is possible.

[305] There are boundaries within which the Court must work when determining appeals. In *Re an application by Vivid Holdings Ltd*,¹⁵⁹ the Environment Court identified that any decision on appeal must be fairly and reasonably within the scope of:

- (a) an original submission; or
- (b) the proposed plan as notified; or
- (c) somewhere in between.

[306] On the issue of scope, Dunningham J stated in *Federated Farmers Southland v Southland Regional Council*,¹⁶⁰ “[a] shorthand way of describing the Environment Court’s scope on appeal is that it is an outcome which is in “the range between what was in the decision being appealed and the relief sought in the appeal”.¹⁶¹

[307] We address issues of scope under individual topic headings for primary issues in dispute, with a summary in Part H. When considering scope, we undertook a specific review of all parties’ appeals as part of our evaluation process. Our

¹⁵⁹ *Re an application by Vivid Holdings Ltd* [1999] NZRMA 467.

¹⁶⁰ [2024] NZHC 726.

¹⁶¹ *Federated Farmers Southland v Southland Regional Council* [2024] NZHC 726 at [42].

understanding of what remained a primary issue in dispute in PC1 was guided by the legal submissions and evidence.

D5 Looking back to guide us towards the future

[308] The evidence is clear that the primary source of contaminants in the PC1 area is diffuse discharges from agricultural activities. By way of background, Mr Pinnell submitted in closing that:¹⁶²

The unexpected [*water quality*] trend results reported by Dr Scarsbrook is a reminder that most accelerated land use changes have unintended consequences. In my living memory, we have experienced:

- Muldoon’s land development encouragement loans that encouraged inappropriate conversion of bush to pasture.
- Aerial sowing of conifer seed in an attempt to stabilise high country screes that created wilding pine incursions.
- Cyclone Bola pine plantations that have now created slash havoc.
- Rapid expansion in dairying in Canterbury and Southland (1990 – 2015) with its associated environmental impacts in those regions.

[309] Dr Scarsbrook stated:¹⁶³

We have seen significant intensification of pastoral agriculture within the Waikato-Waipā catchment over the last two decades. Around half of Waikato’s total land area (2.5 million km²) is in pastoral land use. Since the 2000s, conversion from planted forest to pastoral land, and conversion of non-dairy pastoral land to dairy has increased the area of pastoral land and its intensity of use.

An estimated 57,418 hectares (ha) of planted forest was converted to pastoral land use in the region from 2001 to 2018, while an estimated 15,891 ha of pastoral land was converted to planted forest. The net change in planted forest converted to pastoral land in the region for 2001-2018 was an estimated 41,527 ha.

Between 2001 and 2018, an estimated 504,335 ha (40%) of pastoral land had undergone some intensification, On an annual basis, this represents an annual net intensification rate of just over 1% per annum for the 17-year period.

¹⁶² Pinnell, Closing Submissions at [24].

¹⁶³ Dr Scarsbrook EIC at [149] – [150], [153]. We note that the 2.5 million km² in the first quoted paragraph is not correct and should read 2.5 million ha.

[310] Between 1990 and 2020, Dr Scarsbrook estimated that nitrogen excretion from dairy cattle increased by more than 50%.

[311] During the period of intensification, pastoral farming was lightly regulated in the PC1 area, with the focus appearing to have been on enabling the activities rather than on any meaningful controls on managing effects on the environment. The combination of PC1, more stringent national policy directions in the last few years, and increased market expectations of sustainable farming practices will require major changes in the way farms are managed, some of which are underway.

[312] Fonterra, HortNZ and no doubt other industry organisations, have instigated a range of improved management programmes over the last few years independent of the national and regional planning framework. The Fonterra Risk Scorecard Manual describes the Nitrogen Management Programme as running since the 2012/13 season and it formed part of Fonterra's commitments under the Sustainable Dairying: Water Accord. We describe some of HortNZ's initiatives relating to management improvements in Part F9.

[313] These programmes and the farming evidence before us indicate that there are those within the farming community who understand and accept the need for improved management practises that reduce contaminant discharges and there is good work being done by leaders in the field. By way of example, it was estimated that by 2017 61% of all streams on dairy and drystock farms had been fenced in accordance with the Stock Exclusion Regulations.¹⁶⁴

[314] However, the surface water receiving environments are not reflecting the changes to the extent that might have been expected. Mr Pinnell referred to Dr Scarsbrook's evidence on water quality trends in the Waikato over the 2010 to 2014 and 2014 to 2018 monitoring periods, "especially the increasing trend in *E. coli*

¹⁶⁴ Responses to the Court's questions about estimates of costs for stock exclusion from PC1 waterbodies, 14 November 2023.

concentrations for no clear reason, and very few significant reductions in other contaminants”.¹⁶⁵ He stated this came as a “bombshell” to him and that:¹⁶⁶

... Given that most of this fencing has been completed through this trend period and given concurrent improvements in point source discharges and dairy effluent disposal practices, I would have hoped for significant reductions in all contaminants.

[315] Mr Pinnell went on to explain his views of how PC1 might be received by the wider farming community generally, based on his involvement in the industry over many years. As one example, he stated that:¹⁶⁷

We have no way of objectively assessing how PC1 will be received by farmers in general. The farmer expert witnesses have probably given the Court a biased impression, as we have an understanding of the rules and regulations that is unique to very few farmers. However, my fear that farmers may give up has been informed by 2 events I attended during recesses in this Hearing. The differences in the world views presented in this Hearing and each of the events were stark and almost surreal to me. While I am not claiming any view is right or wrong, the point I would like to make is that for PC1 to be a success, these world views need to come closer together.

[316] Mr McGiven, a dairy farmer and former Waikato Federated farmers president, stated that “PC1 is the most challenging change in regional policy for our members in the Waikato region to date”.¹⁶⁸

[317] Mr Pinnell’s concern about farmers giving up highlights the need for particular care when setting targets. As we indicated in Part A6, it will be critical to the success of PC1 that recognition that progress towards meeting the long-term goal(s) will need to allow time for farmers and growers to adapt to the significantly changed regulatory regime and learn by experience, and that plan provisions must reflect practicality and affordability. This is a matter we explored in various ways through the hearing and we address later in this decision.

¹⁶⁵ Mr Pinnell, Closing submissions at [17].

¹⁶⁶ Mr Pinnell, Closing submissions at [17].

¹⁶⁷ Mr Pinnell, Closing submissions at [8].

¹⁶⁸ McGivern EIC at [45].

[318] By any yardstick, the challenges in restoring and protecting the Waikato and Waipā River catchments are immense and we agree with Mr Pinnell that the best outcomes will be achieved if the two disparate world views come closer together and parties work collaboratively. While we understand the desire to fix the problem(s), we consider that by setting more stringent rules as part of PC1, the outcome could be to seriously delay progress if unachievable short-term targets are set.

D6 The principle-based approach moving forward

[319] We set out below the principles we relied on through the Court process and when carrying out our evaluation of the appeals.

- (a) The provisions of PC1 must reflect what is practicably achievable in a diverse environment where topography, geology, and weather patterns vary significantly at both local and sub-catchment levels, and where information necessary for properly informed decision making is often limited;
- (b) The provisions must still be as clear on their face, certain, workable, practicable, enforceable and equitable as possible in the circumstances, recognising the limitations of methods currently available to quantify diffuse discharges of the primary contaminants;
- (c) When managing the risk of diffuse discharges from land use activities in PC1 it is necessary to consider both the relative scale of the discharges and the scale of the water quality improvement required in the sub-catchment, consistent with Policy 2 of the Notified Version;¹⁶⁹
- (d) PC1 is Stage 1 of a process to give effect to Te Ture Whaimana by 2096; while progress must be made towards the restoration and protection of the River catchments within the term of the plan change, setting realistic targets

¹⁶⁹ Requiring the degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to be proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and proportionate to the scale of water quality improvement required in the sub-catchment.

and timeframes that enable people and communities to adapt will be critical for success;

- (e) Giving full effect to Te Ture Whaimana is likely to require significant changes to land use practices over and above what can be achieved through PC1 and landowners need to be made aware of this at the time of FEP of preparation and/or consent applications;
- (f) Giving effect to Te Ture Whaimana must address all its objectives, including both the restoration and protection of the Waikato River and the restoration and protection of Waikato River iwi according to their tikanga and kawa, including their economic, social, cultural and spiritual relationships with the Waikato River;
- (g) Site and circumstance-specific solutions will need to be determined at a single operating unit farm level through the FEP process, rather than through a “one-size-fits-all” policy and rule framework approach, meaning robust independent review processes must be applied; and
- (h) There is unlikely to be any reliable way to demonstrate that the interim water quality targets have been met within a 10-year timeframe, either by monitoring of water quality or actions taken to reduce land use effects, meaning interim targets should not be seen as a measure of success or failure of PC1.

D7 Policy selection criteria set by the Collaborative Stakeholder Group for Plan Change 1

[320] The Collaborative Stakeholder Group established wide-ranging Policy Selection Criteria to be used, as set out in the s 32 Report.¹⁷⁰ All of the criteria are important and without denigrating any of them, the following are particularly

¹⁷⁰ Notified Version s 32 Report at Appendix 2.

relevant to the identification of the most appropriate choice of activity status to achieve the objectives of PC1, requiring consideration of:

Does the policy:

- achieve sound principles for allocation?
- recognise efforts already made?
- exhibit proportionality (those contributing to the problem contribute to the solution)?
- aim for cost-effective solutions?
- provide confidence and clarity for current and future investment?
- provide realistic timeframes for change?
- minimise social disruption and provide social benefit?

Is the policy:

- able to be measured, monitored and reported?
- implementable and technically feasible?
- administratively efficient?

D8 Requirement to consider alternatives

[321] The same duty of WRC and the Hearing Panel to consider alternatives applies to the Court. Section 290 of the RMA, Powers of court in regard to appeals and inquiries, states:

- (1) The Environment Court has the same power, duty, and discretion in respect of a decision appealed against, or to which an inquiry relates, as the person against whose decision the appeal or inquiry is brought.
- (2) The Environment Court may confirm, amend, or cancel a decision to which an appeal relates.

[322] We describe our consideration of alternatives in Parts E and F.

D9 Other aspects of the Court process

[323] For completeness, we record that other aspects of the Court process included:

- (a) mediation was undertaken over six days in October and November 2022 and 18 days between January and March 2023, following which WRC proposed significant amendments to the Decisions Version to reflect the outcomes;
- (b) eight Court facilitated expert witness conferences;¹⁷¹
- (c) some 120 briefs of evidence;
- (d) closing submissions were received by 24 November 2023 from all parties except from WRC, which were received on 1 December 2023;
- (e) a judicial conference to discuss matters raised in closing submissions was held on 5 December 2023;
- (f) judicial conferences to discuss drafting gates for different land use activities and other outstanding matters were held on 3 April and 17 October 2024; and
- (g) changes to our draft decision in response to the Amendment Act and amendments proposed by WRC from late November 2024.

[324] We considered the evidence was sufficiently clear to enable us to obtain an appropriate understanding of the issues without the need for a site visit.

¹⁷¹ Geospatial information systems; Economics and modelling; Water quality; Farm systems; Wetland and lakes Day 1 – Wetlands; Wetland and lakes Day 2 – Lakes, Planning; Planning (Point source discharges). There was also a response to the Court's questions about estimates of costs for stock exclusion from PC1 waterbodies.

Part E Choice of gateway for resource consent activity status

E1 Background

[325] As noted in Part A6, the gateway tool to be used to set resource consent activity status for dairy farming activities was a predominant issue throughout the appeal process. In both the Notified and Decisions Versions, activity status for dairy farms was to be determined using Overseer. This was consistent with practices used elsewhere in New Zealand over the last 15 years or so, with Overseer embedded within some regional plans as a fundamental starting point. While the significant uncertainties associated with the use of Overseer in regulation had been known about and considered for many years, it was generally acknowledged to be the best tool available.

[326] Its suitability came under renewed scrutiny nationally following a report by the Parliamentary Commissioner for the Environment (**PCE**) in December 2018.¹⁷² Following his investigation into Overseer, the PCE observed “I am left with a keen sense that resolving nutrient pollution will have to commandeer a much wider array of tools”.¹⁷³

[327] The Hearing Panel was aware of the review and recorded in its Recommendation Report that:¹⁷⁴

... Many parties referred us to the Parliamentary Commissioner for the Environment’s “Overseer and Regulatory Oversight” (2018) report where one of the key findings was “*a significant amount of information needed to confirm Overseer’s use in a regulatory setting is lacking*”. An Enfocus report, “*Using Overseer in Water Management Planning*” (2018) was also cited as pointing out the deficiencies of Overseer as a regulatory tool.

How Overseer was to be used in the notified version of PC1 was extensively set out in the section 42A report. It is not set out in any detail here, as the issues were well canvassed in the evidence before the Panel, with most parties having a common understanding of its deficiencies. However, an overview, and some criticisms, of Overseer are set out below.

¹⁷² *Overseer and regulatory oversight: Models, uncertainty and cleaning up our waterways* (Parliamentary Commissioner for the Environment, December 2018).

¹⁷³ *Overseer and regulatory oversight: Models, uncertainty and cleaning up our waterways* (Parliamentary Commissioner for the Environment, December 2018) at page 11.

¹⁷⁴ Recommendation report at [584] and [585].

...

[328] The Panel concluded that:¹⁷⁵

Accordingly, while we agree Overseer may be appropriate in some circumstances, we agree with other submitters that Overseer is not the appropriate sole DST¹⁷⁶ for use under PC1. In the Panel's view, it is more effective and efficient to allow for the adoption of a suite of more inclusive and complete alternative DSTs in PC1 than to prescribe the use of Overseer.

...

... For present purposes, it is sufficient to record that the Hearing Panel has determined that it should recommend enabling alternative models, as well as providing for some farming activities based on stocking rates.

[329] Despite the conclusions reached, the Hearing Panel retained the use of Overseer as the drafting gate for dairy farming activities, with the option to use an alternative that could produce comparable modelling outputs to those of Overseer.

[330] While the primary focus of the appeals was on the use of Overseer as drafting gate for dairy farms, Schedule B of the Decisions Version required that “[a]ny property where the total farmed area is greater than 20 hectares, or any property that is used for commercial vegetable production, must provide a Nitrogen Leaching Loss Rate (**NLLR**)”¹⁷⁷ using one of the above two methods, where required to do so by any rule in Chapter 3.11. The requirement to produce an NLLR and make significant reductions to it applied to CVP activities in accordance with Policy 3, but it was not intended as a drafting gate as all existing CVP activities were controlled activities under Rule 3.11.4.5 and all expanded CVP activities were discretionary activities under Rule 3.11.4.8.

[331] In the Decisions Version, drystock activities with a stocking rate of equal to or less than 8 stock units per hectare (**su/ha**) are permitted and are not required to produce an NLLR but activities above 18 su/ha are controlled activities and must produce an NLLR.

¹⁷⁵ Recommendation report at [603] and [607].

¹⁷⁶ Decision Support Tool.

¹⁷⁷ Defined in the Glossary of the Decisions Version as “A nitrogen loss rate established in conformance with Schedule B”.

[332] The majority of the rest of this Part E addresses only the use of Overseer as a drafting gate for dairy farming. We address its other proposed uses elsewhere in this decision.

[333] Table 1 of Schedule B of the Decisions Version includes a table of NLLR values which defines whether an activity has a low, medium or high NLLR, which are permitted, controlled or discretionary activities in accordance with Rules 3.11.4.3, 3.11.4.4 and 3.11.4.7 respectively.

[334] Fonterra's appeal sought in relation to Policy 4 that:

- A. Amend sub part a of the policy to provide the foundation for PC 1 to:
 - (i) Require the initial assessment of the intensity of farming activities and nitrogen loss risk of farms by reference to either the NLLR or the peak stocking rate of the individual property;
 - ...
- B. ...Explicitly enable N loss risk to be assessed using means other than Overseer leaching estimates in the same way as already provided for in Schedule D1 Part D2 in respect of FEPs associated with permitted activities.¹⁷⁸

[335] Based on our detailed review of the evidence immediately following completion of the hearing, it became apparent that the efficiency and effectiveness of PC1 would be influenced significantly by the efficiency and effectiveness of the drafting gate adopted to determine consent activity status for different intensities of farming activities. In the Court's view, it is self-evident that such a drafting gate must provide reasonable certainty that activities are allocated the appropriate activity status and that the method adopted to ensure this is clear and, if necessary, enforceable with a minimum potential for dispute.

¹⁷⁸ That provides for a whole farm risk assessment using a tool or model approved by a suitably qualified person and a requirement to show that the annual purchased nitrogen surplus does not exceed 150 kg N/ha/y, which could be based on the Fonterra NRS. Nitrogen (N) surplus is the balance between nitrogen inputs and nitrogen outputs. In OverseerFM it is calculated as the sum of the nitrogen inputs used for production on the farm (e.g. fertiliser, imported feed, irrigation water and clover fixation) minus the total nitrogen that is removed from the farm as products (e.g. meat, wool, milk, crops, exported effluent and supplements sold or stored).

[336] Again, based on our initial review, we were satisfied that neither Overseer nor the Fonterra NRS as proposed as an alternative would meet that requirement. However, the issue of Overseer variability was a significant issue of dispute through the appeal process and parties held strongly opposing views on the appropriate drafting gates. The evidence before us was that there had been a significant loss of confidence in the use of Overseer in regulation by sectors of the farming community, in particular by Fonterra, and by the CVP industry. On the other hand, Fish and Game did not accept that Overseer could not meet the requirement for certainty and submitted consistently that the use of Overseer as the drafting gate remained appropriate and was non-negotiable.

[337] In view of the criticality of the issue to the success of PC1, and the need to ensure the provisions were workable in the complex circumstances that exist, the Court sought to work collaboratively with the parties to ensure the provisions would be the most appropriate to meet the objectives of PC1. This took considerable time before and after the hearing and involved several judicial conferences or workshops. The positions of some parties were as strongly entrenched at the end as they were at the beginning of the Court process.

E2 Overseer variability and uncertainty

[338] The variability and/or uncertainty of Overseer estimates was the key aspect in the debate about its suitability for use in regulation and we address it first. Unless otherwise stated, we refer to Overseer variability in this part in relation to individual farms, not its use for catchment-wide modelling or the development of a nitrogen allocation strategy.

[339] Mr Richard Allen, the Environmental Policy Manager at Fonterra, considered that the root zone theoretical nitrogen loss estimated by Overseer has an accuracy $\pm 30\%$.¹⁷⁹ Ms Ongley referred Mr Allen to the Overseer validation outcome statement "... show[ing] that the current Overseer model (6.5.3) produces 'very good' results in estimating nitrogen leaching from grazed pastures and 'satisfactory'

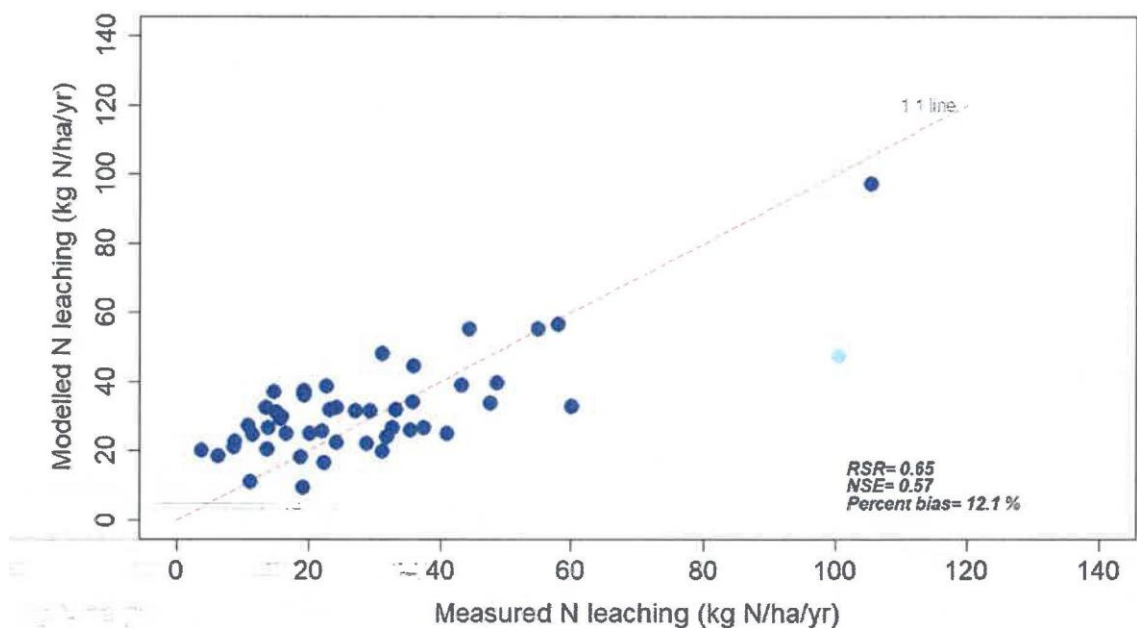
¹⁷⁹ NOE at 1007, lines 7 - 11.

to ‘good results’ for crops ...”.¹⁸⁰ The report is titled “Assessment of Overseer model performance with experimental data from grazed pastures” and was dated August 2023. It was authored by Mr Jean Paul Tavernet, who is the lead modeller of Overseer Ltd.

[340] Mr Allen replied “...if you look at the data that leads to that finding, from the TAG the data has an extremely wide range across the data, so the line is quite good, but the range across that line is really wide. It makes $\pm 30\%$ look a significant understatement of the error”.¹⁸¹ We interpreted his evidence to mean that the overall variability is $\pm 30\%$, but for an individual farm the variability could be greater. The following graph, reproduced from Figure 4 in the section of the report entitled “Comparison with experimental data from grazed pastures” provides one example of the variability.¹⁸² Other graphs in the paper showed similar variability”:

Figure 4

Comparison between experimental and modelled annual nitrogen leaching loss (kgN/ha/year) based on measured data from New Zealand paddock-scale grazing system studies and modelled using the Overseer model. Data are the mean of measurements over years per treatment, site, and soil with at least 2 measurements. The points are indicated by brackets ‘ ’ in Appendix C. The outlier is highlighted in light blue.



¹⁸⁰ Jean Paul Tavernet *Assessment of Overseer model performance with experimental data from grazed pastures* (August 2023) at 3.2.6.

¹⁸¹ NOE at 1012, lines 10 – 13.

¹⁸² Jean Paul Tavernet *Assessment of Overseer model performance with experimental data from grazed pastures* (August 2023) at 3.2.3.

[341] Mr Conway referred to the same document during his cross examination of Dr Le Miere.¹⁸³ Dr Le Miere replied that he had looked at the report behind that work and went on to say:¹⁸⁴

I still have some concern that the variability per farm output still has some quite big plus and minuses and you can see that in figure 7 when it's been validated, you can still get 50% between the sort of measures and the modelled, even 100% difference. Overall as a model when you combined everything together it performs adequately or very good under these performances but I still have some hesitation around the precision on an individual basis.

[342] In a subsequent response to a question from the Court, he thought the average error might be 20%, but “[t]here’s still quite a lot of margin individually. So I think we could still easily be saying 50% depending on the ranges you’re talking about”.¹⁸⁵

[343] We undertook our own review of the report. From all the extensive data members of this Court have reviewed over the last five or more years, we consider that variations of $\pm 50\%$ may occur for an individual paddock but the extent of data is so limited that reliable conclusions cannot be drawn for individual farms. Having considered all the latest evidence as well as our experience of other cases, we consider that a variability factor of 30 to 50% and possibly higher in some cases represents the best available information for most individual farms.

[344] This is consistent with the December 2018 findings of the PCE in relation to Overseer. He stated that:¹⁸⁶

... Depending on whether a farm of interest has similar (or different) combinations of soils, rainfall, climate, and farming systems compared with the ones used for calibration, uncertainty can be small or large.

...

If farms of interest have characteristics that differ from those used for calibration, higher levels of uncertainty can be expected. It has been suggested

¹⁸³ NOE at 1502.

¹⁸⁴ NOE at 1502, lines 20 – 26.

¹⁸⁵ NOE at 1536, lines 7 – 9.

¹⁸⁶ *Overseer and regulatory oversight: Models, uncertainty and cleaning up our waterways* (Parliamentary Commissioner for the Environment, December 2018) at pages 36 - 37.

that uncertainty in these circumstances is likely to exceed 50 per cent, but could be much higher still.

[345] On an FMU or sub-catchment-wide modelling basis, we consider that much lower variability will occur as plusses and minuses will even out to some extent. However, its future use for such a purpose is not a matter for this Court in PC1.

E3 WRC response to the Government's Overseer review process

[346] Following the review and because both the Notified and Decisions Versions of PC1 required the use of Overseer or an approved alternative, WRC considered that proceeding with the previous track for resolving the appeals (based on the use of Overseer) was unlikely to be productive at that stage.¹⁸⁷ They provided a draft report to PC1 appellants on 27 October 2021 seeking feedback on how to progress PC1 given the inconsistencies with national directions. Twenty eight parties provided feedback, with the large majority indicating that the Overseer issues should not prevent progress of appeal matters related to Overseer (or progress with other appeal matters). Some parties suggested alternative ways to manage nitrogen leaching that need not involve the use of Overseer.¹⁸⁸

E4 Resulting Court directions and parties' responses

[347] By minute dated 7 March 2022 we provided an overview of our understanding of the case and set out our proposed preliminary approach. A pre-hearing conference was held on 11 March 2022, with the purpose of planning a subsequent workshop that would provide a framework within which the Court could make preliminary determinations on particular issues. The role of Overseer and alternatives in PC1 were discussed at the conference, including:

What are parties' overall positions on the use of Overseer as a drafting gate for activity status or is another alternative available now? Other than as a drafting gate, do parties consider Overseer should be used for any other topic?

¹⁸⁷ Memorandum of WRC, dated 13 August 2021.

¹⁸⁸ Memorandum of WRC, dated 29 November 2021.

[348] In very broad terms, three key messages came out of the conference:

- (a) WRC considered Overseer should not be used as a drafting gate for activity status but could still have some use, for example in determining if land use change could be allowed;
- (b) Federated Farmers did not support Overseer as a drafting gate and considered that it could not be used to correctly identify low, medium, or high-risk properties, noting that trials had indicated it could over-estimate nitrogen loss by 40 to 50%. An alternative risk-based approach was proposed; and
- (c) Fish and Game was not willing to abandon the use of Overseer as a gateway and wanted to ensure that any alternative approaches would be appropriate and meet the Plan objectives, expressing concern about use of a risk management tool.

[349] It was clear from the above that as part of proceeding to hear the appeals, it would be necessary to have a comprehensive understanding of the concerns about Overseer and whether alternative methods should have a role.

E5 Consideration of alternatives

[350] We considered a comprehensive assessment of alternatives would be essential to support our s 32AA evaluation of the provisions. An outcome of the March conference was that Federated Farmers offered to prepare a discussion paper on alternatives to Overseer, which the Court accepted, that could be considered at a judicial workshop in June 2022. Federated Farmers prepared a comprehensive discussion paper, entitled “Alternatives to Overseer” for use at the workshop. The paper was prepared with input from WRC and updated on 30 May 2022 to reflect feedback from other parties. We express our appreciation to Ms Edwards, who was the primary author of the paper, for the thoroughness of the document.

[351] The purpose of the discussion paper was to identify all the functions Overseer was intended to fulfil in the Decisions Version, identify all of the potential options, tools or approaches that could be used to perform one or more of the functions to be performed by Overseer, and to identify the approaches being adopted by other regional councils in proposed or operative regional plans in response to the PCE's Overseer Review Report.

[352] The paper considered alternatives to Overseer identified in the Government response to the Overseer Review. It considered eight risk assessment approaches, including the Fonterra NRS and the proposed MfE risk index tool. It also considered bespoke solutions for CVP and for WPL using the Ruahuwai Decisions Support Tool it had developed for use on its land. Consideration was given to APSIM and FlowPath models and a physiographic approach as other options that could be used.

[353] The paper also considered amending Overseer to address the identified concerns, a greater use of controls on practices and inputs to manage nitrate leaching and new management tools. No party identified other options to those included in the discussion paper. Overseer was not considered in the paper because it was not an alternative, but it was considered at subsequent expert conferencing.

[354] For completeness, we note that the Block 2 s 42A Report for the Council hearing, which addressed policies, rules and most schedules, recorded that “[a] number of submitters request that WRC re-examine whether Overseer is the best tool for the job. Over 50 submission points stated that PC1 should be amended to allow the use and development of alternative and more accurate models to Overseer” and “[t]hirty-three submission points stated that Overseer should not be used for vegetable production, stating that it is not accurate for this purpose”.¹⁸⁹

[355] A range of alternatives to Overseer was considered in the s 42A Report and by the Hearing Panel and we took that information into account.

¹⁸⁹ Section 42A Report, Block 2 at 101.

E6 Judicial workshop on 14 June 2022

[356] The workshop focussed solely on Overseer and its alternatives. We issued a comprehensive follow-up minute dated 16 June 2022 in which we stated, “[w]e see this minute as a discussion document forming part of an iterative process where parties and the Court work collaboratively to ensure the efficient resolution of the appeals as soon as reasonably practicable ...”.¹⁹⁰

[357] In the minute, we addressed the requirements for expert witness conferencing in some detail. We set out our preliminary observations on how expert conferencing should proceed, based on the Court’s experience of how such processes work most efficiently, for consideration by the parties. We requested feedback from the parties and took that into account when finalising requirements for the conferencing.

E7 Expert conferencing

[358] Court facilitated expert conferencing of 14 experts took place on 16 and 17 August 2022 to address questions formulated as an outcome of the workshop process. The purpose was to recommend the most appropriate tools to be included in methods or a combination of methods in PC1 to address each plan provision identified in the above agreed statement.

[359] A wide range of different views was expressed by the experts on different parts of the conference agenda, and we considered them all. We note that Mr Trebilco summarised reasons why he considered the experts “largely agreed that the Scorecard could be used for a dairy gateway”.¹⁹¹ Our review of the resultant JWS indicated there were differing views that did not lend themselves to being summarised, so our evaluation reflects our own interpretation of the JWS and the relevant evidence.

¹⁹⁰ Minute dated 16 June 2022 at [6].

¹⁹¹ Mr Trebilco EIC at [108].

[360] The experts produced a spreadsheet summarising their assessment of the most feasible options. Unfortunately, the spreadsheet was poorly explained with cryptic descriptors that limited its usefulness. However, there was no disagreement stated in the JWS that the reductions in the score from the Fonterra NRS, the basic contaminant scorecard, the MfE Risk Tool, the Overseer revamp and the Ruahawai DST would be indicative of reductions in farm discharges.

[361] They agreed that no one tool or method could be appropriate for all (or most) farming land uses in the PC1 area. They also agreed that there are two preferable alternatives to Overseer that could be used, because they are most efficient and effective, the Fonterra NRS for dairy and one other, which we could not consider as a viable option because of insufficient detail.

[362] Further conferencing of 17 farm systems experts took place from 6 to 8 September 2023. They agreed that there is no scientific basis for setting the percentile limits that determine the permitted, controlled or restricted discretionary/discretionary activity thresholds included in PC1 but were developed for a planning purpose.

[363] They further agreed that Overseer would be able to create a comparison in quantifying the risks of the loss of nitrogen and phosphorus (given known limitations of the method of calculating phosphorus loss in Overseer) from both existing and expanded CVP land uses to assess whether there is no material increase. However, they agreed that a multi-evidence approach would be required as there is no single tool that allows this to occur.¹⁹²

E8 WRC's amended proposal taking into account the outcomes of expert conferencing and matters arising through the appeal process to that time

[364] Mr Trebilco stated:¹⁹³

¹⁹² JWS Farm Systems, in response to Questions 15 and 63.

¹⁹³ Mr Trebilco EIC at [92].

... the Expert Witness Caucusing Conference (August 2022) concluded that the Fonterra Nitrogen Risk Scorecard was the only available tool to replace use of the Overseer NLLR. I therefore propose that the Fonterra Nitrogen Risk Scorecard numbers be used instead of the NLLR as the basis for rule thresholds for dairy farming.

[365] He assumed that changing from the NLLR thresholds to NRS values would not significantly affect the numbers of farms in each risk category. Based on that assumption, he considered the change would not reduce the effectiveness of PC1.

[366] He considered it appropriate in terms of s 32(2)(c) of the RMA to use the NRS in circumstances where Overseer has been shown to not be reliable for farms other than those on free draining soils.¹⁹⁴ However, he provided no comparison of the suitability of the two tools for drafting gate purposes or any other supporting evidential basis, further explanation, or a documented s 32AA evaluation to support such a material change.

[367] As we discuss in Part E17, subsequent although limited analyses by WRC indicated that Mr Trebilco's assumption that changing from the NLLR thresholds to NRS values would not significantly affect the numbers of farms in each risk category was not correct by a significant margin. Overall, we consider the reasons given and justification provided for changing from the NLLR to the NRS lacked substance and we placed no weight on them.

E9 Approaches being taken by other regional councils

[368] Federated Farmers' Alternatives to Overseer Report included an overview of the approaches that had been or were proposed to be adopted in response to the Overseer Peer Review report by other regional councils with rules in proposed or operative plans that use Overseer. The regional councils included Canterbury, Hawke's Bay, Bay of Plenty, Wellington, Southland and Manawatū-Whanganui.

[369] The most relevant of these was the response of the Manawatū-Whanganui Regional Council, which was proposing the use of a NRS that incorporates

¹⁹⁴ Mr Trebilco EIC at [94].

provision for biophysical factors. That process is currently before a different division of the Court. We are satisfied that we are properly informed on work being undertaken by other regional councils of potential relevance to our PC1 decision.

[370] Two members of the Court are particularly familiar with the Bay of Plenty PC10 appeal process.¹⁹⁵ In that case, the Court set out a range of specific requirements to be met when using Overseer in a regulatory context, as follows:

- (a) A consistent approach to model input data and maximising the accuracy of that data;
- (b) The use of best management practices appropriate for the local environmental conditions such as soil types and weather patterns;
- (c) Using the model to predict trends and relative changes in farm management systems, rather than absolute values;
- (d) Calibrating the model outputs with field measurements for environments where conditions differ significantly from those where an acceptable level of calibration has been achieved;
- (e) Using only appropriately qualified and experienced experts to run the model for compliance purposes;
- (f) Establishing a clear, efficient and reliable process to review and update model outputs and management practices at appropriate intervals;
- (g) Appropriate on-site verification that modelled inputs and outputs are being complied with, in addition to independent peer review of performance; and
- (h) A compliance mechanism that is certain, reasonable, practical, and legally enforceable.

¹⁹⁵ *Federated Farmers of New Zealand Inc v Bay of Plenty Regional Council* [2019] NZEnvC 136.

[371] Extracts from the Court's PC10 decision of direct relevance to the PC1 appeals include:¹⁹⁶

[114] ... It is important to note that if a nitrogen loss below the root zone was predicted (hypothetically) by Overseer to be 4,000 kg a year for a particular property, the actual loss at an uncertainty of $\pm 30\%$ could be anywhere between 2,800 and 5,200 kg a year, which is substantial and makes sound resource management planning problematic.

...

[116] We are also particularly concerned to ensure that, as far as reasonably practicable, resources should be used for environmental improvements on-farm, not for unnecessarily high regulatory and monitoring costs.

[117] ... it is the Court's view that a range of specific requirements need to be met when using Overseer in a regulatory context, including:

...

- (c) Using the model to predict trends and relative changes in farm management systems, rather than absolute values;

...

[372] We are satisfied that the subsequent national debate on the use of Overseer in regulation reinforces the findings of the Court in that case and they remain generally valid in relation to the use of Overseer today. One difference is that the evidence before this Court suggests that Overseer variability for individual farms could be $\pm 50\%$ and possibly more in some cases. If that is the case, a farm with an estimated nitrogen loss of 4,000 kg/ha/y could be discharging anywhere between 2,000 and 6,000 kg/ha/y, a possible difference of three times.

[373] As 4,000 kg/ha/y is broadly equivalent to the 75th percentile nitrogen loss from a 100-ha farm in the PC1 area, there would be little, if any, certainty whether the nitrogen losses from any individual farm was actually above or below that value. Average nitrogen losses could be between 20 and 60 kg/ha/y which, based on Table 1 in Schedule B of the Decisions Version would mean they could be any of permitted, controlled or restricted discretionary/discretionary activities. This is relevant to its suitability for use as a drafting gate and as an indicator of when

¹⁹⁶ *Federated Farmers of New Zealand Inc v Bay of Plenty Regional Council* [2019] NZEnvC 136 at [114], [116] - [117].

proportionately more reductions must be achieved, which the Decisions Version specifies as being the 75th percentile value.

[374] We return to this later but by way of an analogy, we considered a shop weighing scales with an accuracy of $\pm 50\%$. A customer expecting to buy a kilogram of apples could end up with 500 grams or 2 kg, which would not be tolerated in the 500 kg situation. For similar reasons, it is hard to see how Overseer variability of $\pm 50\%$ could be acceptable or tolerated, when the consenting risk for farmers could be that some could be required to obtain a restricted discretionary or discretionary resource consent when in reality their nitrogen losses fall into the permitted range.

E10 Legal submissions on the suitability of Overseer as a drafting gate

[375] WRC submitted in opening that it had interpreted the Government review as meaning that Overseer is not fit for the purpose it is intended to fulfil under PC1 and that Mr Trebilco considered the Overseer-based NLLR thresholds should no longer be used in the PC1 rules. He considered Overseer to be an inappropriate tool for rule gateways. WRC acknowledged that removing the use of Overseer entirely was beyond the scope of the appeals and a s 293 process would therefore be required. In closing, it was submitted that a dual gateway could be acceptable to WRC as a suitable short-term approach, until the issue can be revisited through the Council's Freshwater Policy Review, which is at the early stages of consultation.

[376] Fonterra and DairyNZ jointly submitted in closing that "... there is no merit in relying on Overseer in relation to the drafting gate, either as a sole drafting tool or as part of a dual drafting gate".¹⁹⁷

[377] Beef and Lamb and Federated Farmers jointly submitted in closing that they "... do not support the wholesale deletion of Overseer from PC1, but instead seek that it be retained alongside the use of the NRS".¹⁹⁸

¹⁹⁷ Closing submissions for Fonterra and DairyNZ at [1.4].

¹⁹⁸ Closing submissions for Beef and Lamb and Federated Farmers at [6].

[378] HortNZ submitted in opening that “[i]t is telling that no party or witness in this case promotes the use of Overseer for CVP”, and “[a] range of witnesses for many parties in this appeal freely accepted that Overseer was problematic for CVP”.¹⁹⁹ While not explicitly stated, it is clear from the submissions that HortNZ considers the use of Overseer for managing nitrogen losses from CVP is not appropriate.

[379] In closing submissions, WPL stated its support for retention of the NLLR but sought the use of alternatives to Overseer be included and that no party had established scope to introduce the NRS as a rule gateway for dairy farming.

[380] The WRA submitted that it would in substance be able to support removing Overseer, the continued use of Overseer, or a combination of tools, and that “[i]f the implementation of that combination of tools is the solution that enables the Court to proceed without implementing a section 293 process, then the WRA would support that outcome”.²⁰⁰

[381] Fish and Game and Forest and Bird jointly submitted in closing that they do not oppose a “multiple lines of evidence approach” provided the purpose of the approach is intended to estimate N loss. They also submitted that:²⁰¹

... actual measurement of nitrogen (**N**) loss by Overseer or another acceptable *model* remains essential for cumulative effects management ...

...

The use of Overseer to delineate controlled from discretionary activity status (in this case referred to as putting applicants into ‘bins’/a sorting hat) *is* acceptable, even having regard to a series of Government guidance. ... Even if the “absolute number” warning in the advice did override all other parts of the advice, the use of Overseer at the gateway, is not using Overseer as an absolute number.

We can have more confidence in Overseer, following Ministry for Primary Industries Overseer Redevelopment Programme Report Technical Paper No: 2023/12.

...

¹⁹⁹ Opening submissions for HortNZ at [51].

²⁰⁰ Closing submissions for WRA at [23].

²⁰¹ Closing submissions for Fish and Game and Forest and Bird at [3], [5] – [6], [51].

Critically, there has been no public consultation on the use of the NRS. The potentially wide-ranging implications of changing from Overseer to the NRS mean that it is not possible to be confident there are no other parties that would be interested in commenting on the NRS option.

E11 Expert evidence relating to Overseer

[382] While we note that Mr Jon Williamson, a hydrologist/hydrogeologist who gave evidence on behalf of WPL, referred to the use of Overseer in WPL’s Ruahuwai Decision Support tool, we received no evidence from any expert experienced in the use of Overseer overtly supporting its use in PC1 as a drafting gate.

[383] We received expert evidence relating to Overseer from Mr Allen on behalf of Fonterra. He was seconded to DairyNZ in 2010 to develop a dairy industry protocol for the use of Overseer. This protocol formed the basis of the Overseer Best Practice Data Input Standards. He was also a member of the Technical Advisory Group for the Overseer Best Practice Data Input Standards prior to the Overseer model rework and business restructure.

[384] He described significant issues with reliance on Overseer for use in Fonterra’s nitrogen programme.²⁰² Briefly, these included the high cost of expertise to run the model and version control issues which meant that “[f]armers could make practice improvements and reduce inputs and see the model output number indicating that farm level losses were increasing”.²⁰³ Other issues included difficulty in auditing many input data, the potential for gaming by an expert user, with the potential for inequities and difficulties in identifying actual soil conditions at a farm block scale.

[385] Mr Allen also stated that:²⁰⁴

Fonterra has not required farmer data to the level of detail that would be required for an Overseer file since 2017 and there is no expectation or

²⁰² Mr Allen Second SOE dated 28 July 2023 at [15.4].

²⁰³ Mr Allen Second SOE, 28 July 2023 at [15.4](b).

²⁰⁴ Mr Allen Second SOE 28 July 2023 at [15.8].

requirement that Fonterra’s on-farm advisory team will have expertise in the use of the Overseer model.

[386] Mr Gerard Willis, a planning expert engaged by Fonterra and Dairy NZ stated that:²⁰⁵

The Government advice recommending caution in the use of Overseer has caused a rethink of how farming activities can be effectively managed to achieve target attribute states. In that regard, there has been a realisation that what we are actually able to manage at the farm scale is *risk of discharge* rather than discharge itself. ...

[387] Dr Le Miere represented Federated Farmers on an Overseer steering group in 2010. He outlined wide-ranging concerns about the use of Overseer as a drafting gate by reference to the Government’s Overseer peer review and his own “considerable experience with models”. He stated that:²⁰⁶

... the issues described in the Science Advisory Panel’s report, led the Panel to conclude that they could not be confident that Overseer modelled outputs indicate that changes in farm management reduce or increase losses of nutrients, or what the magnitude or error of these losses might be. Their conclusion is that Overseer is “not adequate to provide more than a coarse understanding of a farm’s nutrient losses”.

...

In terms of the use of Overseer as a drafting gate in PC1, my primary concern (in light of the independent review) is that the Court cannot be confident that it has identified higher risk farming activities and that the activities receiving the greatest scrutiny are those that need it. All the Court can be confident of is that Overseer has been used to identify 25% of farms – whether they are the top 25% or just 25% is uncertain.

In my opinion, the Fonterra N risk scorecard provides greater certainty that the farms with the highest risk have been identified in the 75th percentile because the N risk scorecard is based on practices that are know[n] and have been demonstrated to carry higher risk.

[388] Mr Stuart Ford, an agricultural and resource economist engaged by HortNZ with extensive experience in the use of Overseer, questioned Overseer’s appropriate use for CVP, including that Overseer is not currently capable of modelling all possible crop types therefore forcing the modeller to choose proxy crops to represent the crop. He said that the majority of his concerns had not been met by

²⁰⁵ Mr Willis EIC at [5.3].

²⁰⁶ Dr Le Miere EIC at [6.17], [6.20] - [6.21].

MPI's review of Overseer. He does not support the use of Overseer to determine regulatory thresholds.

[389] In response to a question from the Court, Mr Pinnell commented on Overseer as follows:²⁰⁷

I think its a very good tool to be able to take account of multiple factors on a farm to give you an idea of where risk is on the farm to then create the discussion with the farmer as to how we attempt to manage that risk. And often it's a very – it's an eyeopener to a farmer as to where the risk that, at block level, is on their farms and once they realise that they – and often it's not just the risk, it's the opportunity lost, or over expenditure that they've put into their farm system when they realised they could do it more efficiently to become more efficient and, as a result, be better on the environment. So, I do like the tool – as we've said, there is the variation, you know, of sources of error and, you know, we quote it as normally that 20% error, ...

E12 Central Government guidance on the use of Overseer

[390] In the five years since the Bay of Plenty PC10 hearing and the PCE's report on Overseer, there has been extensive national debate about the appropriateness of using Overseer in regulation and significant further research undertaken. The MfE has provided guidance to Councils on the use of Overseer in regulation since 2022 and updated it in April 2024 (accessed 22 April 2025). The following previous advice remained valid:

- When using OverseerFM, output numbers should not be used as absolute numbers.
- Regulators should continue to use a range of tools and evidence sources when assessing nutrient loss across farms and catchments (referred to as 'a multi-evidence approach')

[391] General principles identified by MfE of relevance to PC1 include:

- (a) ... councils should adopt a best information approach and look for opportunities to support decisions made using OverseerFM data with other evidence.
- (b) When issuing new consents, preparing new regional plans, or changing existing plans, councils should use wording that will provide for maximum

²⁰⁷ NOE at 267, lines 5 – 15.

future flexibility for assessing nutrient loss from a range of tools that may become available.

[392] We note that while we have considered the MfE advice, our findings and determination are based solely on our evaluation of the evidence and the Court’s knowledge of the issues from other cases to the extent relevant.

E13 WRC’s final proposal relating to the use of Overseer as a drafting gate

[393] WRC initially accepted Mr Trebilco’s advice that the use of Overseer should be replaced by NRS values as the sole drafting gate for dairy farming activities. After further consideration by WRC, higher intensity farming activities were required to reduce the risk of diffuse discharges of the four primary contaminants to low or medium determined by reference to tables of either NLLR or NRS in WRC’s Final Proposal. That was a substantial change from the Decisions Version, which required such activities to achieve “significant reductions”. The proposed change raised an issue of whether it precludes a feasible consenting pathway by default for activities that cannot comply. There would be no discretion to accept any value greater than the 75th percentile, however small and whatever the effects.

[394] Mr Trebilco discussed his reasons for proposing the amendment in WRC’s Final Proposal in his EIC, referring to a number of appeals against the Decision Version, including “Provide greater clarity with respect to the terms ‘significant reductions’ ...” Mr Trebilco stated he supported an amendment to the wording of Policy 2(B)(c) to read:²⁰⁸

Requiring farming activities with a high risk of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water to:

- i. Reduce that risk to moderate or low over an appropriate specified time period; or

...

[395] Based on the way the original s 32 Report was written, the proposed amendment would largely reinstate what the Notified Version was intended to

²⁰⁸ Mr Trebilco EIC at [174] and [176].

require, that discharges greater than the 75th percentile value must reduce to that value within a period of approximately 10 years. However, that intent is not reflected in the Notified Version itself as there is no policy requirement to reduce to below the 75th percentile value and where a farm could not satisfy a matter of control relating to the achievement of the 75th percentile value by an agreed date, it defaulted to restricted discretionary activity, not non-complying or prohibited.

[396] As we discuss in Part E16, the Hearing Panel found the 75th percentile approach to be flawed for several reasons. The Panel rejected the concept “that those above an arbitrary trigger level should be required to reduce below that level”.²⁰⁹ Mr Trebilco’s proposed amendment is directly contrary to the Panel’s determination and was not supported by any explanation other than as a response to appeals requiring greater certainty. While he stated that he considered that the proposed amendment is appropriate in terms of s 32 tests, he provided no further documented evaluation to support that assertion, or why he disregarded the Hearing Panel’s findings. He also considered that the substance and overall direction of the Decisions Version of this part of Policy 2 would not be changed but provided no reasons in support.

[397] We agree that Policy 2(b) of the Decisions Version requiring “significant reductions” is inappropriate as it lacks clarity and certainty. However, we consider the evaluation undertaken by Mr Trebilco to support the change in the form proposed fell well short of what would be necessary for the proposal to meet the requirements of the RMA and we do not accept it. The lack of evidence of robust s 32AA evaluations to support proposed major changes to the provisions was a recurring theme in Mr Trebilco’s evidence and limited the weight we could give to some of his proposed amendments.

E14 The Court’s response to the drafting gate issue

[398] It was clear from our initial review of the evidence immediately following completion of the hearing that there would be difficulties in finding a drafting gate

²⁰⁹ Recommendation Report at [1087].

option for differentiating between dairy farming activities with moderate and high intensities and risk of diffuse discharges that would meet the requirements for certainty, clarity and equity needed to meet the objectives of PC1. In our minute dated 23 February 2024 we stated that Overseer variability would lead to uncertainty as to whether farms will be allocated the correct activity status. We provided an example that indicated the true activity status could be any of permitted, controlled or restricted discretionary/discretionary. In our view, such an approach would be unworkable and lack credibility, as discussed further below.

[399] In the same minute we set out our preliminary findings on the suitability of the NRS for use as a drafting gate in some detail and stated that:²¹⁰

Our current view is that significant uncertainties would exist using either or both Overseer and the NRS (in the form currently proposed) as a drafting gate. Parties will be directed to provide comment and to consider possible options that might provide a way forward (set out later in the minute).

[400] Possible options identified in the minute included making dairy farming activities that are not permitted either all controlled or all restricted discretionary activities, and developing an amended NRS with drafting gate limits that make appropriate provision for biophysical characteristics, among others. Subsequently, a series of exchanges occurred between the Court and the parties to consider the issue further.

[401] By minute dated 27 March 2024, we drew attention to the related matter of the 75th percentile nitrogen loss rate, which the Hearing Panel rejected because of its “little confidence in the robustness of the methodology being employed”,²¹¹ but which WRC reintroduced in its Final Proposal. A judicial conference was held on 3 April 2024, with the drafting gate as the primary focus of discussion. Further minutes were issued in April, July and October, with opportunities for parties to respond, from which it was clear that Fish and Game considered a NRS was not an appropriate drafting gate and could only be satisfied if Overseer remained as the sole

²¹⁰ Minute dated 23 February 2024 at [22].

²¹¹ Recommendation Report at [631].

drafting gate for dairy farming activities with more than a low risk of diffuse discharges of nitrogen.

[402] We set out our determination of that matter in Part E16.

E15 WRC’s response to the matters raised by the Court

[403] By memorandum dated 15 March 2024, WRC acknowledged that it had not provided a quantified cost/benefit analysis to support Mr Trebilco’s proposed changes to Policy 2(B) and also acknowledged the Court’s concerns about the proposed changes. In a subsequent memorandum dated 10 May 2024, WRC suggested that “alongside the policy direction to achieve the lowest practicable risk, there could also be a policy direction that the risk of diffuse discharges of nitrogen to water should be reduced proportionate to the level of risk represented by the farm”.²¹²

[404] WRC went on to say:²¹³

... WRC considers that a policy direction that refers to the level of risk of diffuse discharges to water, which can then be interpreted appropriately for a farm during the consent process, is a more workable policy direction.

This policy direction could be applied to restricted discretionary activities, or both restricted discretionary and controlled activities. If the risk is high because of climate or soil conditions, or because there are water bodies being impacted by the farming activities, or because of particular NRS risk factors, appropriate conditions could be applied to reduce risk to an extent proportionate to the level of risk. ...

[405] In response to the Court’s direction to make a proposal on that basis, WRC proposed amendments to Policy 2 to require farming activities with more than a low risk of diffuse discharges to obtain a resource consent and adopt Good Management Practices (**GMP**), removing the requirement to reduce the risk of diffuse discharges to be as low as practicable.²¹⁴ The proposed policy amendment then provided:²¹⁵

²¹² Memorandum of WRC dated 10 May 2024 at [37].

²¹³ Memorandum of WRC dated 10 May 2024 at [39] – [40].

²¹⁴ Memorandum of WRC dated 2 September 2024.

²¹⁵ Memorandum of WRC dated 2 September 2024 at [51].

...

Where despite the adoption of good management practices, there remain significant risks of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water from the farming activities, requiring those farmers to undertake actions over an appropriate specified period stated in a resource consent to reduce that risk proportionately to the magnitude of that risk (where that risk is high, greater reductions in that risk are expected); and

- i) For the purpose of this policy significant risks potentially remain:
 - Where a dairy farm has a Nitrogen Leaching Loss Rate above the 75th percentile, as set out in Schedule B(C) Table 2; or
 - Where the farm is in the catchment of lakes or wetlands, where there is evidence that the intensity of farming and/or physical farm conditions such as slope, high erosion potential or poor drainage, are adversely affecting, or are likely to adversely affect, those water bodies despite the adoption of good management practices; and
- ii) Reductions in that risk shall be meaningful with respect to the size of risk; and
- iii) Those actions shall be recorded in the Farm Environment Plan; and
- iv) For dairy farms, the proportionate reduction in the level of risk shall be managed with reference to an Overseer evaluation for the farm provided with the application for consent and five yearly thereafter; and

[406] The proposed policy set out matters to be had regard to when assessing the actual risk of the farm system and matters to be considered when determining the appropriate specified period.

[407] We consider the policy further in Part E22.

E16 Our evaluation and findings relating to Overseer as a drafting gate

[408] As an early part of our evaluation, we reviewed the Hearing Panel's Recommendation Report in some detail. The panel considered the 75th percentile rule in the Notified Version to be flawed for several reasons.²¹⁶ The panel accepted in principle that "those discharging more [nitrogen] should be under the greatest scrutiny"²¹⁷ and, as noted above, replaced the 75th percentile provisions with a requirement for activities with a high NLLR to make significant reductions in their

²¹⁶ Recommendation Report at [19] and [20].

²¹⁷ Recommendation Report at [1087].

nitrogen discharges, but without defining what “significant” means (as one of three options).

[409] They considered those discharging more nitrogen should be determined by reference to the high NLLR values in Table 1 in Schedule B of the Decisions Version, which were based on Fonterra data for each FMU for the 2015/16 summer season, as run in Overseer version 6.3, which appeared to us to have merit compared to any other available alternative.

[410] We explored the possibility of using a variation of the approach with the parties in our minute dated 30 July 2024. We stated that “Unless any party can demonstrate that is not appropriate, we will adopt the Table 1 values as the basis of 75th percentile values, updated to the latest version of Overseer, to be used in PC1”.²¹⁸ WRC saw difficulty with the proposal because the issue of Overseer version changes presents difficulties, stating “[i]t is not clear how Overseer version 6.3 numbers can be converted into equivalent Overseer FM numbers”.²¹⁹ It submitted that “[w]hile it may be possible to address the versions issue, this would be a complicated process with input and potentially evidence required from the parties’ respective experts”.²²⁰

[411] Federated Farmers and Beef and Lamb jointly submitted that it is not reasonably practicable to update the 75th percentile Overseer numbers, going on to say that “updating the 75th percentile numbers for each Overseer version change creates a significant implementation risk for farms at or near the 75th percentile (i.e., a farm might be below that threshold in some versions and above it in other versions)”.²²¹

[412] After careful consideration of those submissions, we accepted that using Overseer as a drafting gate based on the table in the Decisions Version would not

²¹⁸ Minute dated 30 July 2024 at [37].

²¹⁹ Memorandum of WRC dated 2 September 2024 at [20].

²²⁰ Memorandum of WRC dated 2 September 2024 at [22].

²²¹ Memorandum of Federated Farmers and Beef and Lamb, dated 16 September 2024 at [13].

have sufficient certainty to be considered the most appropriate to achieve the objectives of PC1. Doing so left no Overseer option with sufficient certainty to act as a reliable drafting gate between moderate and high intensity dairy farming activities and we remained cognisant of the agreement of all parties that higher intensity activities should be required to do more mitigation than other discharges and that the 75th percentile value was the level above which more was required.

[413] We continued to consider alternative ways in which those agreements could be respected. However, as noted in Part E13, WRC's Final Proposal that dairy farms reduce their discharges to the 75th percentile value meant there would be no discretion to accept any value greater than the 75th percentile, however small and whatever the effects, resulting in a potential de-facto prohibited status. There was no evidence to show this had been considered and no s 32AA evaluation to support it. It will be seen from later in this Part E that we do not consider adopting the NRS as proposed as the drafting gate would be the most appropriate way to achieve the objectives, which eliminated the two options in evidence before the Court.

[414] As the parties had agreed that stocking rate should be used for drystock farming, and as Fonterra sought its use for dairy farming in its appeal, we explored with the parties the possibility of using it as a drafting gate for dairy farming.²²² Following memoranda in response and discussions at the 17 October 2024 conference, it was apparent that such use would be significantly more complex than for drystock farming and was not supported by any party, including Fonterra who initially sought its use. Accordingly, we did not consider it an appropriate option for PC1.

[415] When considering the use of Overseer as the drafting gate, we took into account the PCE's findings and the following:

- (a) we received no expert evidence supporting its use for this purpose;

²²² Minute dated 2 October 2024.

- (b) there is no support for its use by any farming or CVP party, with the majority view being that is not appropriate for the purpose;
- (c) WRC considers it is not fit for purpose;
- (d) the Court determined in the Bay of Plenty Regional Council PC10 case that Overseer should be used to predict trends and relative changes in farm management systems, rather than absolute values; and
- (e) MfE guidance has been consistent over the last three years that Overseer should not be used as an absolute number.

[416] We considered the submissions of Fish and Game and Forest and Bird, including Fish and Game's submission that using Overseer as a drafting gate is not using it as an absolute number. They did not call evidence from an expert in Overseer to support the submission. The evidence before us is that the nitrogen loss from an individual farm could be 30 to 50% less than or 30 to 50% more than the Overseer predicted loss. That level of variability cannot be considered as acceptable for use as a tool "to sort activities into bins" for consent activity status purposes, as the two parties submitted in closing, nor can it be used as an indicator of when the level of discharge requires an activity to do more by way of mitigation. The example referred to at the end of Part E9 makes that clear.

[417] We find that as the evidence demonstrates that the best expert assessment of variability from the Overseer estimate is so large that the actual nitrogen loss could put the activity in any of permitted, controlled or restricted discretionary/discretionary activity status, using the estimate for regulatory purposes would clearly be untenable. We find that using Overseer as a drafting gate or to determine a 75th percentile value would not provide the certainty needed for regulatory purposes, could result in potentially significant inequities, and would be open to challenge to the extent that it could be unworkable.

[418] Notwithstanding these findings we find that Overseer remains the most appropriate of the available tools to monitor changes in nitrogen loss risk from dairy

farms. Its use for this purpose is consistent with MfE advice and the Court's earlier findings in relation to Bay of Plenty Regional Council PC10. However, it may require a reference file system to be included in PC1 and we will direct WRC to consider this matter further in consultation with the parties and make a recommendation for final determination by the Court.

E17 Possible use of the Nitrogen Risk Scorecard as an alternative to or to complement Overseer as a drafting gate

Preamble

[419] We are satisfied that the only alternative or complementary tool that is currently available could be one based on the Fonterra NRS, which can only be used in its current form for dairy farms. We are aware that a NRS for CVP is being trialled, but it was not proposed as a tool to be used in PC1. Similarly, we are aware that an early draft of a NRS for drystock was put before us but was insufficiently advanced in its development to be considered for use in PC1.

[420] We are also aware of the work MfE is undertaking in relation to NRS and that being undertaken by Manawatū-Whanganui Regional Council in relation to a NRS, both of which incorporate consideration of biophysical characteristics. We see this as an area where considerable further development is likely within the term of PC1. However, a NRS with or without including biophysical characteristics is currently untested and untried as a regulatory tool, but in view of uncertainties relating to the use of Overseer as a gateway tool between controlled and restricted discretionary or discretionary activity status in PC1 and, there being no other alternative tools on the horizon, we considered it particularly carefully.

Background and description of the Fonterra Nitrogen Risk Scorecard

[421] Fonterra developed the Scorecard as part of its Nitrogen Management Programme to focus farmer attention towards identifying and changing specific practices that are contributing to nitrogen loss risk, rather than reporting whole farm level metrics, and more specifically to achieving good farming practice outcomes through FEPs. The Scorecard uses annual farm data relating to six key farm

practices and applies a level of risk to each of those practices against a set of benchmark parameters.²²³ The Scorecard report also includes a calculated nitrogen surplus metric for the property,²²⁴ which could be relevant to compliance with Schedule D1 for permitted activities. It does not model nitrogen loss.

[422] The following diagram shows how the Fonterra Scorecard works:



[423] Each management practice receives a risk rating, with the level of risk determined by a score based on the farm data provided. The risk score is calculated for each key farm practice. That score is then modified by consideration and scoring of 'sub factors' that might exacerbate or decrease the level of risk. The level of risk for each of the six farm management practices is determined by calculating an overall score per management practice, with a score of less than 20 being very low risk ranging to a score greater than 80 being very high risk.

[424] The NRS does not model the whole farm effect of the proposed combination of mitigation measures, nor does it include important risk factors such

²²³ Stock Management, Nitrogen Fertiliser, Imported Feed, Cropping and Cultivation, Irrigation and Effluent Management.

²²⁴ Fonterra Nitrogen Risk Scorecard Manual in Section 2.

as slope, soil conditions or climate, nor predict nitrogen losses below the root zone, which Overseer does.

NRS Peer review

[425] The Fonterra NRS was peer reviewed by AbacusBio.²²⁵ The author of the report was unavailable for questioning and no other expert was able to explain the report to us in any detail. The report found that nitrogen applied in kg/ha accounted for 50% or more of the explained variation in nitrogen loss and that stocking rate and effluent discharge destination were the other main contributors. Table 1.1 in Appendix 1 was entitled “Accuracy, transportability and proportion of variance explained for Overseer N-Loss and Overseer N-Surplus predicted from factors selected from a stepwise regression model for farms without irrigation”. R² for nitrogen loss was less than 50% and for the nitrogen surplus was just under 90%.²²⁶

[426] The executive summary stated, “Overall, the N Scorecard is providing very useful feedback to farmers on their farm management practices. The moderate accuracy of prediction of Overseer N-Loss to water from the Scorecard subfactors is encouraging, given that major environmental data which affect nitrogen loss to water are not included in the Scorecard”.

[427] In our view, an R² value of less than 50% is a concern. It is the Court’s understanding that inclusion of biophysical factors in the Scorecard could increase the R² value for nitrogen loss significantly. We were unable to seek clarification of important aspects of the report by its authors so, overall, we were left with many unanswered questions relating to the suitability of the NRS for use in regulation.

²²⁵ Neville Jopson *Evaluation of Fonterra’s N Scorecard Factors on Overseer Nitrogen Statistics*, by (AbacusBio Limited, 1 November 2019).

²²⁶ R² is a measure that provides information about the goodness of fit of a model. In the context of regression it is a statistical measure of how well the regression line approximates the actual data.

Comparison of Nitrogen Loss Scores with NLLR values

[428] To assist the Court, WRC helpfully commissioned work to compare Overseer-derived NLLR values and NRS scores for some 50 farms in the Upper Waikato and Waipā River FMUs.²²⁷ The Report stated that the Overseer N loss was moderately correlated with the aggregate NRS score in the Upper Waikato catchment ($r^2 = 0.47$) and weakly correlated in the Waipā catchment ($r^2 = 0.20$). Overall, the Overseer N loss was weakly correlated with the aggregate NRS Score ($r^2 = 0.23$). The analysis showed that:²²⁸

...the aggregate NRS Score and Overseer N loss indicated the same level of N risk (low, medium, or high) 54% of the time. The aggregate NRS score, and Overseer N loss indicated a difference in risk of one level 34% of the time (for example, where one tool classifies a farm as medium-risk while the other classifies it as low-risk). The aggregate NRS score, and Overseer N loss indicated a difference in risk of two levels 12% of the time (for example, where one tool classifies a farm as low risk while the other classifies it as high risk).

[429] In the accompanying memorandum, the Council recorded that:²²⁹

Of the 46 farms within the PC1 catchment, 17 would be regulated by the same rule (and have the same activity status) irrespective of which gateway tool is used, and 29 would be regulated by a different rule (and have a different activity status) depending on which gateway tool is used. There are two farms that would be a restricted discretionary activity (i.e. high intensity) if Overseer NLLR is used, and a permitted activity (i.e. low intensity) if the NRS is used.

[430] Our own review of the results showed that for Overseer estimates of around 50 kgN/ha/y, risk scores ranged between 64 and 180, a difference of almost three times. While the sample size was small, taken overall, the variability of results indicates that allowing farms to choose whether to use Overseer or NRS, an option considered by WRC at one time, would result in inconsistency when determining

²²⁷ Memorandum of WRC dated 25 January 2024, at Attachment A, QCONZ *Analysis and comparison of Overseer and Nitrogen Risk Scorecard outputs – Plan Change 1 Catchment* (December 2023).

²²⁸ QCONZ *Analysis and comparison of Overseer and Nitrogen Risk Scorecard outputs – Plan Change 1 Catchment* (December 2023) at page 3.

²²⁹ Memorandum of WRC dated 25 January 2025 at [7].

consent activity status with additional potential for inequities and increased risks of disputes and being unable to enforce the rules.

[431] The study results do not support Mr Trebilco's assumption in Part E8 that changing from the NLLR thresholds to Nitrogen Risk Scorecard values would not significantly affect the numbers of farms in each risk category and suggest it was unlikely to be correct.

Legal submissions

[432] Some of the legal submissions summarised in relation to Overseer in Part E8 are relevant, but we do not repeat them here. However, the following additional closing submission of Fish and Game and Forest and Bird is relevant:²³⁰

The proposal [to use the NRS] would represent a significant departure from the output-based approach to N-loss at the consenting gateway (through the NLLR). The potential implications of this departure are extremely wide-ranging, both in spatial terms and in terms of the effects on other interested parties, and freshwater values generally. It is submitted that a full Schedule 1 RMA process would be needed to ensure public participation before such a decision is taken.

... the NRS is not an alternative model for measuring N loss.

Expert evidence

[433] The experts attending the August 2022 expert conference agreed that:²³¹

With any alternative contaminant risk tool, there will invariably be trade-offs between simplicity and precision that the Court needs to consider between the degree of granularity, complexity and extent of the parameters (i.e. geophysical, practices etc) included or excluded, as evidenced in the differences in expert opinion expressed with regard to technical requirements.

[434] The experts differed as to whether biophysical characteristics should be included, with some saying they should and others saying they should not.

²³⁰ Closing submissions of Fish and Game and Forest and Bird at [38] and [40].

²³¹ JWS, following expert witness caucusing conference on 16 and 17 August 2022 at 2.

[435] Mr Allen was part of a small team that developed and rolled out the NRS to all Fonterra suppliers. He stated that the NRS had been the primary assessment tool used by Fonterra over the last five years, enabling an objective annual assessment of nutrient loss and intensity related risk on all supply farms. He explained that the 75th percentile Purchased Nitrogen Score is used by Fonterra as a threshold metric for an environmental performance payment.²³²

[436] He described the core principles behind the NRS and how it works. By way of example, he explained that:²³³

Fonterra has a robust understanding of the range of practices that exist for each of the key risk drivers. It was therefore possible to align the known range of practices against a score range. Detailed data analysis was carried out to then ensure there was reasonable relativity between each key driver score. For example, the Nitrogen Fertiliser risk score at 80 points would, on average, have a similar impact on the risk of N loss as would a Stocking Rate risk score of 80.

[437] Mr Adrian Brocksopp, a specialist in dairy, arable and nutrient management at WRC, stated that:²³⁴

My assessment of the NRS has shown that it will perform the basic function of assessing nitrogen loss risk for dairy farming operations and determining rule gateways [under PC1 provisions], as it includes all management factors that would commonly contribute to nitrogen loss risk within a dairy farm system.

[438] Mr Lee Matheson, a farm systems expert engaged by Federated Farmers agreed with Mr Brocksopp's view.²³⁵

[439] Mr Brocksopp stated that the level of data provided to calculate NRS values is comprehensive. However, he saw the fact that the NRS does not include assessment of a farm's inherent risk, being factors such as soil, slope and climate as a

²³² Mr Allen EIC at [4.1] - [4.2].

²³³ Mr Allen EIC at [3.5].

²³⁴ Mr Brocksopp EIC at [71].

²³⁵ Mr Matheson EIC at [3.33].

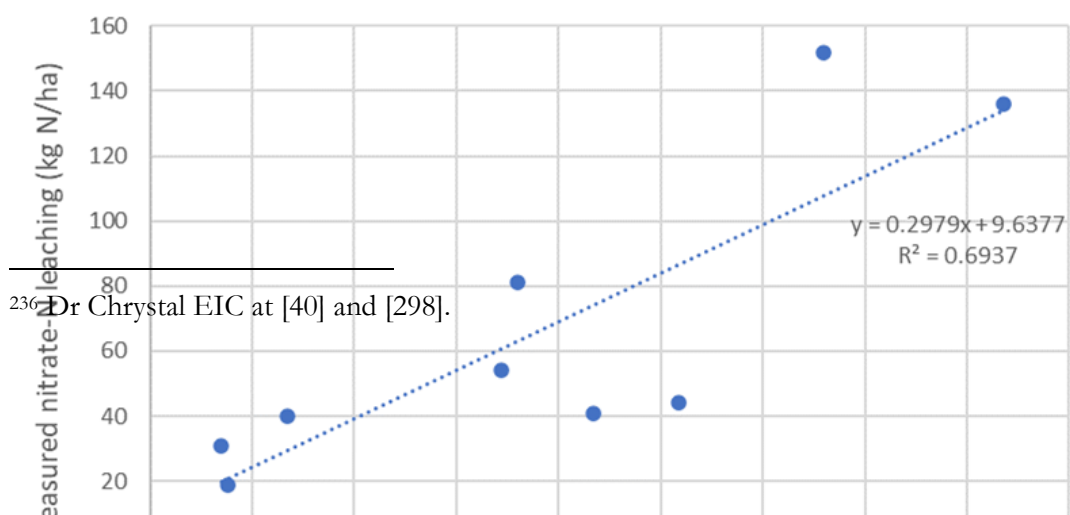
limitation. In his opinion, it is currently the only practical option for determining activity status available.

[440] Dr Jane Chrystal, who is the Principal Science Advisor, Farm Systems and Environment for Beef and Lamb, considers the NRS covers the main drivers of nitrogen leaching loss risk associated with the management of dairy farms. However, she considered that ideally inherent risks of the biophysical characteristics of the farm would be included in the Scorecard but is not. She explained that inherent risks are the intrinsic characteristics of the property that influence the pathway of contaminant loss and/or the degree of contaminant loss and include soil type, climate and topography.²³⁶

[441] While not expert evidence before us, AbacusBio included consideration of the relativity between key drivers in its peer review with the objective being to understand and verify the allocation of risk within each management practice and across all management practices. They concluded that the points allocated to NRS answers were mostly shown in the analysis to account for variation in Overseer nitrogen loss well but suggested some scaling to apply the appropriate adjustments. They noted that several sub-factors have been significantly overweighted for the level of impact on Overseer nitrogen loss observed in the study, but this was considered appropriate as there are effects over and above consideration only on the basis of impact on nitrogen.

Measured nitrate-nitrogen leaching in kg/ha/y against the aggregate risk score and Purchased N Surplus in kgN/ha/y

[442] The following graphs are reproduced from the farm systems experts' JWS dated 6 to 8 September 2023, based on measured values from Waikato farms:



[443] The graphs were included in the JWS without any explanation. We note first that the graphs are based on nitrate-nitrogen not total nitrogen, and it is the discharge of total nitrogen from farms that is more important. The number of data points is small and both graphs show variations that are not dissimilar to those of Overseer. This combination of factors means we can place little weight on the information, but it does little to support the suggestion that using the NRS would be any less uncertain than using Overseer.

WRC's proposed Nitrogen Risk Scorecard

[444] The NRS and the requirements for assessment are set out in Schedule B of WRC's Final Proposal along with the requirements if a NLLR were used. If adopted this would require use of the WRC's online Farm Information Portal which sets out information to be provided.

[445] Schedule B in WRC's Final Proposal sets out the risk thresholds shown in the following Table 9 for use in rules for low, moderate, and high-intensity dairy farms, with their corresponding levels of risk:

Table 9

Nitrogen Risk Scores for low, medium and high intensity dairy farming activities in each FMU from Decisions Version

Risk	Nitrogen Risk Scorecard values
Low	≤ 123 , or ≤ 111 in the Upper Waikato River FMU
Moderate	> 123 , or > 111 in the Upper Waikato River FMU, and < 233
High	≥ 233

E18 Our evaluation of the use the Nitrogen Risk Scorecard as an alternative to Overseer as a drafting gate for dairy farming activities and other functions

Evaluation process required under the Resource Management Act

[446] In accordance with s 32(1)(b) of the RMA, we first considered whether the NRS is a reasonably practicable option and then compared it with Overseer in terms of which would be the most appropriate to fulfil each of the functions required of it

in PC1.

Is a Nitrogen Risk Scorecard a reasonably practicable option?

[447] There has been considerable interest around New Zealand relating to the potential to use these scorecards in addition to or as a replacement for Overseer. This is evidenced by the work being undertaken by MfE and different regional councils. We do not consider that MfE would not be pursuing it for three years if it was not considered a reasonably practicable option, but understand that it may require tailoring to regional needs once released.

[448] We were satisfied from the relatively wide level of interest that the NRS could be a reasonably practicable option and proceeded to evaluate it on its merits.

Suitability of the Nitrogen Risk Scorecard as a drafting gate for dairy farming activities with a low-risk of diffuse discharges and the resulting number of permitted activities that there could be using the NRS

[449] The Hearing Panel stated:²³⁷

We consider that the dairy farmers leaching low levels of N can similarly be accommodated within a permitted activity/standards-based FEP regime with a low risk of untoward environmental outcomes. Although necessarily somewhat arbitrary, we have recommended use of the 30th percentile in each FMU derived from the Fonterra supplier information provided by Mr Allen for this purpose. The Upper Waikato FMU leaching rates provided by Mr Allen are demonstrably higher across the range compared to the other FMUs. We consider a lower band is required in that FMU and we have adopted the 25th percentile for that purpose.

In the middle band, representing 45-50% of the dairy farmers in the catchments, we consider a greater level of control is required in order to be satisfied the risk to the rivers is appropriately managed. ...

[450] Mr Trebilco considered that low risk dairy farming should have a NRS value no higher than the 30th percentile value for dairy farms, apart from in the Upper Waikato River FMU where it should be no higher than the 25th percentile.²³⁸

²³⁷ Recommendation Report at [1108] and [1109].

²³⁸ Mr Trebilco EIC at [117].

[451] We adopted the above percentiles as the starting point for our evaluation and relied on the NRS values in Table 1 in Schedule B of WRC’s Final Proposal as the permitted activity limit. On that basis, we considered that the NRS could be used as a drafting gate for dairy farms with a low risk of diffuse discharges, advised parties accordingly and there was either support or potential acceptance by all parties.

[452] Our reasons were set out in minutes dated 30 April and 30 July 2024 as follows:²³⁹

We are satisfied that NRS scores can be used to classify low intensity dairy farms as permitted activities. While concerns about the lack of consideration of biophysical factors would remain, they would be outweighed by the low potential for nitrogen losses. Furthermore, as the NRS is simple to use, it is likely to be more readily adopted by farmers, and it can be prepared without significant expert advisor input (if any at all). Use of it can lead to management change which responds directly to the risk management requirements of the farm management plans.

Such farms will be required to:

- (a) satisfy the minimum farming standards in Schedule D1;
- (b) demonstrate a reduction in nitrogen losses unless they are already as low as practicable;
- (c) in most cases will operate in accordance with independently certified and audited FEPs or will default to controlled activities.

This is based essentially on a pragmatic acceptance that it applies only to low-risk activities. There is no obvious ideal mechanism for determining activity status for dairy farms based on the information currently available. Requiring annual or even five-yearly Overseer derived NLLRs for low-risk farms would increase delays and costs without significant, if any, environmental benefits. The costs could be used more productively for management improvements. We consider this option satisfies the efficiency and effectiveness requirement of s 32 of the RMA.

[453] As part of our final evaluation for this interim decision, we looked again at the limits proposed for both NRS and NLLR values in Schedule B of WRC’s Final Proposal. We also referred to WRC’s report titled “Assessment of consistency of the Nitrogen Risk Scorecard (NRS) and Overseer gateways for PC1”.²⁴⁰ Of the 50

²³⁹ Minute dated 30 April 2024 at [18] – [19]; Minute dated 30 July 2024 at [17].

²⁴⁰ Memorandum of WRC dated 25 January 2024, Attachment B.

individual farms considered in WRC's study,²⁴¹ it showed that if Overseer was used, only one activity would be permitted based on the proposed NLLR limits, while using an NRS score, 20 activities would be permitted.

[454] If the same proportions were to apply to all 2,000 to 2,400 dairy farms in the PC1 area derived in Part C3, 2% or around 50 would be permitted using Overseer and 40% or around 900 would be permitted using NRS. If 25 to 30% of all dairy farms were to be permitted activities as adopted by the Hearing Panel, the number would be in the order of 650. However, there is no certainty what the actual numbers of permitted dairy farms will be, irrespective of any drafting gate tool used and irrespective of any arbitrary limit based on percentile values. This highlights the major uncertainty that arises from the use of either drafting tool, the potential for unintended consequences and the importance of adopting a “multiple lines of evidence approach” in complex cases such as PC1.

[455] As noted above, the Hearing Panel acknowledged that the percentages for permitted activities were “necessarily somewhat arbitrary”. Part of that evidence before us was that there is no scientific basis for setting limits for the determination of the permitted, controlled or restricted discretionary/discretionary activity thresholds included in PC1.²⁴² In response to a question from the Court, Mr Lee Matheson stated that “we are a long, long way off” having an empirical data set that analyses either Overseer outputs or NRS scores and he could not offer a view on whether a 25% or 50% would be an appropriate cut-off for a particular activity status.²⁴³

²⁴¹ QCONZ *Analysis and comparison of Overseer and Nitrogen Risk Scorecard outputs – Plan Change 1 Catchment* (December 2023); Memorandum of counsel for Waikato Regional Council, dated 25 January 2024, Attachment A.

²⁴² As noted in Part E7, 17 farm systems experts agreed at a conference from 6 to 8 September 2023 that there is no scientific basis for setting limits for the determination for the permitted, controlled, or restricted discretionary/discretionary activity thresholds included in PC1 but were developed for a planning purpose.

²⁴³ NOE at page 1397, lines 19 – 30.

[456] In his opening, Mr Pinnell submitted that controlled activity Rule 3.11.4.4 should be deleted and made into a permitted activity Rule.²⁴⁴ He stated that while discretion needs to be applied in preparing a FEP:²⁴⁵

The FWFP Regulations ... provide certainty by way of an action plan approved by the Certifier. An enforceability pathway is provided through Part 4 audit requirements and part 5 requirements to provide information to the regional council. These regulated provisions I suggest enable a permitted activity classification.

[457] He stated in closing that:²⁴⁶

... The activity status of many of the farming rules could usefully be reduced to permitted, given the introduction of the Freshwater Farm Plan Regulations that require all farm plans to be certified. ...

...

... For the many farmers who will need to apply for consents as well as the certification of their farm plan, consents will be a step too far in my view. It must be remembered that going from the status quo of most farming activities being permitted without conditions to certified farm plans, which are essentially consents to farm, is a huge step in its own right.

The certification process in the FW-FP Regulations need to be viewed as a carefully crafted bespoke resource consent process modelled after Schedule 4 of the RMA. Certification has similar information requirements to those required for consents. The assessment process starting with CCCV and working through inherent vulnerabilities and risks of farming activities to identify actions is no different to an assessment of environmental effects.

[458] In its appeal, Fonterra sought that Table 1 in Schedule B be amended, including by “Recalculating the ‘Low’ leaching threshold to be based on the 50th percentile of dairy farm leaching and adding further columns to display the comparable peak stocking rate thresholds”.²⁴⁷

[459] In considering the most appropriate way to address the above uncertainties, we were guided by the requirement of s 32(1)(b) of the RMA to examine whether the provisions are the most appropriate to meet the objectives of PC1 and by

²⁴⁴ This was not sought in his s 274 Notice, but he did oppose an appeal seeking that the activity be amended to restricted discretionary on the basis that controlled activity status would be the most efficient.

²⁴⁵ Opening submissions of Mr Pinnell at [21].

²⁴⁶ Closing submissions of Mr Pinnell at [2], [11] – [12].

²⁴⁷ Fonterra Notice of Appeal at Schedule 1.

association, to give effect to Te Ture Whaimana. In doing so, there is a need to recognise that it is 12 years since development of the Notified Version commenced²⁴⁸ and the provisions remain in dispute. In the meantime, the condition of the environment can be expected to continue to deteriorate and all parties agree that there is urgency to make PC1 operative as soon as possible.

[460] An equally important consideration in the Court's view is the need to recognise the critical role the farming community, including commercial vegetable growers, will have in delivering the outcomes needed to give effect to Te Ture Whaimana, which is required by 2096, not within the term of PC1. A key challenge for PC1 is to make a positive start to reducing the discharge of the four primary contaminants by first reducing risk, but doing so in a way that recognises that changes in land use activities take time and the provisions must take practicability into account. Mr Pinnell's evidence, in particular, highlighted the importance of understanding what PC1 means for the farming community and ensuring that sufficient time is allowed for provisions to be practically and affordably achievable.

[461] If Overseer was used instead of NRS, the same uncertainty about numbers would exist as shown above and could potentially mean fewer permitted activities. Requiring annual or even five-yearly Overseer derived NLLRs for permitted activities would increase delays and costs without significant, if any, environmental benefits. The costs could be used more productively for management improvements. We find that using the NRS option would satisfy the efficiency and effectiveness requirement of s 32 of the RMA.

[462] There is no clear evidential basis on which to determine what percentage of dairy farming activities should be permitted but the possible range considered appropriate by different parties is between 25 and 50%. It appears unlikely that it would be possible to determine what the "most appropriate" number in terms of s 32(1)(b) of the RMA would be with the limited information available to inform decision making.

²⁴⁸ Ms May EIC at [10].

[463] Whatever number of permitted activities applies and expanding on the reasons set out above:

- (a) Policy 1 applies to all farming activities, including permitted activities and requires "...a general improvement in farming practice to reduce diffuse discharges" of the four primary contaminants;

[our underlining]

- (b) while we cannot prejudge any future changes of s 70 of the RMA, if amendments similar to those made to s 107(2A) to the RMA were made farmers would be required to demonstrate a reduction in permitted discharges within a time specified in the permitted activity rule where the effects on receiving waters listed in s 70 are already occurring.
- (c) WRC and Federated Farmers agreed to amend Schedule D1, Part D(2)(a), which applies to permitted activities to require demonstration that diffuse discharge risk is reducing over time or is already as low as practicable,²⁴⁹ which the Court accepts.
- (d) to ensure (a) above is monitored, we find there should be a five yearly reporting requirement to demonstrate that progress has been made;²⁵⁰
- (e) permitted activities, like controlled activities, must satisfy the minimum farming standards set out in Schedule C relating to stock exclusion and fertiliser application, which have significant potential for adverse effects if uncontrolled;
- (f) permitted activities must meet standards set out in Schedule D1 relating to nutrient and water body management, land and soil, winter grazing of forage crops, effluent management and other activities;

²⁴⁹ Memorandum of WRC, dated 5 April 2024 at [5].

²⁵⁰ Part F8 of this decision.

- (g) an FEP must be prepared in accordance with Schedule D1, which must demonstrate compliance with the minimum standards, including the identification and recording of any specific, time bound actions and mitigations necessary;
- (h) the FEP must be reviewed by a Certified Farm Environment Planner approved by WRC;
- (i) a permitted activity which cannot meet the stock exclusion standards in Clauses 1-4 of Schedule C or one or more of the standards in Schedule D1 will default to a controlled activity; and
- (j) any activity with a Nitrogen Surplus exceeding 150 kg N/ha/y, which could be determined using the NRS in accordance with standard D2.b of Schedule D1 of the Decisions Version, would also default to a controlled activity. This means that the NRS already acts as a drafting gate.

[464] The use of the NRS for identifying dairy farming activities with a low-risk of diffuse discharges would be consistent with:

- (a) the staged approach to contaminant reduction required by Objectives 4 and 5 of the Notified and Objective 3 of the Decisions Versions of PC1;
- (b) Policy 4c of the Notified and Decisions Versions of PC1, which require a risk-based approach to managing land use, including adaptive management, to reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens;
- (c) the outcome described in Section E.3.5.2 of the s 32 Report to improve the ability to implement the entire proposal approach by removing the costs of obtaining resource consents and Farm Environment Plans where the land use contributes a relatively low proportion of diffuse contaminants to water bodies; and

- (d) the Policy Selection Criteria set by the Collaborative Stakeholder Group (in broad terms, see Part D7).

[465] We consider the above summary demonstrates that permitted activities will be managed appropriately as the first stage of a 70-year programme to deliver the outcomes sought by Te Ture Whaimana, irrespective of how many activities are permitted within a range of 25 to 50% of all dairy farming activities, a range that is within scope. Taking the above factors into account, and after considering the requirements of s 32AA of the RMA, including benefits, costs, efficiency and effectiveness, we find that use of the proposed NRS as a drafting gate to identify permitted activity dairy farms is currently the most appropriate way to meet the objectives of PC1 for dairy farming activities with a low-risk of diffuse discharges.

Evaluation in accordance with s 32AA of the RMA

[466] We considered the only two currently available options for use as a drafting gate for low-risk dairy farms in considerable detail, corresponding to the scale and significance of the effects as required by s 32(1)(c). We are satisfied that the use of the NRS is currently the most efficient and effective in meeting the objectives of PC1 for the reasons set out above, including those set out in minutes dated 30 April and 30 July 2024, as required by s 32(1)(b) and taking into account the requirements of s 32(2)(a).

[467] In relation to s 32(2)(c), while there are uncertainties about aspects of using the NRS, there are similar uncertainties about using the alternative Overseer. The NRS is a tool familiar to and already in regular use by most dairy farmers in the PC1 area, whereas use of Overseer was discontinued by most farmers seven or so years ago for reasons set out above. Its use involves less complexity than using Overseer and can be expected to deliver broadly similar environmental outcomes at less regulatory cost. We are satisfied that the risk of acting using the NRS will be less than not acting.

[468] However, we will direct WRC to review the NRS values for permitted activity limits in Table 1 of Schedule B of WRC's Final Proposal to ensure they

represent the best available information. We consider it unlikely that the outcome will affect the above determination.

Suitability of the Nitrogen Risk Scorecard as a drafting gate for medium and high intensity dairy farming activities with associated medium and high-risks of diffuse discharges

[469] We next considered the use of the NRS as an indicator²⁵¹ of the level of risk at which dairy farming activities cease to be controlled activities and default to discretionary or restricted discretionary activity. Importantly, the NRS does not provide a quantified estimate of nitrogen loss from farms nor, as proposed in PC1, does it address biophysical factors that can have a significant effect on the extent of nitrogen loss from farms.

[470] Fonterra’s NRS Report Appendix 4²⁵² states that the report “... does not attempt to model environmental factors (such as soils and climate) that play a significant role in determining how much of this surplus nitrogen is actually lost from your farm (in particular lost to water through leaching)”. When these environmental factors are included, and farms in different biophysical settings are compared, the overall risk of nitrogen loss will be different to that indicated by reliance on the risk score alone, and likely significantly different in some circumstances.

[471] As part of the Government response to the PCE’s Overseer review,²⁵³ a sensitivity analysis was carried out to examine the effects of differences in soils and rainfall for “the main Waikato region for the 2017/18 dataset”. The results are shown in the following Table 10, reproduced from Table 4 of the reference:

²⁵¹ Refer to Part E16 of this decision for the reasons for using the NRS or Overseer as an indicator and not a limit.

²⁵² Appendix 4 Nitrogen Risk Scorecard

Report: <https://www.fonterra.com/content/dam/fonterra-public-website>.

²⁵³ AgResearch *Refining estimates of nitrogen leaching for the New Zealand agricultural greenhouse gas inventory* (MPI Technical Paper No: 2022/05, February 2021).

Table 10

Sensitivity analysis of the effects of soil (at 1260 mm/yr rainfall) and rainfall (assuming a mix of allophanic and gley soils) on N leaching calculated using OVERSEER for the Waikato 2017/18 average dairy farm system, with no other factors changed.

Soil order	Nitrogen leaching (Kg N/ha/y)	Annual rainfall (mm/y)	Nitrogen leaching (Kg N/ha/y)
Organic	26	900	17
Podzol, Gley	32	1100	25
Allophanic	35	1300	34
Pumice	36	1500	40
Pallic	43	1700	48

[472] This table was not presented in evidence and in a minute issued after the hearing closed, we provided parties with the opportunity to comment on its applicability in relation to PC1.²⁵⁴ No responses were received challenging its relevance. The table shows indicative variability of $\pm 25\%$ between different soil types and $\pm 40\%$ or more across the range of annual rainfall. The variability when both are considered together is likely to be higher in some cases.

[473] This indicates that prediction variability in the absence of consideration of biophysical factors in the NRS as proposed could be similar to that of Overseer and more likely greater where there is a combination of poor soils and high rainfall. As in the case of Overseer, without much greater certainty that a large majority of dairy farming activities would be allocated the correct activity status, reliance on the NRS to differentiate between controlled and restricted discretionary or discretionary activities would be problematic, challengeable and, in our view, unlikely to be enforceable.

[474] From the Court's own experience of other cases, it is aware that the effects of clean water irrigation on nitrate leaching from farms can be significant. Fonterra's

²⁵⁴ Minute dated 23 February 2024 at [19].

NRS Manual²⁵⁵ states that irrigation generally increases the nitrogen loss risk of a farm due to the potential for over irrigating to induce drainage events but the manual does not assist in understanding how much nitrogen loss increases under different irrigation regimes.

[475] The PCE in his Overseer Review Report noted that Canterbury Regional Council has used the area subject to irrigation (and winter grazing) to differentiate between permitted activities and those farming activities that require resource consents, which gives some indication of its significance.²⁵⁶

[476] We consider any drafting gate that excludes consideration of the effects of soil conditions, rainfall and irrigation would likely result in at least the same or greater likelihood of farms being allocated the wrong activity status than Overseer and would result in significant equity concerns and the potential for reduced environmental outcomes.

[477] To illustrate the significance of not including biophysical characteristics in some way, a farm with a moderate risk score in lake catchments with high sensitivity to nitrogen losses could result in greater effects on the environment than a high-risk score in an area of low rainfall, favourable soil and drainage conditions and less sensitive receiving waters. This, and the absence of a PC1-wide nitrogen reduction plan would prevent the setting a one-size-fits-all drafting gate based on using the proposed nitrogen risk score alone.

[478] The suggestion that biophysical characteristics could be considered after the activity status had been determined using the NRS as proposed would almost inevitably lead to inequities and significant potential for disputes. In our view, that would not represent good resource management practice and is not one we could support.

²⁵⁵ <https://www.fonterra.com/content/dam/fonterra-public-website/fonterra-new-zealand/documents/pdf/water-reforms/appendix-3-nitrogen-risk-scorecard-engine-documentation-l50009030.pdf> at [5.4].

²⁵⁶ Canterbury Regional Council, 2016. Proposed Variation 5 to the Canterbury Land and Water Regional Plan. Rules 5.44A and 5.54A.

Overall evaluation of the Nitrogen Risk Scorecard as a drafting gate for moderate and high intensity dairy farming activities with associated medium and high-risks of diffuse discharges

[479] As in the case of Overseer, we do not consider an NRS score could be used to define a number below which an activity is controlled and above which an activity is restricted discretionary or discretionary.

[480] If the NRS were used as proposed by the Council, Fonterra and Dairy NZ:

- (a) there would be no clear link between risk scores and the extent of nitrogen leaching from a farm;
- (b) the effectiveness of the NRS at demonstrating and then managing nitrogen reductions has not been tested or ground-truthed by field trials or longer-term parallel studies alongside Overseer;
- (c) the lack of consideration of rainfall, soil conditions and clean water irrigation, which are key drivers of how much nitrogen is likely to be leached, is a serious impediment to its use as a drafting gate;
- (d) it would have no ability to address the issue raised in the s 32 evaluation report for PC1 that setting a NRP at a property-specific level was considered to be an essential first step;
- (e) it is to be expected that changes in the risk management approach will be required during the life of PC1 and we were provided with no evidence as to how this would be managed or what the consequences of change would be for consistency across farms;
- (f) our understanding from the evidence is that risk scores have not previously been used in any form of regulatory process;
- (g) there has been no robust independent peer review of the use of the NRS for regulatory purposes; and

- (h) the potential for farms to be allocated the wrong activity status is unknown but likely to be high.

[481] Until the above issues are addressed it would be premature to use nitrogen risk scores as proposed in PC1 as the primary regulatory tool for differentiating between and/or managing medium and high intensity dairy farming activities with their corresponding increased risks of diffuse discharges.

[482] Its use for any other regulatory purposes will need to be demonstrated more comprehensively than has been demonstrated by the evidence before this Court. Nevertheless, we consider PC1 provides an opportunity to explore its potential for future use in regulation. We would see no reason why it could not be used in a non-statutory way to test its performance in assessing the effectiveness of different mitigation measures as a comparison with Overseer predictions, for example as discussed in Part E22. The inclusion of biophysical factors could be added without delaying PC1 becoming operative and in our view would significantly increase its usefulness.

E19 The extent to which Overseer and a Nitrogen Risk Scorecard could fulfil other roles required to be filled in PC1

[483] For completeness, Table 11 shows a comparison of the suitability of Overseer and the NRS to fulfil roles other than as a drafting gate identified through expert conferencing, except for the offsetting provision, which no longer applies. The table reflects the evidence before the Court, which may change in the future as further information becomes available.

Table 11
Extent to which Overseer and NRS can fulfil different functions

Function to be fulfilled	Overseer	Nitrogen Risk Scorecard
Predicting nitrogen loss	Can be used but predictions involve significant uncertainties	Cannot be used
Act as a baseline for monitoring changes in nitrogen loss	Suitable for comparison purposes	Suitable for comparison purposes but with less certain veracity
Method of assessing land use change	Suitable for comparison purposes only	Not suitable
Modelling the PC1 policy mix and progress towards achieving Te Ture Whaimana	Suitable for comparison purposes only	Not suitable
Preparing for future plan changes	Suitable for comparison purposes only	Not suitable
Catchment accounting	Suitable for comparison purposes only	Not suitable

E20 Estimated costs associated with different resource consent and Farm Environment Plan processes

[484] The cost information provided in written evidence was sparse and while we sought clarification of different aspects from witnesses, it was not possible to gain any clear understanding of the overall costs involved. However, we do not consider that the costs of resource consent and FEP processes for permitted and consented activities will be sufficiently different to affect our determination. As one example of consented activities, whether moderate or high intensity dairy farming activities with their corresponding increased risks of diffuse discharges were controlled or restricted discretionary or discretionary would not change the requirement to assess effects in sufficient detail to identify mitigations necessary to reduce discharges to be as low as practicable within an appropriate specified period.

E21 Findings in relation to the use of Overseer and the NRS

[485] Based on the evidence, we find that Overseer remains the most appropriate tool for most functions required in PC1 but not as an indicator of nitrogen loss rates at which dairy farming activities with a high-risk of diffuse discharges become a restricted discretionary or discretionary activity. This is because of its uncertainty when estimating losses from individual farms. Use of the NRS as proposed as an indicator of when activities should be restricted discretionary or discretionary activity would not be appropriate as it does not consider biophysical factors or appropriately account for increased nitrogen losses and, compared to Overseer, has similar or greater uncertainties as a drafting gate and a number of other important uncertainties in addition.

[486] We are satisfied that the NRS is appropriate as the basis for determining permitted activity status for dairy farms with a low risk of diffuse discharges and may have other potential uses as described in Part E18.

[487] Our overall finding is that there is no practical method of differentiating between the risks of moderate and high intensity dairy farms that will provide certainty that activities are allocated the correct activity status, that the method adopted is clear on its face and, if necessary, enforceable with a minimum potential for dispute. On that basis we find there is no alternative to making all dairy farming activities with medium or high intensities, and increased risks of diffuse discharges, controlled activities.

[488] We acknowledge this does not enable consents to be declined under the PC1 provisions, which we return to in Part E23.

[489] As required by s 290A, we have had regard to the Council decision in relation to the use of Overseer and agree with the following findings:²⁵⁷

... we find that there are significant risks associated with utilisation of the model to establish whether farming practices are giving rise to a particular N leaching number at a particular point in time. We accept Overseer can be a

²⁵⁷ Recommendation Report at [602] and [603].

useful method, but as part of a suite of other potential tools to assist farmers to manage risk appropriate to their individual farm, and in its sub catchment/ catchment context.

Accordingly, while we agree Overseer may be appropriate in some circumstances, we agree with other submitters that Overseer is not the appropriate sole DST [Decision Support Tool] for use under PC1. In the Panel's view, it is more effective and efficient to allow for the adoption of a suite of more inclusive and complete alternative DSTs in PC1 than to prescribe the use of Overseer.

[490] However, we do not agree that Overseer can be used as a drafting gate for dairy farming activities with moderate and high-risks of diffuse discharges of nitrogen or to establish 75th percentile values above which more mitigation is required, which are requirements of the Decisions Version, for the reasons set out above.

[491] In terms of scope, Federated Farmers gave one ground of appeal as “Federated Farmers considers that the controlled activity status ought to also apply to existing high NLLR farms to recognise that they are existing activities”. They sought that Rule 3.11.4.4 be amended to read “Rule 3.11.4.4 – Controlled Activity Rule – Moderate and high intensity farming”.

[492] The Council proposed an amendment to matter of control iv. In addition to the amendment proposed by WRC, we had independently determined that the controlled activity rule must include an amendment to matter of control iv to read: “Measures, including measures to address the effects of rainfall, topography, soil and erosion characteristics and /or clean water irrigation, to ~~address the effects,~~ including cumulative effects ensure that the risks of diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens will be reduced to be as low as practicable over an appropriate specified period, which generally shall not exceed 10 years²⁵⁸ of PC1 becoming operative, as determined in accordance with Policy 2.”²⁵⁹

[493] While this cannot prevent a consent being granted,²⁶⁰ it can ensure this requirement is given appropriate consideration at the time of consent application. As

²⁵⁸ Part E22 of this decision.

²⁵⁹ Includes amendment proposed in memorandum of WRC dated 5 April 2024.

²⁶⁰ RMA, s 104A.

will be seen on Part F33, Policy 7 is to be amended so that the term of consent may be reduced where insufficient mitigation measures will be implemented to ensure diffuse discharges are reduced to be as low as practicable within 10 years of the PC1 becoming operative. We are satisfied this provides an appropriate initial level of control until sufficient further information is gathered to enable more stringent controls to be implemented.

[494] In view of Federated Farmers’ appeal and because all activities were classified either as permitted or controlled activities in the Notified Version, no issues of scope arise.

E22 Future management of medium and high intensity dairy farming activities with their associated higher risks of diffuse discharges

WRC’s proposed amendments to Policy 2

[495] In response to the Court’s concerns about the future management of dairy farming activities with a medium or high risk of diffuse discharges, WRC proposed an amended Policy 2 that replaced the requirement for farms to reduce risks to be as low as practicable with a requirement to adopt GMP and to provide further mitigations in circumstances where significant risks still remained.²⁶¹ These risks were to be mitigated “proportionately to the magnitude of that risk” by farms with a NLLR greater than the 75th percentile value included in Table 2 of Schedule B of the Decisions Version, making reductions that were “meaningful proportionate to the level of risk”.

[496] As an initial comment, “meaningful proportionate to the level of risk” does not represent good policy drafting. When WRC offered to propose a policy based on proportionality, we had understood that to mean that as the risk increases with intensity from low to high, the level of mitigation required would increase progressively in response. We did not understand it to mean that the 75th percentile would continue to be used as a limit above which more than GMP would be required, as that would not overcome concerns about the uncertainty associated

²⁶¹ Memorandum of WRC dated 2 September 2024.

with the use of Overseer. Thus, while there were a number of positive aspects of the proposed policy, it did not address proportionality appropriately or go far enough in terms of providing clarity, which we expand on below.

Practical considerations that will affect the efficiency and effectiveness of the consent application process

[497] In very broad terms, there could be around 2,000 land use activities²⁶² that will require controlled restricted discretionary or discretionary activity consents, including consents for farming in the Whangamarino Wetland catchment. Whichever activity status applies, each application for consent will need to include the same general requirements of a description of the catchment context, the applicable plan provisions and an FEP that includes an assessment of the risks of diffuse discharges from the activity and an action plan setting out mitigations proposed to mitigate the risks. The FEPs will be subject to independent certification.

[498] Information on the catchment context will depend on the advice provided by WRC and there could be efficiency in WRC providing a template setting out relevant plan provisions to be considered, which would minimise the need for each applicant to reinvent the wheel, which would not be efficient. Each applicant will need to prepare their own FEP, with the assistance of professional advisors where necessary, to reflect their particular circumstances.

[499] Policy 2 of the Notified Version required a “tailored approach to reducing diffuse discharges from farming activities” but this is not explicitly stated in subsequent versions. In our view, the wording in the Notified Version provides clarity and should be reinstated unless any party can identify a scope reason for not doing so. The Policy should also be clear that managing the risk of diffuse discharges of the primary contaminants must also consider the current state of the existing receiving environment and the level of degradation that is present. Policy guidance will need to be clear as to how WRC will assess the level of mitigation to

²⁶² Part C3 of this decision.

be provided as the likelihood of contaminant loss and the level of degradation of the receiving environments increase.

[500] When determining how much mitigation should be required by consent conditions for any individual farm, it is necessary to consider both the benefits that will result and the associated costs. For each farm there will be a range of locations from which different contaminants are discharged, some of which may result from quasi-natural causes or as a result of upstream activities that are largely outside the control of a farmer. So, for each farm there will be a range of mitigation options available, each with an associated cost, and each with different benefits in terms of reduced discharges of each of nitrogen, phosphorus, sediment and microbial contaminants. It is not possible to quantify the environmental benefits that will result from any individual mitigation action or any combination of actions at a farm level.

[501] Section 32 of the RMA requires an examination of whether the provisions in the proposal are the most appropriate way to achieve the objectives by identifying other **reasonably practicable options** [our emphasis] for achieving the objectives. The concept of practicability is therefore an established part of plan development and is equally relevant to plan implementation. Unavoidably, an activity-specific tailored approach must take into account practicability and the policy framework must make that clear. This can present difficulties in terms of what practicability means and how it is to be interpreted in PC1 but that would be an issue whether activities are permitted, controlled, restricted discretionary or discretionary and cannot be used to support a view that controlled activity status is inappropriate.

[502] In *Re New Zealand Transport Agency*,²⁶³ which relates to the major Riverlink project in and around Hutt City, the Court raised concerns about uncertainty associated with conditions of consent referring to the Best Practicable Option (**BPO**) and the certainty and potential implications of the widespread and inconsistent use of phrases like “reasonably practicable” or “practicable” (or similar) in the conditions. In response, the applicants amended the conditions to (mostly)

²⁶³ *Re New Zealand Transport Agency* [2022] NZEnvC 161.

use “practicable” to replace the other words or phrases and removed references to the BPO in conditions other than noise. They submitted as to the difficulty of providing further specificity in most cases, as the relevant factors are circumstance dependent and, in some cases, will be unforeseeable.²⁶⁴

[503] The Court accepted the (largely) consistent use of “practicable” in the revised condition set, carefully reviewing its applicability and that of any alternatives in the context it is used. The Court did not consider there was a need to define “practicable”.²⁶⁵

[504] We consider the use of the word “practicable” should remain in PC1 to ensure there is no misunderstanding that both benefits and costs must be considered. We consider that “as low as practicable” must remain to ensure clarity of expectation, particularly in relation to over-allocated sub-catchments and, in particular, in sub-catchments draining to the Whangamarino Wetland or in a sub-catchment draining to lakes named in Table 3.11.3 or in a sub-catchment draining to wetlands listed in Table 3.7.7 of the WRP.

[505] In *Wellington International Airport Limited v New Zealand Air Line Pilots’ Association Industrial Union of Workers Inc*,²⁶⁶ the Court of Appeal stated that “... we consider that what is “practicable” must be assessed in the particular context in which the issue is raised” and that the word “practicable” imports a stricter or higher standard than the words “reasonably practicable”.²⁶⁷ The Supreme Court stated:²⁶⁸

“Practicable” is a word that takes its colour from the context in which it is used. In some contexts, the focus is on what is able to be done physically; in others, the focus is more on what can reasonably be done in the particular circumstances, taking a range of factors into account.

²⁶⁴ *Re New Zealand Transport Agency* at [105] - [107].

²⁶⁵ *Re New Zealand Transport Agency* at [113] and [114].

²⁶⁶ [2017] NZSC 199.

²⁶⁷ *Wellington International Airport Ltd v New Zealand Air Line Pilots’ Association Industrial Union of Workers Inc* [2017] NZSC 199 at [67].

²⁶⁸ *Wellington International Airport Ltd* at [65].

[506] Reasonableness is required when “practicability” is being considered, unless the context demands otherwise. With that in mind, the interpretation of reasonably practicable is “entirely flexible, depending on the context in which the phrase is used”²⁶⁹ and in the context of a plan this includes the plan’s objectives and policies. Inherent in the concept of “reasonably practicable” is the notion of proportionality,²⁷⁰ and we consider it must also apply to the concept of “practicable”. We have already set out our views on proportionality and we would expect what is practicable for any particular activity will need to be proportional to the relative scale of their discharges and the relative scale of water quality improvement required in their sub-catchment.

[507] While noting that the Court in *New Zealand Transport Agency* did not consider a definition of practicable was necessary, it is a word that is open to many different interpretations. In closing, Federated Farmers and Beef and Lamb acknowledged that some precision in what practicable means could be helpful, but submitted the diverse and complex nature of pastoral farming means identifying a comprehensive and exclusive definition would be very challenging or impossible.

[508] Mr Pinnell suggested that a definition is necessary to improve certainty of the provisions and referred to *Royal Forest and Bird Protection Society of New Zealand Inc v Whakatane District Council*.²⁷¹ That case involved a change to the Whakatane District Plan and an appeal relating to the status or classification of the activity of harvesting of manuka and kanuka in Significant Indigenous Biodiversity Sites. It focussed on the identification of reasonably practicable options under s 32 of the RMA and listed seven matters to be considered.

[509] If a similar approach was adopted for resource consent applications in PC1, practicability would need to include consideration of:

²⁶⁹ *Porter v Bandridge Ltd* [1978] ICR 943, at 951-952; cited in *Christchurch Medical Officer of Health v J & G Vandrey Ltd* [2015] NZHC 2749 at [86].

²⁷⁰ *Christchurch Medical Officer of Health v J & G Vandrey Ltd* [2015] NZHC 2749 at [83].

²⁷¹ *Royal Forest and Bird Protection Society of New Zealand Inc v Whakatane District Council* [2017] NZEnvC 51; Memorandum of WRC dated 2 September 2024 at Annexure B.

- (a) those discharging more must make greater reductions;
- (b) the scale of water quality improvement required in the sub-catchment, including compatibility with any sub-catchment water quality management plans approved by WRC;
- (c) the combination of mitigation options appropriate for use in the sub-catchment that will result in the optimum environmental benefit; and
- (d) the financial implications.

[510] In relation to (c) and (d), currently available information does not enable a robust analysis of costs and benefits of different proportionate reductions to be undertaken. However, the costs of mitigation should be able to be assessed with reasonable accuracy based on whole-of-life costs including capital, operation, maintenance and finance costs. Available funding will differ from farm to farm and the collective determination of what is practicable will have social, cultural, environmental and economic consequences at a farm, community and regional level with the potential for economic consequences nationally.

[511] An element of discretion and some degree of tolerance will be necessary if not essential as a result. In this regard, we agree with WRC that:²⁷²

... Application of policies generally necessitates a degree of discretionary judgement, particularly where they need to be read alongside other policies, and it is appropriate to leave the consent authority with discretion over matters that do not easily lend themselves to precise definition at the policy drafting stage.

[512] On a related policy issue, WRC proposed a new Policy 1(e) should be added as follows:

Ensuring that records are kept to demonstrate that the risk of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water bodies is not increasing over time.

²⁷² Memorandum of WRC dated 14 October 2024 at [33].

[513] This should be amended so that the risk is reduced to be as low as practicable within an appropriate specified period.

Good Management Practices

[514] GMP were a requirement of the Notified Version²⁷³ and were defined as “For the purposes of Chapter 3.11, means industry agreed and approved practices and actions undertaken on a property or enterprise that reduce or minimise the risk of contaminants entering a water body”.²⁷⁴

[515] The Hearing Panel stated:²⁷⁵

The terms (and concepts) Best Management Practice and Good Management Practice were used throughout the hearings process, particularly in the section 42A report in relation to FEPs. While the Panel, and many submitters, did not oppose the general concept of good and best farming practices, and that farmers should be (and in many cases were) striving to farm at good and best farming practices, we find that the terms are somewhat nebulous and difficult to define. Furthermore, in some cases the changes required in farming practices to achieve the PC1 objectives would require more than “good” and “best” farming practices.

We have addressed good and best farming practices in other sections of this report. The conclusions from those sections of the report are that as good and best farming practices are not required in a policy and rule sense, there is no need to define these terms.

[516] We agree with WRC that all land use activities should be required to adopt GMP.²⁷⁶ Put another way, it is unclear to us on what basis appropriate GMP would not be adopted. The adoption of GMP, should be a pre-requisite because of the statutory requirement to give effect to Te Ture Whaimana. Accordingly, as provided for in s 290 of the RMA we do not accept that part of the Hearing Panel’s decision that GMP are not required in a policy and rule framework.

²⁷³ “The approach to reducing contaminant losses from pastoral farm land implemented by Chapter 3.11 requires: ... Farm Environment Plans (including those for commercial vegetable producers) that ensure industry-specific good management practice, and identify additional mitigation actions to reduce diffuse discharges ...”; PC1 Notified Version at page 15.

²⁷⁴ PC1 Notified Version at 82.

²⁷⁵ Recommendation Report at [1871] - [1872].

²⁷⁶ Memorandum of WRC dated 14 October 2024.

[517] WRC’s proposed amendment to Policy to 2B)b includes that GMP be determined based on the goals and principles in Schedule D2.²⁷⁷ These describe what is to be achieved under the heading of whole farm, nutrient management, contaminant loss reduction, waterways, stock exclusion, land and soil, effluent and water and soil but they do not define GMPs.

[518] In its appeal Fonterra sought that the goals and principles of Schedule D2 be replaced with the well-known Industry Agreed Good Farming Practices (**GFP**), complemented as necessary with additional detail from the associated GFP guidelines and other specific matters as may be relevant to the Waikato context.

[519] Federated Farmers appeal sought the following relief: “... An appropriate transition and pathway needs to be provided, including staging of actions over (with Federated Farmers’ view being that the focus of the first 10 years is on 10% of the journey, with farms adopting good management practices or good farming practices). ...”.²⁷⁸

[520] Mr Pinnell commented on the proposal as follows:²⁷⁹

The goals and principles in Schedule D2 prescribe few practices and actions that are measurable, time-bound and enforceable, e.g., “adopt measures to reduce erosion”. To specify practices and actions based on these goals and principles requires going through a risk assessment process.

...

The goals and principles in Schedule D2 are therefore insufficient to define what is practicable, rather they are the starting point of a risk assessment having thresholds including “as low as practicable” and “over an appropriate specified period” ...

[521] We agree with Mr Pinnell and consider that all mitigation measures for consented activities, whether GMPs on their own or “more than GMPs” will be required to comply with Schedule D2, so the proposed definition provides no

²⁷⁷ Memorandum of WRC dated 14 October 2024.

²⁷⁸ Federated Farmers Notice of Appeal at [12].

²⁷⁹ Memorandum of Mr Pinnell, dated 13 September 2024 at [19] and [21].

greater clarity than what is already provided by the Schedule. In our view that does not assist in clarifying what GMPs means and requires a replacement provision.

[522] WRC removed reference to relevant industry guidance included in a draft proposal sent to parties because of concerns raised by the Joint Farming Parties, Fish and Game and Mr Pinnell about potential conflicts between different guidelines on good management practices.²⁸⁰

[523] The Joint Farming Parties submitted that:²⁸¹

Reference to “relevant industry guidance” potentially creates ambiguity and uncertainty as to what additional principles and practices might be required (over and above what is required in the Schedule D2 assessment).

[524] Fish and Game submitted that “relevant industry guidance” “introduces a test that is vague and industry documents without vetting by other parties”.²⁸² In response to Fish and Game’s submission relating to a reference in the draft to the Industry Agreed Good Management Practices for Freshwater proposed by WRC, the reference was removed in the version proposed to the Court.

[525] Mr Pinnell submitted that:²⁸³

No industry agreed suite of good management practices is intended to mandate everywhere the full suite of practices. Instead, they are intended for informational and educational purposes rather than regulatory purposes, and to be selectively adopted following an informal risk assessment process.

[526] WPL preferred an approach that establishes an activity status for farming activities on the property that is capable of taking into account the early and voluntary adoption of best management practice.²⁸⁴

²⁸⁰ Memorandum of WRC dated 2 September 2024 at Annexure A at [21].

²⁸¹ Memorandum of WRC dated 2 September 2024 at Annexure B, Joint Farming Parties’ response at [7b.i].

²⁸² Memorandum of WRC dated 2 September 2024 at Annexure B, Fish and Game comments on s 32AA analysis of Policy 2.

²⁸³ Memorandum of Mr Pinnell, dated 13 September 2024 at [20].

²⁸⁴ Memorandum of Wairakei Pastoral Ltd, dated 10 May 2024.

[527] Based on the experience of members of the Court on a number of recent cases involving farming practices, including PC1, industry groups are putting considerable effort into improving environmental performance in their industries. This is not driven only by RMA requirements but also by the sustainability requirements of their markets, which is compelling if their access to the markets is to be retained. In our view, WRC could not define robust GMPs without input from the relevant industries and it would be illogical for PC1 not to require the general adoption of industry developed GMPs where they would contribute to achieving the objectives of PC1. Our reference to “general adoption” recognises that full adoption may not always be possible or necessary or appropriate but should be required to the extent relevant and practicable and where they would contribute to reducing effects on the environment and achieving Te Ture Whaimana.

[528] When expressed in this way, and possibly with an associated requirement for general compliance with codes of practice, industry approved environmental management plans or other established methods that can be readily referenced in FEPs and confirmed by suitably qualified farm advisors, there should be no confusion and it would be simpler for farmers and growers if the same requirements could satisfy both industry and regulatory requirements. It would also assist in improving the efficiency and effectiveness of the PC1 provisions.

[529] Federated Farmers and Beef and Lamb subsequently observed that GMP is a term that farmers and farm advisors/planners are familiar with and agreed that GMP are “very much ... something that an experienced farm advisor would know when they saw it”,²⁸⁵ a point made by the Hearing Panel. They also submitted that “GMP is farm-specific and should be identified and implemented through a farm plan, including when minimum farming standards in Schedule C cannot be complied with”.²⁸⁶

[530] We would expect GMPs that are farm-specific would at least include industry developed GMPs where they were relevant and practicable in the

²⁸⁵ Memorandum of Federated Farmers and Beef and Lamb, dated 15 October 2024 at [27].

²⁸⁶ Memorandum of Federated Farmers and Beef and Lamb, dated 15 October 2024 at [28].

circumstances. However they are defined or determined for the purposes of PC1, they will only be the first step towards ensuring discharges are reduced to be as low as practicable. That will be the acid test and where the hardest decisions will need to be made. We discuss this further in Part F31.

[531] It is worth recalling here that Policy 8 states that people and communities will need to collectively change practices and that infers an expectation of collaboration. The issue of GMPs appears to us to be one example of where a positive collaborative response would be in all parties' interests and we encourage WRC and industry groups to work together to achieve that.

[532] There are no issues of scope arising from the reintroduction of the requirement to adopt GMP.

Setting the appropriate policy

[533] Policy 2(B) of the Notified Version was:

- a. Taking a tailored, risk-based approach to define mitigation actions on the land that will reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, with the mitigation actions to be specified in a Farm Environment Plan ...

...

- d. Requiring the degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to be proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and proportionate to the scale of water quality improvement required in the sub-catchment; and

...

[534] Both the Decisions Version and WRC's Final Proposal retain the requirement to take a risk-based approach, and both include a requirement to demonstrate through FEPs that either the risk of diffuse discharges to water is already as low as practicable given the current land use or will be reduced to be as low as practicable over an appropriate specified period.

[535] Policy 2 of the Decisions Version also requires farms with a high NLLR to "make significant reductions" in the NLLR having regard, among other matters, to

“[w]hether the farming activities are making a significant or disproportionate contribution to nitrogen loading in the sub-catchment(s) within which the land is located and/or downstream catchments”. The Policy does not require regard to be had to the sensitivity of the receiving environment which, in our view, is a significant weakening of the policy in the Notified Version and not the most appropriate way to meet the objectives. The requirement to make significant reductions lacks clarity and also is not the most appropriate way to meet the objectives.

[536] Policy 2 of WRC’s Final proposal reintroduced the requirement to have regard to the sensitivity of the environment. However, it requires farms with a high risk of diffuse discharges to reduce the risk to moderate or low or demonstrate that a transition to a different activity with a moderate or low risk will be undertaken. High risk farms are those above the 75th percentile NLLR which, for reasons set out above, in part E18 for example, is not an acceptable metric because of uncertainty. No s 32AA evaluation was provided to support this proposal.

[537] We consider Policy 2Bd of the Notified Version encapsulates what must be achieved if an appropriate start is to be made towards achieving the vision and strategy of Te Ture Whaimana. However, it too needs expansion to ensure greater clarity, including what “more” means, for example, which is a matter for WRC. Drawing on WRC’s latest proposed amendments to the policy in its memorandum dated 2 September 2024 and taking into account the evidence, we consider that an amended policy 2(B) specific to dairy farming activities with medium and high risks of diffuse discharges along the lines set out below could be the most appropriate way to achieve the objectives.

[538] Our preliminary views are provided as a starting point for further consideration by WRC and parties, from which a revised proposal is to be provided for final determination by the Court. When considering the matter, parties should recognise that the effectiveness of any policy included will be seriously constrained by the current lack of key information needed to guide robust decision-making. While the policy would provide a clear signal of how management of the primary

contaminants could be undertaken once the relevant information has been obtained, its practical application for processing consents in accordance with PC1 will require a high level of pragmatism and the exercise of considerable discretion by WRC.

[539] Suggested matters to be considered in the policy are:

- B) Require **dairy** farming activities with more than a low risk of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water to obtain a resource consent and to prepare a Farm Environment Plan in accordance with Policy 4, as follows:
 - a. Generally requiring that either the farm activity is carried out in accordance with good management practices for the current land use or good management practices will be introduced over an appropriate specified period (both GMPs and circumstances where they may not be adopted to be defined, including how industry specific experience is to be incorporated); and
 - b. Taking a tailored, risk-based approach to define any additional mitigation actions required on the land to reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to the lowest practicable level²⁸⁷ within 10 years.
 - c. Requiring the degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to be proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and proportionate to the scale of water quality improvement required in the sub-catchment; and
 - d. When determining what is “more” and what greater reductions are required, the level of mitigation required must increase broadly in response to where the risk of nitrogen loss lies between low and high in the sub-catchment, managed with reference to an Overseer evaluation for the farm provided with the application for consent;²⁸⁸
 - e. When determining the appropriate level of additional mitigation required to reflect the scale of water quality improvement required in the sub-catchment, consideration must be given to:²⁸⁹
 - i. whether the farm is within any sub-catchments draining to the Whangamarino Wetland or in a sub-catchment draining to lakes named in Table 3.11.3 or in a sub-catchment draining to wetlands listed in Table 3.7.7 of the WRP; and

²⁸⁷ Discussed further in Part F32 of this decision.

²⁸⁸ This is based on WRC’s proposal in its memorandum dated 2 September 2024 but unavoidably will require an indicative range of Overseer values to be agreed possibly in three categories which could be no additional mitigation, category 1 mitigation, and category 2 mitigation.

²⁸⁹ Federated Farmers appeal on Policy 4 includes that FEPs should ensure tailored actions reflect specific circumstances related to the individual sub-catchment (including specific water quality issues).

- ii. the extent to which any sub-catchment is over-allocated for nitrogen in particular based on information to be provided by WRC on catchment context; and

generally requiring the additional mitigation in these sub-catchments to be greater than in sub-catchments where the long-term water quality targets in Table 3.11.1 of the Notified Version are met; and

- f. When determining the appropriate levels of additional mitigation required, consideration must be given to any increased site-specific risks of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens resulting from:
 - i. soil characteristics that could contribute to higher than average nitrogen loss rates for the PC1 sub-catchment area generally; and
 - ii. annual rainfall above average for the PC1 or sub-catchment area; and
 - iii. slope; and
 - iv. high erosion potential; and
 - v. the extent and intensity of irrigation; and

generally requiring the additional mitigation to reflect the increase in risk of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens arising under the above headings; and

- g. Requiring GMP and mitigation measures to be recorded in FEPs and implemented as soon as practicable and prioritised so that those predicted to be most effective in reducing diffuse discharges to be set out as a condition of consent and completed within the first five years of the consent, with steady progress over time; and
- h. Requiring a general indication of further mitigation measures needed to ensure the discharges are reduced to be as low as practicable within an appropriate specified period to be set out in the consent and in no case more than 10 years from the grant of consent; and
- i. Recognising that further mitigation measures may or will be required for restoration purposes by future plan changes, which should be considered in longer-term farm planning.

[540] Sub-clause d. will require an indicative range of Overseer values to be agreed, possibly in three categories which could be no additional mitigation, category 1 mitigation and category 2 mitigation. This does not overcome the uncertainty associated with the use of Overseer but an alternative where there was no guidance on what “more” means would have greater uncertainty. However, this is only one element of an inconvenient and unavoidable dilemma for which a pragmatic way forward must be determined.

[541] The second element is that reductions in primary contaminants losses from individual farms that can be achieved under the PC1 provisions in some over-allocated sub-catchments, including lake and wetland catchments in particular, are both unquantifiable and so limited in extent that they do not provide a sound robust basis for setting stringent reduction targets. The third element is what mitigation measures can be implemented practicably, which will depend on individual farm circumstances.

[542] Despite the above analysis, our current view is that policy along the lines outlined or an appropriate alternative is necessary to ensure clarity on the way contaminants will be managed in the future and, while limited information is currently available, there is a need for clarity as to how WRC will process consents in the interim. We will direct WRC to set out appropriate proposals.

[543] We explored sub-paragraphs g. to i. above in a number of ways through the hearing and subsequently to ensure that farmers and growers are properly informed about the potential for future plan changes to require more stringent controls on diffuse discharges before they make decisions based on PC1 in isolation. In joint closing submissions, Beef and Lamb and Federated Farmers submitted:²⁹⁰

In principle the Joint Farming Parties support PC1 signalling future actions likely to be required to achieve the long-term water quality outcomes. For the whole community, but farmers in particular, signalling what will be required will assist with planning and decision making into the next decade and beyond. The need for farmers to understand the important role they will play under PC1 and the size of the challenge is vital.

[544] When considering timeframes, we took into account Ms Marr's view that measures required to reduce contaminants to as low as practicable should be completed within eight years.²⁹¹ We also took into account responses from other witnesses that continuous improvements would still be an expectation beyond that. We agree with Ms Marr's suggested approach but consider that 10 years is the appropriate period to coincide with five-yearly reviews of FEPs.

²⁹⁰ Closing submissions for Beef and Lamb and Federated Farmers at [51].

²⁹¹ NOE at 1943, lines 28 – 30.

[545] It is also consistent with Objective 2 of the Decisions Version, which required that progress is made over the life of PC1 to achieve the interim water quality targets within 10-years. Objective 3 of the Notified Version was even clearer by requiring actions to be put in place and implemented by 2026 to achieve the interim water quality targets, which was 10 years after PC1 was first notified.

[546] In its appeal, Federated Farmers stated:²⁹²

... An appropriate transition and pathway needs to be provided, including staging of actions over (with Federated Farmers' view being that the focus of the first 10 years is on 10% of the journey, with farms adopting good management practices or good farming practices). The provisions also need to be reasonable, practicable and implementable. They ought to provide for flexibility to tailor actions to particular farms, farm systems and/or locations. The actions required ought to recognise the scale, intensity and risk of activities, as well as the fact that this is the first part of the journey, the catchment is currently not well understood and farming activities are not the only (and in some cases even the main) driver of water quality issue

[547] Federated Farmers also sought an amendment to the timeframes in paragraph 4 of Schedule C: Minimum Farming Standards to require the completion of stock exclusion fencing for permitted activities in 10 years from the date PC1 becomes operative, not two.²⁹³

[548] We are satisfied there is scope to require mitigation measures to reduce diffuse discharges to be as low as practicable within 10 years.

[549] Ten years is broadly consistent with the minimum duration of consents that will be granted to most activities, as discussed in Part F33, and when a future plan change should be operative with clearer direction on a PC1-wide contaminant reduction targets. Ten years takes us to the second review of FEPs, after which further mitigations of diffuse discharges are likely to be required in over-allocated catchments. In our view, it also provides greater certainty of compliance with the amended s 107(2A) of the RMA referred to in Part B10.

²⁹² Federated Farmers Notice of Appeal at [12].

²⁹³ Except in sub-catchments identified as a priority for *E. coli* in Table 3.11-2 when the extension sought was from one to five years.

[550] We note that Policy 2(B) applies only to moderate and high intensity dairy farming activities and should not be broadened to introduce changes to other land use activities as there has been no consideration of the potential for unintended consequences at this late stage of the appeal process. Activities requiring consent in the Whangamarino Wetland catchment will be restricted discretionary in accordance with Rule 3.11.4.6 and our current view is that other controlled activity land uses such as dry stock farming in other catchments will have less risk of diffuse discharges of nitrogen than dairy but that can be confirmed by the requirements to monitor changes in nitrogen loss risk using Overseer. In our view, any further controls should be determined as part of the next plan change.

[551] The above comments reflect our continuing high level of concern that greater clarity and certainty of policy direction is required to enhance the efficiency, effectiveness and equity of PC1. They are made for consideration by WRC and other parties and are not directions, nor intended to unreasonably constrain WRC's decision-making flexibility. We will direct WRC to propose what it considers to be the most appropriate policy to meet the objectives, and its proposed approach to processing resource consents on an interim basis until more complete information is available, taking into account the matters we have raised and responses from parties.

E23 Section 32AA evaluation of the use of Overseer and the NRS as drafting gates for dairy farming activities with moderate and high risks of diffuse discharges and the most appropriate resource consent activity status

[552] In terms of scale and significance as defined in s 32(1)(c) of the RMA, we considered both the extent to which environmental effects would change and the effects on the large number of individual dairy farming activities that will be required to apply for resource consents. We do not consider that environmental effects would be significantly different in the context of the long-term outcomes required to give effect to Te Ture Whaimana, whichever activity status is adopted. Similarly, we do not consider effects on individual activities will be significantly different. In both cases, that is because each activity will be required to reduce their diffuse discharges

to be as low as practicable within 10-years, which will depend on their individual circumstances.

[553] We identified all reasonably practicable options that could be used as a drafting gate and explored them with the parties in considerable detail. As part of our evaluation, we considered Principle (b) in Part D6, which is that the provisions must be as clear on their face, certain, workable, practicable, enforceable and equitable as possible in the circumstances, recognising the limitations of methods currently available to quantify diffuse discharges of the primary contaminants. A drafting gate seeking to differentiate between dairy farming activities with moderate and high risks of diffuse discharges based on either Overseer or the NRS would not satisfy the principle and would give rise to serious questions about clarity, certainty, equity and enforceability in particular and, consequently, about the effectiveness and efficiency in meeting the objectives of PC1.

[554] As a consequence, unavoidably, all dairy farms with more than a low risk of diffuse discharges will have the same activity status which could be controlled, restricted discretionary or discretionary. We explored these different options with parties by way of minutes, memoranda in response and conferences or workshops. We considered that of restricted discretionary and discretionary, restricted discretionary would be more appropriate as the matters to be considered could be focused on defined matters of discretion, it would be consistent with the principle of adopting the least restrictive activity status and would be the least inconsistent with the Notified Version.

[555] As noted in Part E20, we do not consider the costs of alternative resource consent and FEP processes would be sufficiently different to affect our determination.

[556] The ability to decline consents was a particular concern for some parties and that is understandable. In circumstances where the date for giving effect to Te Ture Whaimana is some 70 years away, where the historical planning framework enabled and to an extent encouraged the activities causing the current degraded state of the

Rivers to occur, and where the tools do not exist to reliably differentiate between controlled and restricted discretionary activities, the need to decline some consents in the immediate short term will not be a major influencing factor in terms of the most appropriate overall way to meet the objectives of PC1.

[557] Of further relevance, WRC submitted that it would do everything it could to put measures in place through conditions to avoid declining consents and it would be a rare situation where a consent application for someone wishing to continue to farm would need to be declined, which suggests that adopting controlled activity status would not significantly delay restoration of the River.²⁹⁴

[558] WRC also submitted that it:

- (a) had a degree of comfort that a set of provisions could work based on the “flatter” controlled activity structure to reduce the level of concern that the tool being used to differentiate between controlled and restricted discretionary was capturing the wrong farms;²⁹⁵ and
- (b) considered that adopting a flatter rule structure could get people onto their good management practice farm planning sooner, which would be better for the River.²⁹⁶

[559] Whether activities were controlled or restricted discretionary, they would have to demonstrate at the time of consent application mitigations to be used to reduce the risks of diffuse discharges of nitrogen to the lowest practicable level within 10 years as a first step. That is, unless they are already as low as practicable given the current land use. Taking that and other relevant factors into account, we consider that amendments to Policy 2 along the lines outlined above and controlled activity status are the most appropriate way to achieve the objectives because they:

²⁹⁴ Mr Conway, record of judicial conference held 17 October 2024 at [14].

²⁹⁵ Mr Conway, record of judicial conference held 17 October 2024 at [7].

²⁹⁶ Mr Conway, record of judicial conference held 17 October 2024 at [13].

- (a) appropriately recognise and provide for the complexities, significant unknowns, uncertainties, risks and financial constraints that exist and minimise as far as reasonably practicable the potential for workability issues and for unintended consequences to arise and the resulting potential for delays in progress;
- (b) meet the objectives more efficiently and effectively than the provisions as presented to the Court;
- (c) ensure that a start is made on reducing discharges, taking actions that contribute to the vision and strategy of Te Ture Whaimana and gathering information with the aim of preparing for possible property-level limits for contaminants based on land suitability in the future.²⁹⁷
- (d) minimise the potential for delays in implementation by simplifying the resource consent process, adopting the least restrictive activity status and enabling mitigation works to start earlier;
- (e) enable realistic times for initial implementation, while making it clear that further reductions in contaminant discharges may be required in future plan changes and decisions need to be made in that knowledge; and
- (f) are consistent with MfE advice to use Overseer for comparison purposes, not as an absolute number.

[560] In terms of efficiency and effectiveness compared to the discretionary or restricted discretionary activity pathway, the controlled activity pathway:

- (a) will not result in any significant reduction in the environmental outcomes achieved in the term of PC1 and may improve them by encouraging farmers

²⁹⁷ By reference to the relevance of the staged approach included in the s 32 report at E.2.5.1.

to participate through less restrictive consent processing requirements, recognising recent economic pressures;

- (b) includes further provisions to encourage effective planning for subsequent stages of Te Ture Whaimana;
- (c) will result in similar social outcomes in terms of recreation and other non-use values and improved social outcomes for farmers, their families and supporting communities by the more straight forward consenting process (including for low-risk dairy farming activities) and reduced potential for inequities to arise;
- (d) will result in similar cultural outcomes by making progress towards achievement of Te Ture Whaimana; and
- (e) is consistent with the Collaborative Stakeholder Group Policy Selection Criteria relating to achieving sound principles for allocation, recognising efforts already made, exhibiting proportionality, aiming for cost-effective solutions, providing realistic timeframes for change, minimising social disruption, implementability and technical feasibility and administrative efficiency, and is not inconsistent with any other criterion.

[561] When considering the risk of acting or not acting in relation to controlled activity status we took into account submissions from Fish and Game and Forest and Bird that s 77A is not unqualified and there are express (e.g. s 70) and implied filters.²⁹⁸ They referred to *Eden v Thames Coromandel District Council*, where the Environment Court found that controlled activity status should be used if a council “really considers that consent would always be granted for a particular activity subject only to the terms and conditions that may be imposed...”.²⁹⁹ They also

²⁹⁸ Memorandum of Fish and Game and Forest and Bird, dated 16 September 2024, citing *Rangitata Diversion Race Management Ltd v Genesis Energy Ltd* [2015] NZHC 2174.

²⁹⁹ *Eden v Thames Coromandel District Council* [2020] NZEnvC 13 at [116].

referred to *TKC Holdings Ltd v Western Bay of Plenty District Council*, where the Environment Court stated:³⁰⁰

Section 32(2)(c) requires us to assess the risk of acting or not acting. ... given the significant values at play, it is clear the Court should adopt a cautious approach to ensure that any development which occurs is appropriate and maintains or enhances the environmental, cultural, social and archaeological values of the island. We conclude that this precludes controlled activity status.
...

[562] To ensure that any development of farming and CVP activities in PC1 maintain or enhance the environmental, cultural, social values necessary to give effect to Te Ture Whaimana, we have amended matter of control iv in Rule 3.11.4.4 of the Decisions Version as set out in Part E21. We are satisfied that will enable WRC to exercise its control to ensure the risks are managed so that any difference of effects compared to adopting a restricted discretionary or discretionary activity status will have no influence on the achievement of Te Ture Whaimana. Maintenance and enhancement of the values will be achieved within the term of PC1 and can be further enhanced through the provisions of future plan changes.

[563] When considering all aspects of the risk of acting or not acting, including our findings that there is no reliable method of differentiating between moderate and high intensity dairy farms with their associated increased risks of diffuse discharges, our overall finding is that the proposed amendments to Policy 2 and a controlled activity pathway are the most appropriate way to achieve the objectives.

E24 Scope

Scope to amend the drafting gate for dairy farming activities with a low risk of diffuse discharges

[564] The issue of scope to replace Overseer by the NRS as the drafting gate for dairy activities with a low risk of diffuse discharges was addressed in considerable depth through the process, including in closing submissions and in subsequent minutes and responses from parties.³⁰¹ Fonterra and Dairy NZ submitted in closing

³⁰⁰ *TKC Holdings Ltd v Western Bay of Plenty District Council* [2015] NZEnvC 100 at [87].

³⁰¹ Minutes dated 6 December 2023, 30 April 2024 and 30 July 2024.

that they consider that there is scope to both incorporate the NRS as the dairy drafting gate and to remove Overseer. However, should the Court wish to take a conservative approach, a s 293 process could be utilised. WRC submitted that it would abide the decision of the Court in relation to scope.

[565] Fish and Game and Forest and Bird submitted in closing that the NRS as a gateway, either on its own or with Overseer, is outside the scope of submissions and appeals and “that to utilise s 293 in the current circumstances would involve the Court improperly undertaking the role of a planning authority (rather than an appellate court).” By memorandum dated 2 June 2023, they submitted that the changes proposed to be made are not within the s 293 jurisdiction and that:³⁰²

There is no section 32 analysis produced by WRC on the replacement of the Overseer ‘gateway’ in PC 1 with the Fonterra Risk scorecard (for dairy and stocking rate (for drystock). The change is based on informal expert conferencing that occurred prior to evidence exchange, amongst farms experts for a limited number of parties.

[566] In their memorandum dated 28 April 2024, Fish and Game and Forest and Bird submitted:

Wishing to assist the Court with moving forward so that progress can be made to progress Te Ture Whaimana, Fish & Game/RFBPS do not oppose a short s293 process which it is understood would simply be to demarcate low risk farms based primarily on a NRS aggregate number without the concurrent use of Overseer. This would enable them to put forward expert evidence from farms systems analyst.

[567] The use of the NRS for dairy farming activities with a low-risk of diffuse discharges was sought by Fonterra in its submission on the Notified Version of Variation 1. It sought an amendment to Policy 2 to “take a risk-based approach”:³⁰³

to manage the diffuse discharge of nitrogen to:

- ensure discharges do not
 - exceed the Nitrogen Reference Point (**NRP**) for the property or enterprise; **or**

³⁰² Referring to the JWS dated 24 August 2022.

³⁰³ Fonterra Submission on Variation 1 to PC1.

- on properties with low to medium nitrogen leaching risk, increase as determined by a Nitrogen Risk Scorecard Assessment; and ...

[568] In relation to permitted activities Rules 3.11.5.1 to 5.11.5.3, Fonterra commented:

Since the original notification of PC 1 Fonterra has further developed its thinking on the most efficient and effective way to ensure farms can remain within a referenced nutrient loss footprint. While Fonterra continues to support the use of OVERSEER as an appropriate method to monitor a high N leaching risk farm system, it believes there are more administratively efficient ways to achieve the same outcomes in respect of farm systems that are of lower risk.

Fonterra therefore proposes a revised land use rule framework (and supporting Schedules) that simplifies the rule structure so as to have a clear regulatory hierarchy that applies restrictions and reporting obligations that correspond to the risk presented by particular farming types and scales. Accordingly, Fonterra proposes that obligations on small, low risk properties that use land for farming activities are modest with an increasing level of oversight and reporting required as risk factors for N loss increase.

[569] Fonterra sought an amendment to Permitted Activity Rule 3.11.5.2 - Small and/or low to medium nitrogen leaching risk farming activities (now Rule 3.11.4.3) where the property has an area greater than 20 ha and:³⁰⁴

- 4d. A reference level of nitrogen leaching, is provided to the Waikato Regional Council in the form of **either**:
 - (i) A Nitrogen Reference Point calculated in accordance with Schedule B; **or**
 - (ii) A Nitrogen Risk Scorecard Reference Grade determined in accordance with Schedule BA.

(our emphasis)

[570] Fonterra sought the insertion of the following new Schedule BA:

Schedule BA – Nitrogen Risk Scorecard Reference Grade and assessment Properties or enterprises greater than 20ha (or greater than 4.1 ha that cannot meet the conditions of Rule 3.11.5.2 (3)) must comply with a nitrogen reference leaching rate determined either as the Nitrogen Reference Point (calculated in accordance with Schedule B) or a Nitrogen Risk Scorecard Reference Grade (established in accordance with Schedule BA).

³⁰⁴ Fonterra Submission on Variation 1 to PC1.

[571] On our plain reading of the amendment sought to Policy 2, the inclusion of the words “or” means that on properties with more than a low to medium nitrogen leaching risk, the risk was to be assessed based on the NRP and for properties with low to medium nitrogen leaching risk, the risk would be assessed on the Fonterra’s NRS. Schedule BA and the Nitrogen Risk Scorecard Reference Grade are explained in the submission and, together with the amendment sought to Rule 3.11.5.2 can be read unequivocally as the use of the NRS as an alternative to Overseer having been sought by Fonterra. We are satisfied that any of the 1,100 or so other submitters on the Notified Version and Variation 1 would have been made aware that a use of the NRS was being sought for low-risk dairy farming activities.

[572] By way of background, Fonterra stated that it was concerned about “[t]he feasibility of implementation of some of V1’s [Variation 1] nitrogen management provisions given the heavy reliance on OVERSEER modelling”. It provided the following comments on Policy 2 and Schedule BA:

Fonterra supports nitrogen being managed by way of a numeric nitrogen discharge limit with flexibility retained in how that limit is complied with. ... However, acknowledging the significant administrative burden of requiring OVERSEER modelling for low risk farming activities that remain in a relative “steady state” year to year, Fonterra also proposes that a simplified tool be available to be used by as an alternative for OVERSEER reporting for properties meeting low to medium risk criteria. Fonterra also proposes that a simplified tool be available to be used as an alternative for OVERSEER reporting for properties meeting low to medium risk criteria.

... Fonterra supports the idea that lower nitrogen leaching risk farms may, as an alternative to an OVERSEER-measured NRP and a three-year rolling average leaching rate, choose to have their nitrogen leaching risk assessed using a simpler measure of deviation from a reference level of nitrogen leaching. This will use farm input metrics as a proxy for nitrogen output risk. Fonterra proposes that this take the form of a Nitrogen Risk Scorecard.

... In simple terms, the scorecard will assess whether annual changes/variation in key farm inputs will, individually or in combination, affect the nitrogen leaching that could be expected from the property. In broad terms, the scorecard will be a form of matrix that allows farms in steady state (i.e. farms with little or no variation in their annual key farm inputs) to demonstrate compliance without engaging in OVERSEER modelling.

[573] Standard D2.b of Schedule D1 of the Decisions Version provides for the use of the NRS to demonstrate that the annual Purchased Nitrogen Surplus does not exceed 150 kg N/ha/y. This means that the Hearing Panel accepted Fonterra’s

submission to allow the NRS to be used for monitoring the annual nitrogen loss as an option but this was after the status of the activity as low risk had been established using the activity's NLLR. It also means that the NRS methodology already acts as a default drafting gate in the Decisions Version.

[574] No party appealed this provision.

[575] Fonterra's appeal sought the amendment to Policy 2 so that "[o]ppportunity needs to be provided within that rewording for nitrogen reductions to be demonstrated by means other than annual Overseer modelling. For example, purchased nitrogen surplus or Fonterra's Nitrogen Risk Scorecard should be acceptable metrics." As noted in Part E1, it also sought that Policy 4 be amended to require the initial assessment of the intensity of farming activities and nitrogen loss risk of farms by reference to either the NLLR or the peak stocking rate of the individual property. It did not seek that the NRS be used as alternative.

[576] In their appeals, Fonterra and Dairy NZ stated that Policy 2 establishes a highly differentiated approach to managing activities that is not based on the adverse effects of those activities. One of Fonterra's grounds for appeal was the different treatment of rural land uses and their associated diffuse discharges, as between dairy and non-dairy and raised the issue of equity. In relation to the drafting gate issue, they referred to the requirement in the Decisions Version for low-risk dairy farms to produce a NLLR, while no drystock farms are required to do so.³⁰⁵

[577] Fish and Game and Forest and Bird submitted that there is no s 32 analysis produced by WRC on the replacement of the Overseer 'gateway' in PC1 with the Fonterra NRS (for dairy) and stocking rate (for drystock). We undertook our own s 32AA assessment of the proposed change to the dairy drafting gate in Part E18 before determining that currently it is the most appropriate way to meet the objectives. We have no jurisdiction to look into the basis on which the drafting gate for drystock was changed as it is not the subject of appeal. However, the change has left a gap in policy direction as to how a general improvement in drystock farming

³⁰⁵ Fonterra Notice of Appeal at [8(c)(ii)] and in relation to Policy 4a and Rule 3.11.4.4.

and reducing discharges from drystock activities to be as low as practicable will be assessed.

[578] Fish and Game and Forest and Bird submitted in closing that:

... the option of introducing the NRS as an alternative to NLLR (or alongside it) in the gateway cannot be said to have been “*reasonably and fairly raised*” in submissions or on appeals, except perhaps for low risk farms (Fonterra submission on Variation 1). The proposed amendments could not have been reasonably anticipated.

...

There is no jurisdiction for the Court to make amendments to such an extent that those who are potentially affected have not had the opportunity to participate.”³⁰⁶

[579] We are satisfied that the specific amendment sought to Policy 2 reasonably and fairly raised the use of the NRS and, based on reading the policy at face value, could have been seen as including use as a drafting gate for low-risk farming activities. If a party looked more closely and read Fonterra’s comments in support of its proposed amendments, they would have seen that it was proposed to be a simplified tool to be used by as an alternative for Overseer reporting for properties meeting low to medium risk criteria that remain in a relative “steady state” year to year. This would have required a steady state to have been demonstrated before the alternative would be used.

[580] All farming interests in the Waikato have been represented by industry organisations that can reasonably be expected to have kept their members informed. We do not consider any other party will be adversely affected by the change. It will have no effect on drystock farmers, CVP activities or dairy farmers with more than a low risk of losses of the primary contaminants, which collectively account for between 80 and 90% of all diffuse discharging activities. It would have positive effects for low-risk farms without adversely affecting any other party. It would also

³⁰⁶ *Clearwater Resort Ltd v Christchurch City Council* HC Christchurch AP 34/02 (14 March 2003) at [66].

have benefits for tangata whenua and the wider Waikato community as a whole by enabling an earlier start to environmental improvements.

[581] Fish and Game and Forest and Bird submitted in closing that the NRS proposal would involve lower order submissions driving consequential changes further up the hierarchy of provisions in the same document in an unorthodox way, as cautioned against in *Royal Forest and Bird Protection Society of New Zealand Inc v Dunedin City Council*.³⁰⁷ We reject that submission as Policy 2 of the Notified Version was “Manage and require reductions in sub-catchment-wide diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens from farming activities on properties and enterprises by: a. Taking a tailored, risk based approach ...”. The use of a nitrogen risk scorecard is consistent with that policy but does not drive change higher up the hierarchy.

[582] Forest and Bird and Fish and Game quoted “... the Council must be satisfied that the proposed changes are appropriate in response to the public’s contribution. The assessment of whether any amendment was reasonably and fairly raised in the course of submissions should be approached in a realistic workable fashion rather than from the perspective of legal nicety”.³⁰⁸

[583] The public’s contribution is a strong message to improve water quality in the Waikato region and we have determined that use of the NRS is the most appropriate way to start that process for low-risk dairy farms. We have approached our determination in terms of what is realistic and workable based on the evidence before us and on the Court’s experience on other cases, particularly Bay of Plenty PC10. It is the most efficient and effective way to achieve the Objectives of PC1. We do not consider that legal nicety would change the outcome as no party will be disadvantaged by the use of the NRS for the limited purposes determined as

³⁰⁷ *Royal Forest and Bird Protection Society of New Zealand Inc v Dunedin City Council* [2023] NZEnvC 79.

³⁰⁸ *Albany North Landowners v Auckland Council* [2016] NZHC 138, at [115], citing *Royal Forest and Bird Protection Society of New Zealand v Buller Coal* [2012] NZHC 2156 at [13]; see also *Gertrude’s Saddlery Limited v Queenstown Lakes District Council* [2020] NZHC 3887 (“*Gertrude’s Saddlery*”), at [63].

appropriate for PC1 or by not having been aware of that use at the time submissions on Variation 1 closed.

[584] We are satisfied that there is no reasonable basis to require a s 293 process, which would result in significant negative effects in terms of delays, costs, unnecessary use of scarce resources and adverse public reaction, with no potential for compensating benefits to be achieved.

Scope to amend the activity status of dairy farming activities with a high risk of diffuse discharges and amend policy 2

[585] We have determined there is scope to amend the activity status of dairy farming activities with a high risk of diffuse discharges to controlled as it was a provision in the Notified Version and Federated Farmers sought an amendment to Rule 3.11.4.4 in its appeal, so that it applied to moderate and high intensity farming.

[586] We note for completeness that one of the standards or terms of the rule was a requirement to produce a NRP for the property or enterprise using Overseer. A matter over which control was reserved by WRC was “[t]he actions and timeframes to ensure that the diffuse discharge of nitrogen does not increase beyond the Nitrogen Reference Point for the property or enterprise”. The management of dairy farming activities with medium and high-risks of diffuse discharges in accordance with our decision will require a NLLR³⁰⁹ to be produced and reduced over time, rather than “not increase”. This is necessary if a start is to be made towards achieving Te Ture Whaimana and does not give rise to issues of scope.

[587] As discussed in Part E22, the Decisions Version introduced a new requirement in Policy 2 to demonstrate that either the NLLR is already as low as practicable given the current land use or will reduce to the lowest practicable level over an appropriate specified period. No scope issues arise from that change, and we accept it. However, the Decisions Version removed the requirement to adopt GMP and replaced the proportionate requirements of the Notified Version with a

³⁰⁹ The Hearing Panel changed the requirement to produce a NRP to a NLLR; both based on the Overseer model.

requirement for farming activities with a high NLLR to make significant reductions to them and to have regard to whether a significant or disproportionate contribution to nitrogen loading in the sub-catchment(s) would result.

[588] In its appeal relating to Policy 2, Federated Farmers stated that it “... ought to take into account the specific characteristics or circumstances including the sub-catchment, proportionality and resources reasonably available to the farm”.³¹⁰ It also considered that the focus of FEPs should be on good farming practices or good management practices and included a suggested definition. In their appeal Fonterra and Dairy NZ sought that the goals and principles in Schedule D2 should be replaced with “well known Industry Agreed Good Farming Practices”.³¹¹ The Decisions Version required a proportionate approach to be adopted and included a requirement for a 10% reduction in nitrogen through the implementation of Best or Good Management Practices in Policy 3.

[589] An amendment to Policy 2 along the lines outlined in Part E22 is within scope as it is largely on the Notified plan change and also consistent with the above appeals. We accept the new requirement introduced by the Hearing Panel relating to “as low as practicable”. We do not accept that the 75th percentile NLLR can be used as a trigger because of its large potential variability. A number of other amendments to Policy 2 included in the Decisions Version reduce the overall clarity of the policy direction with no compensating benefits and, in accordance with s 290 of the RMA, we do not accept them.

³¹⁰ Federated Farmers Notice of appeal at Appendix 1.

³¹¹ Fonterra Notice of Appeal at Schedule 1; Dairy NZ Notice of Appeal.

PART F Other matters

F1 Introduction

[590] While the drafting gate issue was a major focus of the hearing, a wide range of other matters were addressed through the appeal process. We address them in this Part F after providing a summary of the catchment-wide approach used to guide the development of PC1 and the complexities arising from the changing regulatory environment.

F2 Catchment-wide economic considerations

[591] We received economic evidence from Dr Olukunle Olufemi Olubode-Awosola, an economist and agricultural/environmental policy analyst who has been employed by WRC since late 2013. The following background is based on his evidence and the report attached to it entitled “Evaluation of the Decision Version of the Proposed Plan Change 1 policy mix” dated March 2022. Scenario modelling for the Notified Version was undertaken using the Land Application Model (**LAM**) developed by *Doole et al* and reported on in November 2015. Dr Olubode-Awosola extended the model and database to simulate the decisions version of the policy mix, including economic and production implications. Some updated cost information was included in the updated model.

[592] Dr Olubode-Awosola explained the model as:

- 17 ... a collection of mathematical equations, comprising a set of catchment-level farm income maximisation equations (economic model) and 6 sets of hydrogeological equations (hydrological models), which are all integrated to find the most cost-effective ways to achieve a given set of water quality outcomes, across the 74 sub-catchments of the 4 FMUs in the Waikato and Waipā River catchments.
- 18 The model has features to evaluate the aggregate costs of mitigation actions to achieve water quality target attribute states, and takes into account variables in the PC1 provisions that contribute to achieving targets.

[593] The complexity of the model was illustrated by Dr Olubode-Awosola when he explained that the LAM is an integration of hydrological models that have more than 50,000 variables and more than 18,000 of them are non-linear variables.³¹²

[594] He stated that different but coherent means were used to estimate land use profitability close to the base year (2011/12 to 2012/13) data.

[595] As PC1 is the first 10-year stage in an 80-year programme, we focus in this discussion on the key outcomes of the short-term catchment-wide modelling that affect our evaluation of the plan change. It would be premature to consider any longer-term issues until much more is known about the river catchments. We do not consider it necessary to repeat details of the modelling other than the following extracts from Dr Olubode-Awosola's evidence, which we considered to be particularly relevant:

20 The results indicated that more target attribute states could be met than not. Specifically, 250 of the 336 attribute states targets were met and/or exceeded. Most (56) of the 86 breaches are for *E. Coli* measures. Most (42) of those *E. Coli* breaches were in Lower Waikato or Waipā (21 each). Of the remaining 30 breaches, 26 were related to nitrogen (N), mostly (24) in the Upper Waikato. The remaining 4 were water clarity (3 in Lower Waikato and 1 in Middle Waikato). In addition to the short-term target scenario, the level of commercial vegetable production (CVP) expansion recommended by the Hearing Panel was estimated to have relatively small negative effects on the prospects of meeting the target attribute states. Likewise, the results of intensification of iwi land are also similar to the notified version of PC 1.

...

23 In the modelling, it is implied that farm areas under high NLLR could drop by about 21% in the Lower Waikato, 64% in the middle Waikato, about 100% in the Upper Waikato, whilst there is no change in the Waipā.³¹³ This amounts to just over a 50% drop in farm areas under high NLLR in the whole Waikato-Waipā River catchment. These are mainly in dairy and horticulture farming. At farm level for example, for dairy farms currently on medium input farm system, these farms would have to reduce stocking rate by about 10%, N use by about 100% and supplementary feed by about 31%, on about 75% of their effective land areas. That would result in farm profit being reduced by

³¹² Dr Olubode-Awosola EIC at [20].

³¹³ For the short-term scenario; for the long-term scenario, the areas in high NLLR could drop by about 70% in the Lower Waikato, 90% in the middle Waikato and 100% in Waipā and Upper Waikato (from Appendix 1 at [3.7]).

about 5% and N leaching by about 31%. With additional specific mitigations, say 31% of streambank on accord streams in the sub-catchment being fenced, these farms would have to further reduce stocking rate by additional 3%, and supplementary feed by additional 55% on all their effective land areas. That would result in further reduction in farm profit by about 6% and N leaching by about 3%. This is in line with the assumptions (mitigating nutrient loss along abatement costs curves and shift in the curves) on which the modelling was based whereby successive reductions in a unit of contaminant are increasingly costly.

- 24 At catchment level, the level of target achievement as reported in paragraph 20 above is estimated to lead to a potential loss of about 16% of profitability due to the cost of mitigation of contaminants. An on-farm implication is that options to mitigate contaminant losses would represent advancements in technology with concerted efforts to minimise the costs of mitigation and improve productivity. That may include nutrient management planning, soil testing, precision farming techniques, riparian planting, farm system changes, etc.

...

51. In terms of results of the TLG's modelling, the simulation was reported to be able to achieve significant improvement in water quality across the catchment, except in the Upper Waikato FMU which is due to N 'load to come'. ...

[footnotes omitted]

[596] The results in paragraph [20] of Dr Olubode-Awosola's evidence refer to achievement of the interim water quality targets, noting that around 15% would not be met. Longer term the achievement was less, with approximately 50% of targets not being met.

F3 Modelling relating to the development of Tangata Whenua Ancestral Land

[597] Whether PC1 should include provision for the development of TWAL was a significant matter of dispute. Dr Olubode-Awosola modelled three scenarios for the development of 9,200 ha of iwi land in the short-term that are currently in forestry and drystock farming, but that he considered suitable for conversion into intensive drystock and dairy farming - one third, two thirds and the whole 9,200 ha. Of the iwi land areas allowed for intensification, 86% is in Upper Waikato, about 12% in Waipā and 2% in the Lower Waikato FMUs. In the short-term scenario, intensification on iwi lands could be expected to increase the extent of breaches of

interim water quality targets slightly, especially where there are already breaches. Few new breaches in other sub-catchments would be expected.

[598] The overall increase in effects for the low development scenario was considered to be marginal. In the medium development scenario, the number of breaches would increase from 35 to 37 compared to the low development scenario. In the high development scenario, breaches would increase by a further three. PC1-wide nitrogen loads discharged from the land were estimated to increase from around a short-term nitrogen loss of around 13,450 tN/y by around 80, 160 and 240 tN/y for the low, medium and high development scenarios respectively.³¹⁴ Allowing for 35% nitrogen attenuation³¹⁵ between the farm and the receiving water, the increased loads in the rivers would be, indicatively, 50, 100 and 150 tN/y. We discuss this further in Part F28.

F4 Modelling relating to the expansion of commercial vegetable production

[599] This was another matter of dispute. Dr Olubode-Awosola modelled expansion from the 2012 baseline data of about 6,000 ha as modelled in the Notified Version to more than 6,396 ha under the Decisions Version. PC1-wide catchment nitrogen load was estimated to increase by around 30 tN/y over and above the short-term nitrogen loss of around 13,450 tN/y. The indicative additional quantity reaching the river would be 20 tN/y based on an assumed attenuation rate of 35% as derived in Part F5.

F5 Our preliminary observations relating to model predictions

[600] We acknowledge first the complexity of catchment-wide modelling in an area the size of PC1 with so many variables and unknowns, where the data used is more than 12 years out of date and where around 10 years have passed since the base

³¹⁴ Dr Olubode-Awosola EIC, Appendix 1, Table 7.

³¹⁵ The basis of the 35% allowance is set out in Part F5, but the actual percentage will vary in different parts of the area and is not known as a PC1 area-wide average. Caution must be exercised when using the 35% figure but it enables a general indication of nitrogen loads reaching the river to be obtained.

models were developed and costs assessed. Much has changed over that time and it was not possible for us to tell from the evidence how representative the modelled outcomes are of the circumstances that exist today.

[601] Dr Olubode-Awosola fairly noted that:³¹⁶

The results of the modelling exercise as presented in the Evaluation of the Decision Version (Appendix 1) can be interpreted as a best-case scenario, which implies the outcomes are possible and not necessarily what would happen with certainty. ...

As is always the case with modelling exercises, limitations to the level of calibration in the model apply to this study.

...

With the assumptions about the mitigation options and the data inputs, the results are as expected, *a priori*, in terms of direction of impacts. That is where we expect a scenario or policy provision to have negative impact on meeting targets, such results were found. However, the magnitudes are only an indication as modelling cannot guarantee precision all the time.

... the assumptions have not captured any possible benefits of contaminant mitigation actions that are in place already.

... the speed at which groundwater transmits nitrogen leached below the root zone to surface water, and the likely attenuation rate of nitrogen between the root zone and surface waterway, provides a time factor that is difficult to capture. This time factor has not been represented in the model, although the implied linkages have been represented as far as possible. This is related to the fact that another factor affecting the achievement or not of the target attribute states is N load to come.

[602] He added that time, though critical to the difference between contaminant loads on farm and concentrations in the rivers, was not explicitly incorporated into the modelling and that there are many other factors that are time dependent such as development and adoption of innovations, changes in prices and costs and climate.

[603] We also acknowledge the thought that has been put into the model and its predecessors by Dr Olubode-Awosola and others, and the challenges presented by the number and extent of changes that have occurred since the modelling commenced. We see no basis for criticism of Dr Olubode-Awosola's work and none is intended; we accept the uncertainties as a reality of the circumstances. However,

³¹⁶ Dr Olubode-Awosola EIC at [64] and Appendix 1, Summary, conclusions and implications.

as economic well-being sits alongside social and cultural well-being and avoiding, remedying, or mitigating adverse effects of activities on the environment in the purpose of the RMA, it is a matter we considered particularly carefully.

[604] We started by reviewing the assumptions used in the model against the wider evidence before us, the provisions that remain in dispute and the Court’s understanding of catchment-wide planning and modelling from other cases. As part of the review, we considered concerns raised by other parties and the extent to which they remain valid, if at all. As an example, Federated Farmers was initially concerned that the costs of the Proposal had not been adequately evaluated in the original s 32 Report,³¹⁷ and referred to a 2016 report of the Technical Leaders Group for the Healthy Rivers Wai Ora Project on the economic impact of the Proposal which found:

... the proposed policy mix will have a significant negative impact on income, employment, and exports within agricultural industries in the Waikato region and those sectors that provide services to them. These impacts are further magnified when connections with industries across the nation are considered.

[605] Federated Farmers and Beef and Lamb submitted that a lot of the social and economic assessments and modelling undertaken for the CSG are now more than 10 years old and WRC has not provided an update in its Environment Court evidence (save for re-running the Waikato Land Allocation Model).³¹⁸

[606] Based on our review, we observed that:

- (a) the economic assessment estimated the “current” catchment nitrogen load discharged from farming activities as 16,742 t/y³¹⁹ and the estimated nitrogen load in the lower Waikato is stated as 10,981 t/y for the whole catchment in water quality evidence summarised in Table 1;

³¹⁷ Federated Farmers submission on the Notified Version; Garry McDonald and Graeme Doole, Regional- and National-level Economic Impacts of the Proposed Waikato Regional Plan Change No. 1 — Waikato and Waipā River Catchments, 12 August 2016.

³¹⁸ Opening submissions at [4.7].

³¹⁹ Dr Olubode-Awosola EIC, Appendix 1, Table 7.

- (b) based on these estimates, the average attenuation rate would be approximately 35%. The actual average could be significantly different and rates will vary significantly across the PC1 area, meaning much longer term monitoring will be required before reliable estimates of the effects of attenuation and nitrogen load to come will be known.³²⁰ The s 32 Report recorded that attenuation estimates ranged between 5% to 50% across the 74 sub-catchments,³²¹ which appear to be broadly consistent with a 35% average.
- (c) model assumptions relating to the area of CVP expansion allowed and relating to stream fencing and set-back distances appeared to differ significantly from the evidence before us. As an example, the model assumed the proportion of streambanks on dairy farms fenced with a 5 m buffer was 54% in the long-term scenario and about 50% in the short-term scenario.³²² From Part C8, it can be seen that in 2017, effective fencing on dairy farms was 87% of bank length.
- (d) the model assumptions did not capture any possible benefits of contaminant mitigation actions that have been put in place since the baseline date of 2012,³²³ and
- (e) the model assumptions included that land use change was not allowed and that high intensity dairy and drystock farms have to reduce their nitrogen leaching to the 75th percentile,³²⁴ while there is no certainty that will be achievable within the term of PC1 without land use change.

[607] One further matter requiring consideration is that the model assumed the cost of conversion of TWAL from forestry to dairy at \$3,305/ha, conversion from

³²⁰ Roland Stenger *Nitrogen lag review* (Lincoln Agritech Ltd, Report 1058-14-R1, June 2022) in Tab 26 of the secondary materials in evidence folder stated: Input-output balances (and therefore attenuation factors derived from them) depend strongly on the accuracy of the N leaching losses estimated for the various land uses in a catchment.

³²¹ Section 32 Report at C2.2.4.

³²² Dr Olubode-Awosola EIC, Appendix 1 at [2.3.3].

³²³ Dr Olubode-Awosola EIC, Appendix 1 at 4.

³²⁴ Dr Olubode-Awosola EIC at [50].

forestry to drystock at \$1,448/ha and conversion from drystock to dairy at \$1,805/ha. These allowances are substantially lower than estimates in the evidence heard by the Court in relation to the Bay of Plenty PC10 appeals, which included:³²⁵

In terms of affordability, Mr Le Miere estimated that conversion from forestry to sheep and beef farming would cost around \$16,500/ha with a carbon tax at \$6/t and around \$31,500/ha with the tax at \$25/t. He estimated that conversion from forestry to dairy would cost around \$37,550/ha with a carbon tax at \$6/t and around \$52,500/ha with the tax at \$25/t. Mr P R Journeaux for the Regional Council similarly estimated the costs of conversion from forestry to dairy at \$32,600/ha with carbon tax of \$17,500/ha, or a total of approximately \$50,000/ha. The JWS on Economics states that it is unprofitable to convert from forestry to any pastoral land use and that this is a strong constraint on its optionality.

[608] That evidence was not before us in the PC1 appeals and could not be tested, but in the PC10 case, the Court's decision records:

Based on the evidence, we find it is unlikely that any significant conversion from forestry or bush and scrub to pastoral use would be likely to occur on economic grounds alone. We find that other types of land use including papakāinga, tourism ventures, visitor accommodation and possibly short rotation carbon crops and various forms of horticulture including orcharding are or could be practicable in certain situations.

[609] While we can place limited weight on evidence given in a different case, it highlights one example of the difficulties faced in catchment-wide modelling as a basis for informing important policy decisions.

[610] Overall, when Dr Olubode-Awosola's limitations of the model are taken into account, together with the changed circumstances since the model was developed, the uncertainty as to what extent those are now reflected in the model and question marks about cost assumptions, it raises significant questions about the reliance we can place on the economic modelling predictions for the purposes of PC1 decision-making.

[611] A particularly significant issue for our determination of the case relates to the model prediction that 50% of high intensity farms must reduce their nitrogen loss to

³²⁵ *Federated Farmers of New Zealand Inc v Bay of Plenty Regional Council* [2019] NZEnvC 136 at [225].

the 75th percentile value for their FMU. That could involve between 250 and 500 farms, based on the range discussed in Part C3, and the evidence did not address what the environmental benefits or what the social and economic costs would be in a way that enabled us to undertake an informed evaluation. Other issues involving significant uncertainties relate to the extent to which and the rate at which mitigations were to be achieved in relation to fencing, riparian planting and the size of wetlands to be protected to meet the interim water quality targets within the term of PC1. The adequacy of associated cost estimates for these aspects is also uncertain.

[612] We discuss these matters below but our overall finding is that we can have limited confidence that the model predictions reliably represent the situation that exists today.

F6 Dealing with a changing regulatory environment and a complex, uncertain state of knowledge

[613] Development of PC1 has had to respond to a regulatory environment that has been in a state of considerable and continuing change since the Decisions Version was publicly notified and appeals were lodged, as discussed in part in Parts B and D3. In addition, the issues to be addressed involve high levels of complexity and uncertainty, meaning there should be no expectation of precision and an acceptance that outcomes cannot be predicted with certainty. Put simply, the information currently available for properly informed decision-making does not exist. A key requirement is to ensure that information needed to support robust future planning is gathered as part of PC1, which is provided for, and that will take time.

[614] A large number of separate but inter-related issues arose though the appeals process and we must consider how best to coordinate responses to individual issues to ensure the provisions as a whole are the most appropriate to meet the objectives. Helpful guidance is provided in the following especially relevant WRPS objectives

for integrated management as summarised by Mr Trebilco, as well as all other WRPS and WRP objectives and policies he identified:³²⁶

IM-O1 Integrated Management: which emphasises the need to recognise (among other matters), the inter-relationships between water body catchments, riparian areas, wetlands and coastal environments, as well as the relationships between environmental, social, economic and cultural wellbeing.

IM-O2 Resource use and development: Recognises and provides for the role of sustainable resource use and development and its benefits in enabling people and communities to provide for their economic, social and cultural wellbeing.

IM-O3 Decision making: which sets out underlying principles for decision making including the adoption of appropriate planning timeframes, adaptive management, mātauranga Māori, and flexible solutions for local variations.

IM-O4 Health and wellbeing of the Waikato River: which recognises the need to restore and protect the health and wellbeing of the Waikato River to achieve Te Ture Whaimana.

[615] To assist us in addressing issues to reflect their inter-related nature and complexity, we evaluated them in what we considered to be a logical and sequential order as set out below.

F7 Target attribute states

[616] Target attribute states in addenda to Tables 3.11-1 (a), (b) and (c) - Sub-catchments monitored from late 2018 were agreed between the parties and are included in WRC's Final Version. We accept the amendments at face value as they were agreed.

[617] Fish and Game agreed with the post-conferencing version of Objectives 1 and 2 of PC1 but did not agree with the proposed target attribute states to which those Objectives refer. While they agreed that some additional target attribute states would more appropriately await the freshwater plan change notified in 2024, they considered there is no barrier to including the following in PC1:³²⁷

³²⁶ Mr Trebilco EIC at [34].

³²⁷ Opening submissions (revised) at [19] and confirmed in closing submissions.

- a. Narrative attribute states for wetlands (other than the Whangamarino wetland which has a TAS)³²⁸.
- b. Maintenance states for lakes.
- c. Dissolved oxygen TAS's that are set at the NPSFM 2020 bottom line, for the Lower Waikato FMU.

[618] As stated in Part B2 the obligation to give effect to the current version or any replacement version of the NPSFM rests with WRC in accordance with a prescribed process. As also stated, we consider it would be inappropriate for the Court to step into that process. Even if that were not the case, before making a determination we would want to have a much more complete understanding of the catchment context than was provided in evidence.

[619] While we considered the conflicting evidence of Dr Robertson and Dr Scarsbrook in relation to the inclusion of narrative attribute states for wetlands, it did not change anything stated above. It requires much more detailed evaluation than is possible based on the evidence before the Court.

[620] As we have made no changes to the agreed provisions, no issues of scope arise.

F8 Ensuring different farming sectors are treated equitably

[621] The issue of equity was raised in appeals by each of the farming and CVP sectors and by counsel and experts for each of the sectors as discussed below. It is clearly a critical issue and we considered it particularly carefully. For the avoidance of doubt, each sector is important to the region and to New Zealand and any inference that one is more important than others or should be treated more leniently than any other is not accepted by the Court.

[622] By way of a preliminary observation, the Notified Version treated all sectors the same, requiring most activities to produce an NRP, and to reduce diffuse discharges either by 10% in the case of nitrogen for CVP or, in the cases of dairy and drystock farms, proportionate to the amount of current discharge (those

³²⁸ Target Attribute State.

discharging more are expected to make greater reductions), and proportionate to the scale of water quality improvement required in the sub-catchment. The Decisions Version introduced changes that mean there is no longer a consistent approach to managing dairy and drystock farms and WRC's Final proposal is silent on a method to be used for managing CVP activities.

[623] We accept that the changes made were based on evidence received in relation to each of the three sectors. However, there is also a need to consider the overall coherence and internal consistency of the plan to ensure that if one sector is treated differently, no other sector is unfairly disadvantaged. This was a significant concern through the hearing.

[624] We took into account that each sector contributes different proportions of each of the four primary contaminants to overall catchment loads. Of particular note is that the Notified and Decisions Versions of PC1 used nitrogen as the basis for setting consent activity status, without requiring the same level of control on the three other primary contaminants that may in some cases have similar or greater effects on the environment than nitrogen. This gave rise to an element of tension at times through the hearing process between the dairy and drystock sectors and, along with CVP, each sector sought to ensure they were not unfairly disadvantaged compared to each other and that they are all treated equitably.

[625] We address equity between dairy and drystock farming in this Part F8 and matters relating to CVP in Part F9.

[626] Our understanding of the contributions of nitrogen and sediment made by the dairy and drystock sectors was assisted by the following evidence from Dr Depree:³²⁹

Dairy and drystock comprise a similar area of the PC1 catchment area – approximately 33% and 34%, respectively. However, they have different contaminant profiles. Dairy contributes more nitrogen than drystock (67% and 27%, respectively), however drystock contributes more to the catchment's diffuse P-loss (56% compared to 37% dairy).

³²⁹ Dr Depree EIC from [1.7].

With respect to sediment, which in my opinion is a higher priority (or certainly more challenging with respect to meeting 80-yr targets), drystock farmland contributes approximately 3-times more sediment than dairy (66% compared to 21%) based on long-term soil erosion data. In the high sediment yielding catchments, drystock farmland contributes 69% and 80% of sediment (based in long-term soil erosion data).

[627] Beef and Lamb and Federated Farmers acknowledged that sediment is a particular contaminant of concern for the drystock sector and that stock exclusion on slopes up to 15° might be appropriate in the longer-term but they considered it should not be required by PC1. We note that contrary to the above submission, Beef and Lamb’s appeal sought an amendment to the stock exclusion standards in Schedule C to delete a requirement to fence streams on land with slopes greater than 15° but not with a slope of up to 15°. While Federated Farmers expressed concern about the costs of fencing in its appeal, it did not seek any amendments to the provisions. We do not consider the issue further here but address it in detail in Part F14.

[628] Fonterra and Dairy NZ were concerned about the lack of controls on intensification of drystock farms and proposed an amendment to Policy 4 to require identification of the winter stocking rate in the FEP and amendments to the recertification requirements for FEPs.

[629] Beef and Lamb and Federated Farmers submitted in closing that “the proposed drystock drafting gate will not result in on-farm intensification of a drystock system beyond that which is necessary to provide flexibility to allow farms to respond to climatic and other factors (i.e. increasing or decreasing stock numbers)”.³³⁰ They referred to the evidence of Mr Andrew Burt, the chief economist at Beef and Lamb, who stated that “... there has been no material change in average stocking rate on drystock farms over a prolonged period, and there is no evidence demonstrating any likelihood of those stock numbers increasing”.³³¹

³³⁰ Closing submissions at [23], referring to submissions for Waikato and Waipā River Iwi in the context of the undermining of TWAL provisions at [76].

³³¹ Closing submissions at [23(c)].

[630] WRC’s Final Proposal sets limits on winter stocking rates for permitted and controlled drystock activities, which we consider goes some way towards addressing that concern.³³² A concern that remained was the comparative numbers of dairy and drystock farms classified in each activity status, which we discuss below.

[631] Mr Willis’ EIC stated that in many ways, PC1 creates an “uneven playing ground” for the different primary sectors. He assessed this will mean that dairy may be left to do all the “heavy lifting” when it comes to achieving contaminant loss reductions, which he considered inefficient when considering the discharge risk profile of dairy across all contaminants relative to other sectors. He identified particular concerns as:³³³

CVP is given policy support through express recognition of that sector’s “positive contribution”; is expressly allowed to expand its areal footprint, has no applicable minimum standards; is not managed according to a low, medium or high risk / discharge framework and hence existing high-risk operations appear to be ‘grand-parented’ into the new regime. ...

A threshold gateway that applies to drystock that means that the vast majority of drystock farms will be permitted activities ...

75% of dairy farms will require consent ... 25 to 30% of dairy farms will need to make a ‘significant reduction’ in N loss.

[632] The move away from using nitrogen leaching rates for drystock resulted from the farm systems experts’ agreement and advice to the Hearing Panel that stocking rate is the best metric for drafting permitted and controlled activities for drystock, albeit a coarse one. Mr Pinnell and Mr Robinson considered winter stocking rate and comparative stocking rate/ha are pragmatic metrics for risk. They also stated that “[t]he thresholds are somewhat arbitrary, given that risk generally increases with stock intensity without clear step changes” and “[t]he StatsNZ distribution of stocking rates suggests a significant proportion of drystock farmers will require consents, raising questions regarding compliance efficiency”.³³⁴

[633] Mr Willis’ evidence that “the vast majority” of drystock farms will be permitted activities was not challenged at the hearing but his opinion was contrary

³³² Rules 3.11.4.1, 3.11.4.3 and 3.11.4.4.

³³³ Mr Willis EIC at [6.11].

³³⁴ JWS Farm systems at [11].

to the views expressed during expert conferencing by Mr Pinnell and Mr Robinson. We sought clarification of the extent to which the drystock drafting gate will enable drystock farms to be permitted or require controlled activity consent, and whether that is equitable compared to the requirements for dairy farms.³³⁵ In response, WRC estimated that around 80% of drystock farms would be permitted and 20% controlled, when compliance with stocking rate limits was the only criterion. They noted that other criteria such as compliance with minimum farming standards would also be required and could increase the percentage of controlled activities.³³⁶

[634] WRC acknowledged that equity is an important consideration when it comes to the application of the rules relating to dairy and drystock farms, but considered that the relative contributions from each sector to discharges of the four primary contaminants, should ideally be considered and “[i]t follows that an approach that placed more farms from a higher risk sector into a stricter activity classification could be an equitable approach to the achievement of PC1’s objectives”. Based on that approach, dairy would have the stricter activity status classification if nitrogen was considered, replaced by drystock if sediment was considered, which highlights some of the difficulty in ensuring equity.

[635] We have determined that for reasons other than equity, both dairy and drystock will either be permitted or controlled, a consequence of which is that the potential for inequities will be significantly reduced compared to the Decisions Version or WRC’s Final Proposal. While we note that the percentages of permitted activities are likely to differ between the two sectors, there is currently no way of knowing what the actual percentages will be, as we discussed in Part E18. We are satisfied that the provisions as amended by this decision will require both permitted and controlled activities to comply with appropriate standards that reflect their level of risk of diffuse discharges and to reduce their discharges to be as low as practicable within 10 years.

³³⁵ Minute dated 23 February 2024.

³³⁶ Memorandum of WRC dated 15 March 2024.

[636] With regard to sediment losses, we agree with Federated Farmers and Beef and Lamb that where a catchment has a higher risk of sediment losses in particular, PC1 and other plans will need to ensure that a farmer identifies that risk and addresses it, whether they are a dairy farmer or a drystock farmer, or another type of land user such as harvesting of forestry.³³⁷ Dr Scarsbrook identified sediment risk hot spots with a higher sediment yield and/or risk of sediment loss, as including hillslope erosion, mass movement and streambank erosion.³³⁸ WRC is to consider if Schedule D2 should be amended to require “that farm scale erosion risks (type of erosion occurring / areas of the property at risk / specific location of major erosion sites) are mapped”, similar to the requirement in Part D4a of Schedule D1. This information will not only be relevant to the effective implementation of PC1 but also for future plan changes.

[637] With regard to the concern about lack of controls on intensification of drystock farms, we accept that some flexibility for stock movement up and down is required for effective operation of drystock farms. However, Objective 2 requires progress be made **over the life of PC1** towards achieving the Vision of Te Ture Whaimana. The recent addition of s 107(2A) to the RMA now requires consented activities to demonstrate a reduction in discharges during the term of consent where the effects on receiving waters listed in s 107(1)(g) are already occurring or are likely to arise, which appears likely in parts of the PC1 area. We anticipate that the required reduction in contaminant losses from consented drystock farms will be demonstrated using Overseer, but WRC is to provide confirmation.

[638] Standard 2a in Schedule D1 of WRC’s Final Proposal still includes a requirement that the FEP demonstrates at each 5 yearly review that the risk of nitrogen, phosphorus, sediment and microbial pathogen discharges to waterbodies **is not increasing over time**. Accordingly, there is still an inconsistency in the Schedule in terms of the requirement to contribute to achieving the Vision of Te Ture Whaimana and the objectives of PC1. Amendments are to be made to include a requirement to demonstrate a reduction in contaminant loads and to require five

³³⁷ Joint memorandum dated 15 March 2024.

³³⁸ Dr Scarsbrook, EIC at [132].

yearly reporting to demonstrate that progress has been made. WRC is to advise the method it will use to ensure the diffuse discharges from permitted drystock farms reduce.

[639] WRC is to propose wording to address each of the above matters in consultation for parties for determination by the Court.

[640] Subject to those amendments we are satisfied that, based on our review of the relevant evidence as whole,³³⁹ there are no obvious or disproportionate inequities between the two types of farming activities and that any that do exist will be largely minimised. Our findings relating to activity status make this more certain and no doubt it will be considered further again in any future plan change.

[641] Overall, we are satisfied that no issues of scope arise in any matters of equity between dairy and drystock farming sectors.

F9 Commercial Vegetable Production

General background

[642] There are over 200 commercial vegetable growers in the Waikato region. They produce over 60 fruit and vegetable crops and 90% of the vegetables grown are for domestic supply. Population in the Auckland and Waikato regions is projected to grow by 11% and 18% respectively by 2030. The current growing area in the Waikato is 7,020 ha, with 565 ha of CVP land in the Auckland region and the Lower Waikato FMU zoned for future urban. To cater for the increased Waikato population, Ms Michelle Sands, the Manager of Strategy and Policy with HortNZ, stated that 1,264 ha of additional CVP land will be required. If the PC1 area were to provide vegetables to supply Auckland's population growth and loss of land to urban development in Auckland, 1,877 ha of additional CVP will be required.³⁴⁰

³³⁹ Including "Riparian characteristics of pastoral waterways in the Waikato region, 2002-2017", Norris *et al* 2020.

³⁴⁰ Ms Sands EIC.

[643] Ms Sands stressed the importance of vegetables to meet human health needs and the effects of supply constraints on vegetable prices. She referred to the Specified Vegetable Growing Policy in the NPSFM 2020, which identified Pukekohe as one of two specified vegetable growing areas in New Zealand. The policy required that regional councils must have regard to the importance of the contribution of the specified growing area. However, the Court of Appeal quashed the relevant provision in cl 3.33 and Appendix 5 of NPSFM.³⁴¹ Consequently, the Minister for the Environment is to reconsider whether there should be exemptions for the specified vegetable growing areas including Pukekohe.

[644] HortNZ advised the Court that its case was unaffected by the Court of Appeal decision.³⁴²

[645] Ms Sands stated that CVP land occupies 0.6% of the total area of the Waikato River catchment and is estimated to account for 2.5% of the diffuse nitrogen load, 0.9% of the phosphorus load and a negligible contribution of *E. coli* and sediment load. Land use change to CVP is predicted to result in water quality improvements for some contaminants.³⁴³ She identified HortNZ's key remaining concerns as the need for the flexibility to rotate crops at the FMU scale and the need for CVP expansion to keep up with population demand.

[646] HortNZ submitted in opening that "CVP is generally set to receive more restrictive treatment under PC1 than various other resource uses in the catchment" and "there are some basic problems with PC1 as it relates to CVP".³⁴⁴ These included the definition of the baseline, the matters raised by Ms Sands, setback distances from CVP and the use of Overseer for CVP. The submissions emphasised the need for the CVP provisions to be workable.

³⁴¹ *Muaupoko Tribal Authority Inc v Minister for the Environment* [2023] NZCA 641.

³⁴² Memorandum dated 26 January 2024.

³⁴³ Ms Sands EIC at [2], by reference to the EIC of Ms Holmes at [11] and [12].

³⁴⁴ Opening submissions at [21] and [35].

Crop rotation and provisions for existing Commercial Vegetable Production and provision for future growth

[647] HortNZ and the Pukekohe Vegetable Growers Association provided a significant amount of evidence on the need for crop rotation to be allowed on an FMU-wide basis, and the constraints that would apply to CVP operations if crop rotation was limited to the sub-catchment basis required in the Decisions Version. In response, the requirement introduced in the Decisions Version to restrict locations to within sub-catchments and Table 1 of the Decisions Version that set limits on the areas of CVP growth that could occur in sub-catchments are not included in WRC's Final Proposal. We accept their removal as appropriate.

[648] Amended Policy 3 in WRC's Final proposal enables existing CVP as defined in Rule 3.11.4.5(2). Amended Rule 3.11.4.5 reads:

...

2. The following information, relating to the land used by the applicant for commercial vegetable production in the period 1 July 2006 to 30 June 2016, is provided to the Waikato Regional Council at the time of the resource consent application:
 - a. The total, maximum area (hectares) of land used for commercial vegetable production for any full year; and
 - b. In relation to the particular year identified in a) above, the maximum areas (hectares) of land used for commercial vegetable production (including fallow land actively part of a crop rotation cycle) and their locations, per subcatchment [refer to Map 3.11-2]; and
3. The total area of land within each sub-catchment for which consent is sought for commercial vegetable production must not exceed the maximum areas as identified in condition 2 of this rule; and ...

[649] One of the matters over which WRC reserves control is the maximum total and per-sub-catchment area of land to be used for commercial vegetable production.

[650] Rule 3.11.4.8 of the Final Proposal provides for the area of CVP to expand by the 1877 ha identified as necessary by Ms Sands.

[651] Policy 3b.iii requires that:

There is no material increase in the risk of diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens associated with the grower's existing and expanded commercial vegetable production (in combination) relative to what would have occurred on the land under the land use to be displaced by new commercial vegetable production;

[652] We note for convenience here that scope for this amendment is provided by Fonterra's Appeal in relation to Policy 3 and Rule 3.11.4.8.³⁴⁵

[653] We do not consider that CVP receives more restrictive treatment than other sectors as all existing single operating units with moderate or high risks of diffuse discharges of the four primary contaminants will be controlled activities. We accept that the CVP sector contributes less overall loads of the four primary contaminants in the PC1 area as a whole than the dairy and dry stock farming sectors. However, as stated in our minute dated 23 February, "CVP land use activities can discharge high levels of nitrogen and we want to be satisfied that the PC1 provisions require CVP to play its part in achieving Te Ture Whaimana, much as dairy farming activities discharging high levels of nitrogen are required to do". Put simply, individual single operating CVP units can contribute high nitrogen loads per ha, which can be broadly similar to those from high leaching dairy units. We address the issue of reduced nitrogen losses in our evaluation below.

[654] With regard to crop rotation, we find the now proposed provisions appropriately address HortNZ's concerns.

[655] WRC, in consultation with parties, is to consider if it would assist if a definition of crop rotation was included in PC1.

³⁴⁵ "Add to Policy 3 a requirement to demonstrate that, where new land is to be brought into vegetable production, discharges of diffuse contaminants would be no greater than the activity displaced (or, where that cannot be demonstrated, that offsetting of additional contaminants is undertaken on another site within the same sub catchment and preferably the same water body)" and "The conversion of land for CVP to occur only where it can be demonstrated that the loss of nitrogen and sediment would be no greater than that of the land use displaced by the conversion and that any increase in phosphorus would be negligible".

Monitoring nitrogen reductions from Commercial Vegetable Production

[656] Both the Notified and Decisions Versions required CVP activities to provide nitrogen loss estimates using Overseer. HortNZ's submission on the Notified Version sought that the definition of the NRP be retained that provides for the establishment of an alternative method or model to establish a benchmark nitrogen and phosphorus discharge for commercial vegetable production systems.

[657] HortNZ's appeal sought that the use of Overseer be retained as the method of measuring nitrogen loss. The Decisions Version retained the alternative model option so there was no reason for HortNZ to address the issue in its appeal. WRC's Final proposal includes no explicit requirement for CVP activities to model nitrogen loss and has removed the provision in Schedule BA.3 relating to the establishment of the NLLR using an alternative model to Overseer. We address the issue of alternative models in Part F25, but for present purposes note that Mr Trebilco's reasons for removing the requirement for CVP activities to provide a nitrogen loss baseline in Policy 3 was because of the lack of any suitable tools, including Overseer, to assess a baseline. He stated that:³⁴⁶

The best that can be done is to ensure the Policy has strong provisions for reducing contaminant loss to the lowest practicable (along with other provisions for contaminant management).

[658] This was of concern to the Court as, ultimately, there will be an overall need to do more than reduce contaminant loss to the lowest practicable level, and we wanted to ensure we had a full understanding of the issue. While the need was not immediate at that time, with the amendments subsequently made to s 107 to the RMA, WRC will or may need to be satisfied that reductions in contaminant losses will occur during the term of any resource consents issued for CVP activities in accordance with PC1. This raises the question of whether consents can be granted at all if a reduction cannot be demonstrated, which significantly increases the

³⁴⁶ Mr Trebilco EIC at [188].

importance of fully understanding the issue and the most appropriate way to address it and we considered it in some detail.

[659] We start by recording that:

- (a) a grower cannot sell to a New Zealand supermarket or export if they are not GAP³⁴⁷ certified, which is subject to independent third-party audit. This means that almost all horticultural growers in New Zealand are GAP certified (whether via GLOBAL GAP, Zespri GAP or NZ GAP), and growers are highly motivated to achieve and maintain certification.
- (b) NZGAP has developed an Environmental Management System (**GAP EMS**) add-on to better align the requirements within the core standards with New Zealand regulation to deliver on regulatory FEPs or Freshwater Farm Plans.³⁴⁸ 70% of the CVP land within Waikato is registered with the GAP EMS. Growers in the Lower Waikato have been a focus of HortNZ extension,³⁴⁹ and approximately 100% of CVP land in the Lower Waikato is registered with the GAP EMS.³⁵⁰
- (c) risk assessment is already a part of NZGAP's FEPs and various versions of a CVP risk scorecard are in development, including by MfE, Manawatū-Whanganui Regional Council and in the PC1 area.³⁵¹
- (d) Hort NZ has developed a code or practice for nutrient management, which is a living document. A Sustainable Vegetable Systems (**SVS**)

³⁴⁷ New Zealand Good Agricultural Practice (NZGA) is an industry assurance scheme administered by HortNZ. GLOBAL G.A.P is a farm assurance programme began in 1997 that sets voluntary standards for the certification of agricultural products.

³⁴⁸ Ms Sands EIC at [74], NZGAP and HortNZ have been working closely with MfE to trial an update to of the GAP EMS to deliver on the Freshwater Farm Plan regulations, and RMA Part 9A.

³⁴⁹ This was not explained in evidence but we interpreted it to mean HortNZ's engagement with growers.

³⁵⁰ Ms Sands, EIC at [76]. Not all growers that are registered with the GAP EMS have been audited yet, but they are underway.

³⁵¹ Mr Barber EIC at [40].

project was started in 2019 and was officially launched on 2 August 2024, which was part MPI funded and will lead to updating of the code of practice. The SVS includes a nitrogen budgeting tool designed for fertiliser decision makers. It is underpinned by a crop model and ground-truthed by soil nitrogen testing.³⁵²

[660] To assist our understanding we directed HortNZ to recommend how reductions would most appropriately be determined and enforced if found necessary.³⁵³ HortNZ responded by way of a comprehensive statement of supplementary evidence dated 22 May 2024 from Mr Ford who, as recorded in Part E11, is an agricultural and resource economist with extensive experience in using Overseer. As also recorded in Part E11, Mr Ford questioned the appropriateness of using Overseer for CVP, including that it is not currently capable of modelling all possible crop types therefore forcing the modeller to choose proxy crops to represent the crop. He does not support the use of Overseer to determine regulatory thresholds.

[661] In his May supplementary evidence, Mr Ford described and qualitatively assessed the adequacy of practices that growers are taking and/or able to take that are likely to reduce N leaching. He also described appropriate ways of measuring progress towards reducing nitrogen losses and recommend the most appropriate method of monitoring compliance. He provided the results of a 2014 study he had undertaken based on a survey of 23 growers, which was built on through the experience of an expert panel of growers and provided a comprehensive summary of relevant evidence and work undertaken since 2014.

[662] He stated that “[o]ne could correctly assume that I was particularly nervous about the accuracy of the results that I gained from the Overseer modelling of CVP”. One of comments from his 2014 study was that “[a]n alternative model (**APSIM**) is available, and it may be able to better model the performance of N

³⁵² Mr Barber EIC from [26].

³⁵³ Minute dated 27 March 2024.

leaching and P output in Horticulture”. Results of the study of particular relevance to PC1 included:

... as the intensity of the current rotations increases (and the amount of N used increases) the N leaching increases.

... the current practice of N timing of application does not contribute to the total amount of leaching.

... there is a strong co relation between the volume of N applied and the subsequent leaching performance at the standard volumes of N used in the crops in this analysis.

... a 10% reduction in leaching would result in significant reductions in yields and Gross Margins. My interpretation of these results was that the growers, at 2014, were matching Nutrient demand to supply reasonably well, and further reductions in N use resulted in reduced yield and therefore reduced profit.

[663] Mr Ford indicated that since 2014, the CVP industry has undertaken research to find a means of achieving a more efficient use of the applied nitrogen and therefore to reduce nitrogen leaching. This included a publication of best-practice advice to manage the nutrition of vegetable crops in New Zealand, with a firm emphasis on practices that are scientifically defensible. He referred to other initiatives that have been introduced including a “Nitrate Quick” nitrogen test to assist with nitrogen fertiliser decisions for arable and vegetable crops in 2023 and the “Sustainable Vegetable Systems Tool”, which promotes improved nutrient management and provides evidence of operating with best practice to consumers and regulators. He also referred to the promotion of FEPs and use of the NRS when managing risk from CVP activities.

[664] Mr Ford’s evidence was clear and helpful and we accept it. It is also clear from the other initiatives referred to above that the CVP industry has recognised and is proactively responding to the need to effectively manage the environmental effects of its activities. We accept that FEPs are the appropriate tool for demonstrating nitrogen loss has been reduced to be as low as practicable but that does remove the need to monitor nitrogen losses for regulatory purposes, particularly if s 107 of the RMA applies. Mr Ford’s evidence was again helpful in understanding what might be possible.

[665] When addressing the possibility of setting a numerical reduction in nitrogen loss from CVP to be included in PC1, he stated that "...we cannot use Overseer or any other model to model/measure the degree of reduction required ...". With regard to his 2014 findings referred to above he found that the growers were matching nutrient demand to supply reasonably well, and further reductions in nitrogen use resulted in reduced yield and therefore reduced profit. He noted that a similar result was found in a 2023 PerrinAg study referred to by Mr Ford, who noted that:

... the Gross Margins used in the PerrinAg report were significantly less profitable than the ones which I used in the Ford report and so the financial results of the mitigations showed the growing operation becoming negative, loss making, much quicker than I found.

[666] Mr Ford addressed the economics of fresh vegetable supply in his EIC, making the observation that "... the margins which the crops are grown on are on average very slim with the weighted average data indicating that the average annual profit of the weighted rotations is only approximately 10% of the revenue". In relation to alternative models he stated:³⁵⁴

... I advocated very strongly for an alternative solution to allow the calculation of some proxy Nitrogen leaching figures which ranged across the various soil types represented and across a range of representative rotations which are able to be modelled more accurately in APSIM than in Overseer.

These leaching values would be listed in a look up table and then would be used by the CVP growers to estimate their N and P and sediment leaching values. Both the growers and the WRC would have a more realistic value to use in estimating the impact of the CVP sector as a whole, the impact of any Good Farming Practices (GFP) and any possible further mitigations which they were able to adopt in order to achieve the water quality targets as part of the development of actions in their FEP.

We could not gain agreement with the WRC that this was an appropriate alternative way forward.

[667] In her evidence, Ms Sands stated:³⁵⁵

I am part of the technical advisory group for the Overseer review. My understanding of the limitations and appropriate use of Overseer has improved due to my involvement in this technical advisory group. I no longer support

³⁵⁴ Mr Ford EIC from [51].

³⁵⁵ Ms Sands EIC at [101] and [79].

using Overseer derived limits as a consenting gateway as proposed in my Block 3 evidence or the HortNZ appeal.

Diffuse discharges from CVP can be reduced to as low as practicable with risk based FEPs, that draw on industry research, the GAP schemes and tools such as the Sustainable Vegetable Systems (**SVS**) crop budget and the CVP risk scorecard.

[668] When asked to provide an update on progress at a conference held on 17 October 2024, WRC responded “This remains a work in progress. The Freshwater Policy Review (**FPR**) is exploring the development of an appropriate method for demonstrating how diffuse discharge risk from CVP can be measured and compliance determined”.³⁵⁶

[669] It is self-evident that this did not assist efforts to find a way forward and it was not clear to us what scope existed to remove Overseer and the use of alternative models to Overseer for use for CVP in PC1. By way of minute dated 13 March 2025, we stated:

[30] We acknowledge the difficulties of accurately monitoring changes in diffuse discharges of nitrogen and the inappropriateness of alternative models to Overseer being required to produce comparable modelling outputs to those of Overseer as amended in the Decisions Version. However, it would not be acceptable to leave that requirement open for 10 years until a new plan change becomes operative or to leave it to the discretion of individual consent processing officers.

[31] It appears to us that there could be two ways to proceed:

- (a) To retain Overseer with its known limitations; or
- (b) For WRC to work with HortNZ and the Pukekohe Vegetable Growers Association, to the extent appropriate, to propose an alternative method to the satisfaction of the Court.

[32] The second option could fall within the scope of an amendment to Policy 2 sought by Fonterra in its appeal, seeking that “The policy tests in relation to nitrogen loss need to apply to all farms that require a resource consent and not just to dairy farms.”

[33] We will direct WRC to consider if a s 293 process would be required before any change could be determined and to report back on this matter. Other parties may of course submit on this issue.

[670] In response, WRC stated that it did not intend that there would be no monitoring of nitrogen risk from CVP activities, but rather that the means of

³⁵⁶ Memorandum dated 14 October 2024.

monitoring this would not be specified in PC1. It did not address the potential for s 107 of the RMA to apply to CVP activities, which would require demonstration that contaminant losses would be reduced during the term of any resource consents granted to CVP activities. Of the two options identified by the Court, WRC preferred to retain Overseer and proposed reinstatement of the requirement that CVP activities operate within a NLLR baseline, despite its known limitations. WRC stated this would avoid the need for a s 293 process, while the alternative would require one noting that it is a key concern for WRC to avoid further delay in making PC1 operative.

[671] In its initial memorandum responding to the minute, HortNZ submitted that the Court is not correct in linking s 107 or the provisions of PC1 relating to effects of activities to sub-catchments. On the contrary, PC1 requires water quality to be managed at the sub-catchment level, with a requirement to meet different water quality targets in different sub-catchments in accordance with Table 3.11.1. It is reasonable to anticipate that s 107 may apply in some sub-catchments and not in others, independent of the crop rotation provisions of the plan change, which appeared to be HortNZ's basis of expressing concern. The fact that s 107, the amended provisions, nor the RMA refer to sub-catchments is not determinative – PC1 from notification set explicit requirements to meet sub-catchment water quality targets, which cannot be achieved in any other way than considering the circumstances in each sub-catchment. We reject the submission.

[672] We agree with the part of HortNZ's memorandum that states that the Court's decision will need to be based on a "wider exercise of judgment".³⁵⁷ That is exactly what we are intending to do. Our concern about the method of monitoring nitrogen loss from CVP activities arises not only from wanting to understand what PC1 requires, as the original provisions were proposed to be removed and not replaced, but also because of the recent amendment to s 107.

³⁵⁷ *Meridian Energy Ltd v Central Otago District Council* [2011] 1 NZLR 482 at [116]. See also *QAC v Queenstown Lakes District Council* [2013] NZHC 2347 at [132].

[673] The HortNZ memorandum addresses the issue of monitoring nitrogen losses stating that on-farm practices are the reliable monitor and refers to relevant evidence. Our initial response is that we are aware of the range of measures that are available, as referred to in the memorandum and in some detail by Mr Ford, but that does not tell us how they would be used to demonstrate a reduction in nitrogen loss, particularly if that becomes a statutory requirement. Plan provisions must be clear on their face, certain, workable, practicable, enforceable and treat everyone the same as far as that is possible. WRC provides no guidance on what is required for monitoring nitrogen losses from CVP activities in its Final Proposal and appears to be relying on the next plan change before it is addressed, based on its advice at the October 2024 conference. While it may not be necessary to include detailed provisions in PC1, there must be clarity by way of a method on what is proposed.

[674] A number of quotations from the evidence were included in HortNZ's memorandum, which were already well understood by the Court, but they did not refer to the evidence that growers were matching nutrient demand to supply reasonably well, and further reductions in nitrogen use resulted in reduced yield and therefore reduced profit. This suggests to us that further reductions are not a realistic expectation as it would be unsustainable, yet s 107 could require it.

[675] When considering all aspects of the PC1 provisions from the early stages of our engagement with the appeals process, we recognised the potential for unforeseen consequences and road-blocks to occur and have sought to ensure they are avoided. That applies equally to CVP provisions and is why we raised the issue because that potential does exist in relation to s 107. The issue of compliance with s 107 is a matter for WRC, not the Court, but should not be left until a consent is applied for, before considering how to address it.

[676] In accordance with the provisions proposed in WRC's Final proposal, PC1 requires that nitrogen risk is managed so that it is as low as practicable within the term of PC1. We accept that FEPs and the use of other tools and practices referred to in HortNZs' evidence are the appropriate way to demonstrate that nitrogen losses are reduced to be as low as practicable, but a method that will be used for

demonstration purposes should be set out to ensure consistency. In addition, there are procedures that must be followed under the RMA before a provision in a proposed plan that has been through a full Schedule 4 process can be removed.

[677] WRC did not follow that procedure when proposing to remove all use of Overseer for CVP from PC1 and not replace it, and as scope to make the change has not been demonstrated, a s 293 process would be required. If the Court were to conclude that an alternative to Overseer is appropriate, as referred to by HortNZ, it would not obviate the need to comply with relevant provisions of the RMA, which would delay the CVP provisions of PC1 becoming operative.

[678] It is of note, despite the limitations of Overseer for use with CVP being known at the time, HortNZ's appeal sought the retention of the use of Overseer for determining nitrogen loss, or a suitable alternative model. It is also of note that WRC now proposes to reinstate the use of Overseer for CVP, despite Mr Trebilco having stated previously that he considered Overseer based NLLR thresholds should not be used in the PC1 rules and "reliance on the NLLR to provide a nitrogen loss baseline is no longer supportable".³⁵⁸

[679] We note here that HortNZ and Pukekohe Vegetable Growers Association sought leave for the Court to read their joint memorandum dated 5 May 2025, which we granted and have read the memorandum. This set out reasons why the organisations opposed the changes proposed by WRC because of their effects on them. We consider that the concerns are appropriately addressed in the following evaluation, which was completed before receipt of the memorandum.

[680] Accepting that the issue of scope will be addressed in the appropriate way, s 107(2A) may or will require WRC to be satisfied that a reduction in nitrogen losses occurs during the term of any consent granted. Independent of that, the appropriate method should not be left until a new plan change becomes operative in 10 or more years' time; nor should it be left to the discretion of individual consent officers in the meantime. There is a defined method of demonstrating reductions in nitrogen

³⁵⁸ Mr Trebilco EIC at [188].

losses for consented dairy and drystock farming activities using Overseer, and for both effective management and equity reasons, an appropriate method for CVP must be identified.

[681] Without wishing to step into the planning arena, but wanting to ensure that PC1 proceeds as efficiently and effectively as possible, a degree of pragmatism is likely to be required to address the s 107 requirement, as has been necessary for other aspects of PC1. In our view, it would be reasonable to expect that when a CVP activity undertakes a robust risk assessment, complies with Good Management Practices and the relevant industry requirements and sets them out in an FEP that will be independently certified and audited, all of which are likely to be updated over the 10-year term of PC1, that a reduction in nitrogen use and nitrogen loss from site could be expected. This would likely be limited in extent but should be a reduction.

[682] We have previously determined that Overseer's issues with uncertainty and variability make it unsuitable as a drafting gate for dairy farming activities but it can be used for comparative purposes. We consider that because of the particular limitations and uncertainty of Overseer for use with CVP activities, no reliance could be placed on comparative results from Overseer modelling because of the different crop rotations that would be used over time. For that reason we consider that the use of FEPs could provide an acceptable alternative, provided a clear method is documented to the satisfaction of the Court.

[683] WRC's recently stated support for retaining Overseer for use with CVP after previously rejecting it strongly is difficult to understand in view of its known limitations and difficult to support simply because it would avoid a s 293 process, when the reliability of the results are unknown in the case of CVP. There also appears to have been a reluctance on WRC's part to engage with the CVP industry on alternatives to the use of Overseer. In combination this suggests a lack of consistency in WRC's approach. While the issue can fairly be described as being in the hard or very hard basket, it cannot simply be sidelined.

[684] We will direct WRC to consult with parties to seek their views and propose a methodology or clear framework for demonstrating that nitrogen risk is reducing and/or is as low as possible, for final determination by the Court. We consider it reasonable to expect WRC will have considered how it proposes to address s 107(2A) of the RMA in relation to CVP and will direct it to inform the Court of its intentions.

Minimum standards for Commercial Vegetable Production activities

[685] The need for minimum standards for CVP operations was the subject of evidence both for and against. As one example, the Director-General's position was that a 10 m set-back from waterbodies should apply to CVP and other cultivation.³⁵⁹ WRC's Final Proposal adds an exclusion that clause 9 of Schedule C, which sets a minimum set-back of 5 m, does not apply to CVP activities.

[686] In view of the concern about sediment loss in the PC1 area and the evidence we received on the amount of sediment loss from bare earth,³⁶⁰ we consider that a minimum separation distance should apply to CVP activities and should be of 5 m.

[687] In view of the range of crops and other variables involved in CVP, we do not consider it appropriate to set other generally applicable minimum standards as part of PC1 but following further work, it may need to be reconsidered for the next plan change. In the meantime, as only the 5 m minimum standard is to apply to CVP, it would be clearer to clarify that Schedule C: Minimum farming standards applies to pastoral farming only, except for the 5 m requirement. Stating in Schedule C that clauses 6, 7 and 9 do not apply to CVP as currently proposed lacks clarity, at it could mean that either greater or lesser limits could or should apply.

[688] Controls on CVP activities will be exercised through FEPs, which will be subject to independent certification and audit. We consider that based on the evidence before us, that is the most appropriate way to meet the objectives.

³⁵⁹ Closing submissions at [48].

³⁶⁰ Dr Depree EIR at [2.2].

Equity between Commercial Vegetable Production and pastoral farming activities

[689] As noted above, Mr Willis expressed concern that CVP is given policy support through express recognition of that sector’s “positive contribution”. Other concerns were raised by other parties and experts that there were inequities between the way CVP and other farming activities were managed.³⁶¹ As also noted above, HortNZ considered CVP received more restrictive treatment.

[690] We acknowledge and accept the importance of CVP activities and that PC1 needs to make appropriate provision for it to continue to meet New Zealand’s needs, subject to appropriate controls. However, other farming activities are also important and need to continue subject to controls. We do not consider it appropriate for PC1 to differentiate between sectors on the grounds of relative importance and, if there is scope to do so, the reference should be removed.

[691] To address the issue of equity, we start by considering Dr Scarsbrook’s evidence that “A primary driver for PC1 was the expansion and intensification of dairy farming in the region ... over the period 2001 to 2012”.³⁶² We also considered his evidence in Part D6 that nitrogen excretion from dairy cattle was estimated to have increased by more than 50% between 1990 and 2020. Total diffuse discharges of nitrogen amount to more than 6,600 t/y, which is 90% of all anthropogenic loads discharged.³⁶³ Dairy contributes 67% of the nitrogen and drystock 27%,³⁶⁴ or indicatively more than twice as much. CVP discharges indicatively 2.5% of the diffuse nitrogen load, or around 165 t/y.³⁶⁵

[692] When considered on a PC1-wide basis, contrary to Mr Willis’ view, it is appropriate that the dairy sector does most of the “heavy lifting” and we see no basis for his view that it would be inefficient.

³⁶¹ For Example, Fonterra Notice of appeal in relation to Policies 2 and 3 and Rule 3.11.4.5.

³⁶² Dr Scarsbrook, EIC at [146].

³⁶³ From Table 1.

³⁶⁴ Dr Depree, EIC from [1.7].

³⁶⁵ Ms Holmes, EIC at [1].

[693] Having said that, being a small overall contributor does not absolve CVP activities from playing their part in contributing to the achievement of Te Ture Whaimana. We do not accept HortNZ's submissions that because effects of their activities are "potential", "localised" and limited to "certain areas"³⁶⁶, they are exempt from compliance with the same requirements of the RMA as other discharges.

[694] It is evident from other aspects of the CVP evidence, that considerable attention is being paid to reducing the effects of CVP operations.³⁶⁷ As noted above, we accept that the CVP industry has recognised and is proactively responding to the need to effectively manage the environmental effects of its activities.

[695] We considered the extent to which nitrogen reduction from CVP could be achieved in some detail. The 10% reduction requirement of the Notified Version was considered by the Hearing Panel, which accepted that it should be deleted for a number of reasons, including how it is to be apportioned across individual CVP activities, what the timeframe is to achieve it, what the start-point is (and whether that is known with any precision) and whether it is realistic in the face of pressure for additional CVP in the Waikato Region.³⁶⁸

[696] As noted above, we sought further evidence from HortNZ to assess what reductions are likely to have been achieved since PC1 was notified and what further reductions were considered practicable in the next 10 to 20 years. In response,³⁶⁹ Mr Ford expressed the opinion that if he had to put a figure on the reduced nitrogen use across that period in the CVP sector in the Waikato, he would say that it has been between 5% and 10%. He stated that considerable caution is needed in relying on this estimate.

[697] Our overall finding is that subject to our direction relating to nitrogen loss monitoring from CVP activities being followed, and to the extent possible based on

³⁶⁶ HortNZ closing submissions at [19].

³⁶⁷ Ms Sands EIC.

³⁶⁸ Recommendation Report at [1192].

³⁶⁹ Mr Ford supplementary evidence.

current knowledge, the provisions of PC1 as amended by our decision will ensure all sectors are treated equitably and no sector will be unreasonably or inappropriately disadvantaged.

Scope

[698] In its appeal, HortNZ sought among other things, that:

- (a) Rule 3.11.4.5 allows for commercial vegetable production rotations;
- (b) Rule 3.11.4.8 ensures commercial vegetable production expansion is appropriately provided for;
- (c) amendments are made to Policy 3c.(ii) as outlined below;
- (d) Schedule B be amended to allow a NLLR to be established via an alternative, approved model; and
- (e) amendments to other provisions to ensure equity with CVP provisions.

[699] We are satisfied that there are no issues of scope relating to the drafting gate for CVP, as all existing CVP activities are controlled activities and all expanded CVP activities are discretionary activities under PC1. We are also satisfied that no issues of scope arise relating to the majority of matters raised above. However, in relation to (c) and (d) above and the proposal to remove Overseer, WRC submitted that “there are no appeal points seeking that Overseer be removed entirely from the PC1 rule framework”.³⁷⁰ Based on our review of the appeals, there are no appeal points seeking its removal for CVP. Accordingly, there is no scope for the proposed amendment.

[700] Schedule 1 of the Notified Version provided for the use of an alternative model or method to Overseer approved by the Chief Executive Officer of WRC. This was amended in Schedule B of the Decisions Version to allow for an NLLR to

³⁷⁰ Memorandum dated 31 March 2023.

be prepared using an alternative model to Overseer, provided it “can produce comparable modelling outputs to those of Overseer”.

[701] However, Mr Trebilco considered that the rule thresholds need to be clear and certain and should be such that there is one method through which they are calculated. He did not therefore support alternative tools for determination of the rule thresholds³⁷¹ and deleted clause A.3 in WRC’s Final Proposal without replacing it with any other requirement to monitor nitrogen loss from CVP activities. This leaves an important gap in the provisions which, unless filled, could or will require a s 293 process to resolve. We consider this further in Part F25 relating to alternative models for calculating nitrogen loss rate.

F10 Arable farming

[702] By way of context, we note that arable cropping comprises just 0.4% of the land area in the PC1 catchment. However, as explained by Dr Le Miere, this is not reflective of the total area of land used for arable cropping because maize is the dominant crop in the Waikato and many farmers grow maize alongside other activities.³⁷²

[703] Federated Farmers and Beef and Lamb submitted in closing that arable cropping is a small, but important, component of farming activities within the PC1 catchment and that there is currently no express rule enabling arable cropping; there are only limits on how much of any farm can be used for arable cropping. They considered there should be a specific rule enabling arable cropping on land over 20 ha and proposed a new permitted rule which they numbered 3.11.4.3(3A).

[704] WRC responded in closing by reference to the rule framework in WRC’s Final Proposal, which it considered appropriate with its existing wording. In view of the contribution of pastoral farming to degraded water quality in the PC1 area, WRC

³⁷¹ Mr Trebilco, EIR dated 25 August 2023 at [313].

³⁷² Federated Farmers and Beef and Lamb opening submissions at [4.3].

considered that arable cropping should mostly be regulated as a controlled activity under Rule 3.11.4.4 and did not agree with the proposed new rule.

[705] We agree with the reasons set out by WRC and accept its version of the relevant provisions in WRC's Final Proposal.

[706] No scope issues arise.

F11 Aspects of stock exclusion and riparian planting generally common to all water bodies

[707] The stock exclusion provisions in general were the subject of many appeals and extensive submissions and evidence.

[708] Mr Trebilco stated that of all the provisions in PC1, the stock exclusion provisions proved most controversial.³⁷³ WRC submitted that stock exclusion is one of the most important tools in PC1 to achieve Objectives 1 and 2 and give effect to Te Ture Whaimana, that its latest version of Schedule C is the most appropriate in terms of s 32 of the RMA and in particular, that the costs are justified by the corresponding benefits.³⁷⁴

[709] Issues relating to set-back distances and riparian vegetation are closely linked to the stock exclusion provisions, which primarily involve fencing, and we address them together. There are aspects that are common to all water bodies and others that are specific to individual water body types. In this Part F11 we address common issues and then address aspects specific to rivers and streams, lakes and wetlands in Parts F17, F18 and F20 respectively.

[710] WRC's Final Proposal includes significant amendments to the relevant provisions in the Decisions Version and we set both out below. First, we summarise

³⁷³ Mr Trebilco, EIR dated 25 August 2023 at [319].

³⁷⁴ Closing submissions at [15.3].

the range of relevant appeals so that parties can consider them alongside WRC's proposed amendments. The range sought:

- (a) one of the WRA's bases of appeal was that it would be more appropriate to include setback provisions for stock exclusion from lakes and wetlands of at least 5 m rather than 3 m;
- (b) the Director General sought that a setback of 10 m apply from all wetlands greater than 50 m² in area; the edge of the beds of all lakes and the edge of the beds for all permanent rivers and streams and 3 m setbacks from the edge of the beds of all intermittent/ephemeral rivers and streams;
- (c) Fish and Game sought amendments to Schedule C to require fences to exclude stock to be set back at least 10 m from the edge of all wetlands,³⁷⁵ 20 m from the edge of the bed of all lakes and at least 5 m from the edge of the bed of waterbodies other than wetlands and lakes;
- (d) Federated Farmers sought the deletion of Schedule D1 5e This is in the section headed "Winter grazing of forage crops" and requires "Ephemeral waterbodies that are not permanently fenced that have water in them during grazing are temporarily fenced to exclude stock". It also sought the deletion of the requirement to fence wetlands other than those in Table 3.7.7 of the WRP. It considered that the 3 m setback required by Schedule C from the edge of any wetland listed in Table 3.7.7 and from the outer edge of the bed of any other water bodies was too stringent.

[711] Policy 2 of the Decisions Version is:

- d. Generally excluding farmed cattle, horses, deer and pigs from rivers, streams, drains, wetlands, lakes and springs; and

³⁷⁵ Specifically deleting the 50 m² threshold in the Decisions Version.

- e. Where farmed cattle, horses, deer and pigs are not excluded from rivers, streams, drains, wetlands, lakes and springs:
 - i. Ensuring adverse effects of stock on waterbodies are minimised, including by the identification and management of critical source areas, ensuring that access of stock to waterbodies does not cause conspicuous pugging and exacerbated erosion; and
 - ii. Imposing consent conditions to require mitigation measures to address any damage to aquatic habitat and discharge of contaminants resulting from stock access to those waterbodies; and
- f. Encouraging creation of riparian buffers (with appropriate riparian vegetation where necessary) adjacent to rivers, streams, drains, wetlands, lakes and springs to reduce overland flow of contaminants and improve freshwater habitat quality.

[712] Policy 2B of WRC's Final Proposal is:

- f. Generally excluding farmed cattle, horses, deer and pigs from rivers, streams, drains, wetlands, lakes and springs to:
 - Prevent or minimise the direct deposition of animal excreta to water bodies; and
 - Reduce sediment loss from the disturbance of beds and banks of water bodies; and
 - Reduce damage to bank and stream habitat; and
- g. Where farmed cattle, horses, deer and pigs are not excluded from rivers, streams, drains, wetlands, lakes and springs in accordance with Schedule C:
 - i. Ensuring adverse effects of stock on waterbodies are minimised, including by the identification and management of critical source areas, ensuring that access of stock to waterbodies does not cause conspicuous pugging and exacerbated erosion; and
 - ii. Ensuring that Farm Environment Plans and consent conditions contain appropriate measures to avoid or mitigate the risk of damage to aquatic habitat and discharge of nitrogen, phosphorus, sediment and microbial pathogens resulting from stock access to those waterbodies; and to achieve, to the extent practicable, the environmental outcomes of stock exclusion stated in Policy 2(f); and
- h. Encouraging creation of riparian buffers where practicable (with appropriate riparian vegetation) adjacent to rivers, streams, drains, wetlands, lakes and springs to reduce overland flow of nitrogen, phosphorus, sediment and microbial pathogens and improve freshwater habitat quality.

[713] Schedule C: Minimum farming standards of the Decisions Version, to be met by all dairy and drystock activities with limited exclusions, is:

Stock exclusion:

Notwithstanding any other requirements of this Plan, and except as provided by Exclusions I. and II., farmed cattle, horses, deer and pigs must be excluded from the water bodies listed in 5. below as follows:

1. The water bodies on land:
 - a. with a slope of up to 15 degrees; or
 - b. with a slope over 15 degrees where in any paddock adjoining the water body, the number of stock units exceeds 18 per grazed hectare at any time;

must be fenced to exclude farmed cattle, horses, deer and pigs, unless those animals are prevented from entering the bed of the water body by a stock-proof natural or constructed barrier formed by topography or vegetation.

...

2. New temporary, permanent or virtual fences installed after this chapter becomes operative must be located to ensure farmed cattle, horses, deer and pigs will be excluded from the bed of the water body. The fences must be located at a distance of not less than:
 - a. 3 metres from the edge of any wetlands listed in Table 3.7.7 of the Waikato Regional Plan; and
 - b. 3 metres from the outer edge of the bed for any other waterbodies; and
 - c. 1 metre from the edge of a drain, except for drains where the bank-to-bank width is less than 2 metres in which case no setback from the edge of the drain is required.
3. Farmed cattle, horses, deer and pigs must not enter onto or pass across the bed of the water body, except when using a livestock crossing structure or when they are being supervised and actively driven across a water body, at a location identified for this purpose in a Farm Environment Plan, in one continuous movement.

...

4. For farming that is permitted under Rules 3.11.4.1, 3.11.4.2 and 3.11.4.3, Clauses 1 and 2 above must be complied with:
 - a. within 2 years after this chapter becomes operative; or
 - b. in sub-catchments identified as a priority for *E. coli* in Table 3.11-2, within 1 year after this chapter becomes operative.
5. Water bodies from which cattle, horses, deer and pigs must be excluded:
 - a. The bed of a river (including any spring, stream and modified river or stream), or artificial watercourse that is permanently or intermittently flowing; and

- b. The bed of any lake; and
- c. Any wetland, including a constructed wetland, greater than 50m².

For the purposes of Clause 5, an intermittently flowing river or artificial watercourse is one which is not permanently flowing, is not an ephemeral water body, and meets at least three of the following criteria:

- a. it has natural pools;
- b. it has a well-defined channel, such that the bed and banks can be distinguished;
- c. it contains surface water more than 48 hours after a rain event which results in stream flow;
- d. rooted terrestrial vegetation is not established across the entire cross-sectional width of the channel;
- e. organic debris resulting from flood can be seen on the floodplain; or
- f. there is evidence of substrate sorting process, including scour and deposition.

[714] Schedule C of WRC's Final proposal is:

Stock exclusion

In addition to any requirements in the Resource Management (Stock Exclusion) Regulations 2020, notwithstanding any other requirements of this Plan, farmed cattle, horses, deer and pigs must be excluded from the water bodies listed in clause 4. below as follows:

1. The water bodies on the following land must be fenced:
 - a. land with a slope up to and including 10 degrees; and
 - b. land with a slope over 10 degrees where any paddock adjoining the waterbody is used for:
 - i. intensive grazing in accordance with the Resource Management (Stock Exclusion) Regulations 2020 definition of intensively grazing; or
 - ii. grazing, unless a certified Farm Environment Plan for the property has identified areas where fencing is impracticable, and for those areas, measures are proposed that will:
 - Prevent or minimise the direct deposition of animal excreta to water bodies; and
 - Reduce sediment loss from the disturbance of beds and banks of water bodies; and
 - Reduce damage to bank and stream habitat.
 - c. where fencing is required in accordance with clause 1(a) or 1(b), land must be fenced with a temporary, permanent or virtual

fence to exclude farmed cattle, horses, deer and pigs, unless those animals are prevented from entering the bed of the water body by a stock proof natural or constructed barrier formed by topography or vegetation.

[Advice notes omitted]

2. New temporary, permanent or virtual fences installed after this chapter becomes operative must be located to ensure farmed cattle, horses, deer and pigs will be excluded from the bed of the water body. The fences must be located at a distance of not less than:
 - a. 10 metres from the edge of any wetlands listed in Table 3.7.7 of the Waikato Regional Plan; and
 - a. 10 metres from the outer edge of the bed of the lakes named in Table 3.11-3; and
 - b. 1 metre from the edge of a drain or intermittent water course, except for drains where the bank-to-bank width is less than 2 metres in which case no setback from the edge of the drain is required; and
 - c. 3 metres from the outer edge of the bed for any other waterbodies unless a certified Farm Environment Plan has specified particular locations where 3 metres is not practicable, in which case the distance must be as close as practicable to 3 metres.
3. For farming that is permitted under Rules 3.11.4.1, 3.11.4.2 and 3.11.4.3, Clauses 1 and 2 above must be complied with as soon as practicable, and in all cases, no later than 5 years after this chapter becomes operative, with steady progress toward compliance over the time required.
4. Water bodies from which cattle, horses, deer and pigs must be excluded:
 - a. The bed of any permanently or intermittently flowing river (including any spring, stream and modified river or stream) or artificial watercourse; and
 - b. The bed of any lake; and
 - c. Any wetland, including a constructed wetland, greater than 500m², and any wetland greater than 50m² that:
 - i) supports a population of threatened species as described in the compulsory value for threatened species in the National Policy Statement for Freshwater Management 2020; or
 - ii) flows into, or receives water from, a water body that stock are required to be excluded from.
5. The following are exempted from Clause 1, 2, 3 and 4:
 - a. any ephemeral water bodies or ephemeral springs;
 - b. farmed cattle, deer, horses and pigs that are using a stock crossing structure, including a bridge or culvert, to cross any water bodies subject to stock exclusion;

- c. farmed cattle, deer, horses and pigs that are supervised and actively driven in one continuous movement across the bed of any permanently or intermittently flowing river (including any spring, stream and modified river or stream) or artificial watercourse;
- d. horses being ridden or led across the bed of any water bodies subject to stock exclusion; and
- e. deer or pig wallows in constructed ponds or constructed wetlands that are located at least 10 metres away from the bed of a surface water body and where that surface water body is protected from discharges from the wallows.

[Advice notes omitted.]

For the purposes of Clause 4, an intermittently flowing river or artificial watercourse is one which is not permanently flowing, is not an ephemeral water body, and meets at least three of the following criteria:

- a. it has natural pools;
- b. it has a well-defined channel, such that the bed and banks can be distinguished;
- c. it contains surface water more than 48 hours after a rain event which results in stream flow;
- d. rooted terrestrial vegetation is not established across the entire cross-sectional width of the channel;
- e. organic debris resulting from flood can be seen on the floodplain; or
- f. there is evidence of substrate sorting process, including scour and deposition.

An ephemeral waterbody is a waterbody that:

- a. has a bed that is predominantly vegetated; and
- b. only conveys or temporarily retains water during or immediately following rainfall events; and
- c. does not convey or retain water at other times; and
- d. is not a wetland.

[715] By way of background, the Stock Exclusion Regulations require that stock must not be allowed closer than 3 m to the edge of a lake or wide river except in limited defined circumstances. Our evaluation takes into account the amendments to the Stock Exclusion Regulations included in the Freshwater Amendment Act. These revoke the definition of low slope land in reg 4 and revoke regs 14, 15 and 18 which require the exclusion of deer and beef cattle on low slope land from lakes and wide rivers and the exclusion of stock on low slope land from any natural wetland that is 0.05 ha or more.

[716] We note that reg 19 provides that a more stringent rule in a regional plan prevails over a provision in those regulations that relates to the same matter. For clarity, we started our evaluation based on the provisions in the Decisions Version of PC1, which was publicly notified on 22 April 2020, before the Regulations came into effect on 3 September 2020 and we took into account relevant matters in the evidence.

[717] In terms of methods of stock exclusion, Dr Le Miere stated³⁷⁶ “[t]he primary (and in many cases only) mechanism for excluding stock from waterbodies is fences”. While some witnesses considered there were alternatives, we are satisfied that fencing is the most effective way of excluding stock from water bodies and is one of the few known tools to minimise the effects of stock access and damage to stream margins. Natural barriers, if they exist, could be another. We were not persuaded that the strategic placement of water troughs and shade away from water bodies would be sufficiently effective at excluding stock to be considered on anything other than an exception basis. That would need to be certified by the FEP certifier or reviewer and its effectiveness monitored.

[718] Because of the importance placed on fencing by WRC and the strongly held views of different parties, we considered the evolution of the provisions through the PC1 process.

[719] In the Notified Version, Schedule C: Stock exclusion required cattle, horses, deer and pigs to be excluded from any river or drain that continually contains surface water, any wetland, including a constructed wetland and any lake. New fences installed after 22 October 2016 were required to be located so that animals could not be within 1 m of the bed of the water body. The provisions for most permitted activities had to be complied with by 1 July 2023 in priority 1 sub-catchments and 1 July 2026 in priority 2 and priority 3 sub-catchments listed in Table 3.11-2 and in other cases within three years of an FEP being provided to

³⁷⁶ Dr Le Miere EIC at [4.3].

WRC and no later than 1 July 2026. As it is five years since the Council decision was notified, at least five years would need to be added to the above dates.

[720] The s 32 Report recorded in relation to staging that:

High priority areas are to have stock exclusion in place first, followed by medium priority areas and low priority areas, with all to be completed **within ten years**. These dates are aligned with the implementation dates for Farm Environment Plans, with stock exclusion to be completed three [years] after a Farm Environment Plan is to be developed, or by 2026, whichever is sooner.³⁷⁷
[emphasis added]

[721] The s 42A Report stated:

The PC1 rules require that stock exclusion is to be completed three years after a FEP is developed, or at the latest by 1 July 2026. Officers consider that extending these timeframes would further delay the restoration of degraded water quality and would not adequately support the objectives and policies of PC1. Therefore, the Officers do not agree that the stock exclusion timeframes can be extended without undermining the intent and achievement of PC1.

[722] The Hearing Panel also noted that stock exclusion was one of the most heavily submitted on elements of PC1. They stated that many submissions sought the complete removal of stock exclusion requirements, while others sought substantial amendment, primarily to make the provisions more flexible and require less fencing. Other submissions sought more certainty in the provisions, and some considered the notified provisions were inadequate.³⁷⁸

[723] The issues were addressed in some detail in the Recommendation Report and issues relating to slope were particularly controversial, with the Hearing Panel stating:³⁷⁹

Many of the drystock farmers who appeared before us said PC 1 should adopt the draft National Standards for Stock Exclusion (February 2017) with which they largely agreed. Accordingly, they largely accepted that slopes less than 15 degrees should be fenced, but said that this should not be required for slopes

³⁷⁷ Option 6, which was considered by WRC is the most appropriate way to achieve the objectives of Plan Change 1. Section 32 Report at 157.

³⁷⁸ Recommendation Report at [1649].

³⁷⁹ Recommendation Report from [1650].

greater than 15 degrees, with other options being able to be considered on a case by case basis.

[724] The Hearing Panel recorded that it was persuaded by the evidence of the drystock sector, which included that:³⁸⁰

... greater recognition was required of their particular circumstances. This included that much of their land was over 15 degrees in slope and that the water bodies on their land were extensive (including intermittent streams and wetlands), often in steep sided gullies or slopes - all of which made it difficult or impractical to fence; and that to require fencing of these areas would likely create greater adverse sedimentation effects due to the earthworks, benching and tracking to construct the fences. Notwithstanding these concerns, they were also concerned that the cost of such extensive fencing would be prohibitive, ...

[725] The Hearing Panel recorded that it received considerable evidence regarding the environmental benefits of riparian buffers, but they found it difficult to pin down any consensus regarding the quantitative relationships associated with reductions in the inputs of *E. coli*, nutrients and sediment to waterways relative to the width of a set-back or the vegetation that it supported. The Panel concluded that:³⁸¹

Based on the information we have had presented to us, it seems that while riparian buffers have potential advantages to surface water quality and ecology, there are no clear-cut quantitative relationships we can rely on when it comes to specifying setback distances for planning purposes, other than to minimise stock access to streambanks and surface water.

[726] Reflecting the above comments, and as noted above, Schedule C: Minimum farming standards of the Decisions Version required farmed cattle, horses, deer and pigs on land with a slope of up to 15° to be excluded from the bed of a river (including any spring, stream and modified river or stream), or artificial watercourse that is permanently or intermittently flowing; the bed of any lake; and any wetland, including a constructed wetland, greater than 50 m².³⁸²

³⁸⁰ Recommendation Report at [1664].

³⁸¹ Decision Report at [1658].

³⁸² We address wetlands in Part F20 of this decision.

[727] New temporary, permanent or virtual fences were to be installed 3 m from the edge of any wetlands listed in Table 3.7.7 of the Waikato Regional Plan, 3 m from the outer edge of the bed for any other waterbodies and 1 m from the edge of a drain, except for drains where the bank-to-bank width is less than 2 m in which case no setback from the edge of the drain is required. For permitted activities, stock exclusion and fencing were required to be in place within two years of PC1 becoming operative and one year in some circumstances. For controlled or restricted discretionary activities, timeframes were matters of control or discretion.

[728] Schedule C: Minimum farming standards in WRC's Final Proposal was different again and requires new fences to be located 10 m from the edge of any wetlands listed in Table 3.7.7 of the WRP, 10 m from the outer edge of the bed of the lakes named in Table 3.11-3, 1 m from the edge of a drain or intermittent water course, except for drains where the bank-to-bank width is less than 2 m, in which case no set-back from the edge of the drain is required, and 3 m from the outer edge of the bed for any other waterbodies unless a certified FEP has specified particular locations where 3 m is not practicable, in which case the distance must be as close as practicable to 3 m.

[729] Permitted activities were required to comply as soon as practicable, and in all cases, no later than five years after PC1 becomes operative, with steady progress toward compliance over time required. For controlled or restricted discretionary activities, timeframes were matters of control or discretion.

[730] At the Council hearing, officers recommended that fencing requirements apply to intermittent but not ephemeral water bodies. The Hearing Panel agreed and that is provided for in the Decisions Version.³⁸³ The requirement is retained in WRC's Final Proposal with a definition of ephemeral waterbody added. However, ephemeral streams are already defined in the Operative WRP as "[s]treams that flow continuously for at least three months between March and September but do not flow all year".

³⁸³ Recommendation Report at [1678].

[731] This is problematic, as that definition clearly refers to intermittent streams or rivers. Thus, unavoidably, there are now conflicting definitions of ephemeral watercourses in the WRP and PC1. Given the context here relates to flowing water, the term ephemeral watercourse is more appropriate than ephemeral waterbody, as the latter would also include non-flowing waterbodies such as ponds and lakes. For that reason, we direct WRC to change waterbody to watercourse where appropriate.

[732] As noted in Part C7, we understand that the proposed definitions in WRC's Final Proposal are those included in or derived from the Auckland Unitary Plan³⁸⁴ and in our view are a pragmatic and appropriate way to provide improved clarity for farmers, FEP certifiers and consent officers when deciding which watercourses must be fenced. We would also expect that if an ephemeral waterbody under the PC1 definition was a significant source of contaminant loss, it would be addressed as a critical source area.

[733] We accept the definitions subject to making it explicit in Schedule C that they both apply for the purpose of Clause 4, not the WRP definition of ephemeral stream. WRC is to propose appropriate wording for final determination by the Court.

F12 Lengths of streams to be fenced

[734] Estimates of mapped stream lengths on dairy and drystock land on different slopes are shown in Tables 5 and 6 in Part C7. The estimated total length of mapped streams on dairy land is approximately 10,100 km, of which some 8,700 km is on land with a slope of 10° or less, 1,230 km on land with slopes of between 10 and 15° and 170 km on land with a slope of 15° or above. The estimated total length of streams on drystock land is approximately 8,300 km, of which some 5,400 km is on land with a slope of 10° or less, 2,250 km on land with slopes of between 10° and 15° and 650 km on land with a slope of 15° or above.

³⁸⁴ Recommendation Report at [1677].

[735] From Tables 7 and 8 in Part C9, it can be seen that indicatively, around 2,000 km and 5,000 km of fencing on dairy and drystock land respectively remain to be completed and are the appropriate basis for estimating costs. The evidence did not enable us to determine how much remained to be fenced on different slope land.

F13 Costs of fencing and riparian buffers

[736] We considered effectiveness, practicality and affordability as part of our evaluation of alternative proposals and their associated costs. The evidence included limited information on costs and did not address affordability at all. Accordingly, as noted previously, we directed further expert conferencing to address Court questions relating to costs. The outcomes are set out in a JWS dated 14 November 2023. The task for the experts was challenging and undertaken at a distance in less-than-ideal circumstances. All costs include fencing costs at an average cost of \$15/m, as directed by the Court, and Net Present Value opportunity costs. We record that we have accepted the estimates at face value but make observations on some aspects.

[737] So that there is no misunderstanding, the available information does not allow anything more than a broad indication of costs to be obtained and, as made clear earlier, there should be no expectation of precision. While some experts were concerned about costs being overestimated, from our experience we consider that is unrealistic and that they are more likely to be significant underestimates. When we proposed using an average fencing cost of \$15/m we did not want to risk over-inflated estimates and kept the cost low. In reality, the average cost of all fencing is likely to be significantly greater than \$15 when gates, terrain and other components are included, possibly by 50% or more. This needs to be kept in mind, as it will almost certainly outweigh any reductions that might result from changes in the assumptions about minor matters of detail that were raised by some experts.

[738] By way of illustration, Mr Bruce Cameron, a sheep and beef farmer who gave evidence on behalf of Federated Farmers, provided the following details of a quote he received from his local fencing contractor:³⁸⁵

The quote they gave me was \$12.80/m plus GST for a 2 wire electric fence (with posts at 8m spacing) and \$65 plus GST per angle. They also quoted me \$28.50/m plus GST for an 8 wire post and batten fence and \$110 per angle stayed. Gates would be \$880 plus GST per gateway. They also told me that there are some conditions on these quotes such as how rough the terrain is and whether rock is present (in which case the cost will be higher).

[739] The JWS records that the experts agreed:

- (a) the estimated costs of fencing installation and NPV opportunity costs as per the national stock exclusion regulations (rather than PC1 requirements) for streams and rivers is approximately \$46.7 million for dairy and \$24.7 million for drystock. This is for wide rivers (>1m) that have not already been fenced with a 3m set-back on land <5 degrees (as per MfE low slope map) for drystock and all slopes for dairy.
- (b) This does not include the costs from work such as installing reticulation, culverts, bridges, gates reconfiguring paddocks, etc, (KC) to the extent that this is required. ...

[740] The experts estimated additional costs for fencing all permanent and intermittent (all stream orders) streams and rivers on different slopes thresholds with 3 m and 10 m set-backs as shown in Table 12. This shows the additional fencing costs to those costs estimated above.

³⁸⁵ Mr Cameron EIC at [103].

Table 12

Estimated additional costs for fencing all permanent and intermittent streams and rivers on different slopes thresholds with 3 m and 10 m set-backs

Sector	Set-back	0-5 degree slope	0-10 degree slope	0-15 degree slope
Dairy	10m	\$211,396,605	\$263,171,067	\$307,685,654
Drystock	10m	\$96,628,195	\$168,236,940	\$249,372,967
	Total	\$308,024,800	\$431,408,007	\$557,058,620
Dairy	3m	\$57,260,585	\$78,124,738	\$96,063,296
Drystock	3m	\$54,278,898	\$100,908,405	\$153,741,798
	Total	\$111,539,483	\$179,033,144	\$249,805,094

[741] We note that the above table was based on providing the same width buffers to all streams, including lower order streams from which the Director General sought 3 m not 10 m buffers.³⁸⁶ As lower order streams indicatively account for around 80% of all streams, we agree with Ms Kate McArthur, a freshwater ecologist giving evidence on behalf of the Director General, and others that the estimates for 10m buffers overestimate the likely costs and are misleading.

[742] For current purposes, we have added 20% of the difference between the 3 m and 10 m estimates to the 3 m estimates to obtain a broad indication of possible costs. On that basis we consider estimates of \$140 million for dairy and \$170 million for drystock and a combined estimate of \$310 million can be used for indicative purposes. When the \$46.7 million for dairy and \$24.7 million for drystock are added from above, the estimate becomes around \$380 million. As noted above, we consider these are likely to be significant underestimates.

[743] The estimated additional costs of riparian planting for waterways captured under the national stock exclusion regulations (rather than PC1 requirements) for streams and rivers were approximately \$16 million for dairy and \$18 million for

³⁸⁶ JWS setting out responses to the court's questions about estimates of costs for stock exclusion from PC1 water bodies at 24.

drystock. This is for wide rivers (>1 m) that have not already been fenced with a 3 m set-back on land <5° (as per MfE low slope map) for drystock and all slopes for dairy. The estimated costs for streams and rivers with a 10 m set-back were approximately \$37 million for dairy and \$41 million for drystock.

[744] The experts estimated the costs of riparian planting for all permanent and intermittent (all stream orders) streams and rivers on different slopes thresholds with 3 m and 10 m set-backs as shown in the table below.

Table 13
Estimated costs of riparian planting for all permanent and intermittent streams and rivers on different slopes thresholds with 3 m and 10 m set-backs

Sector	Set-back	0-5 degree slope	0-10 degree slope	0-15 degree slope
Dairy	10m	\$117,111,167	\$140,596,542	\$160,788,771
Drystock	10m	\$187,790,507	\$298,556,543	\$424,059,594
	Total	\$304,901,673	\$439,153,085	\$584,848,364
Dairy	3m	\$35,133,350	\$42,178,963	\$48,236,631
Drystock	3m	\$56,337,152	\$89,566,963	\$127,217,878
	Total	\$91,470,502	\$131,745,926	\$175,454,509

[745] We made a similar adjustment to the one related to set-back distances to account for there being no proposal that lower order streams be provided with 10 m set-backs or riparian buffers. On that basis we adopted estimates of \$60 million for dairy and \$190 million for drystock and a combined estimate of \$250 million.

[746] The experts estimated the cost of fencing all drains with 1 m set-backs either side (2 m combined set-back) at approximately \$94 million for dairy and \$21 million for drystock; and the cost of fencing all drains with 3 m set-backs either side (6 m combined set-back) at approximately \$162 million for dairy and \$25 million for drystock. The additional cost of riparian planting all drains with 1 m set-backs either side (2 m combined set-back) was estimated at approximately \$18 million for dairy and \$6 million for drystock.

[747] Indicatively, the total costs of fencing and riparian planting with set-backs proposed by the Director General could be in the order of \$800 million based on the above information and significantly greater if fencing costs quoted to Mr Cameron were to apply, likely in excess of \$1 billion. These costs do not include land lost to production.

[748] We acknowledge that Dr Le Miere's estimates were significantly less than the above indicative estimates, which were prepared in difficult circumstances. For current purposes, we accept the outcomes of the conferencing by eight experts with a combination of both farming and environmental backgrounds as more up-to-date and providing a more complete estimate. The evidence before the Hearing Panel suggested that planting and maintaining a 20 m riparian margin would cost in the order of \$2 billion, with the value of the land lost over \$900 million,³⁸⁷ which adds weight to the evidence before us. In our view, the JWS estimates are likely to underestimate rather than over-estimate total costs and even in that is not the case, their magnitude is so large that before any policy requirements more stringent than those in national regulations could be justified in terms of s 32 of the RMA, much greater certainty of benefits and costs would be required.

F14 Amendments to the slope requirements proposed by Mr Trebilco

[749] As noted above, the Notified Version required that cattle, horses, deer and pigs must be excluded from any river that continually contains surface water, any drain that continually contains surface water, any wetland, including a constructed wetland and any lake.³⁸⁸ There was no reference to slope. The Decisions Version introduced a requirement to fence waterways with slopes of up to 15°. Mr Trebilco outlined appeals that requested changes to Schedule C but none of those referred to fencing on different sloped land. He then stated:³⁸⁹

I understand that a number of parties are concerned about the practicality of the stock exclusion requirements in clause 1 of Schedule C including the difficulty of fencing steep slopes, the difficulty of accessing steep land by

³⁸⁷ Recommendation Report at [998].

³⁸⁸ Schedule C.

³⁸⁹ Mr Trebilco EIC at [397].

tractor to facilitate fencing, the damage that fencing of steep slopes can cause to land, the high cost of fencing, the difficulty of measuring slope given the large variation in slope in hill country, the cost of reticulated water supplies for fenced paddocks, and the cost of culverted stock crossings.

[750] He stated that he accepted the concerns and proposed that the slope threshold be reduced from 15° to 10° with stock excluded from land over 10° when used for intensive grazing and:

Require that where the grazed stock units per hectare exceed 18, stock are to be excluded from water bodies unless a Certified Farm Environment Planner has confirmed in the FEP for the property that appropriate shade, reticulated water or other mitigations are adopted to achieve the environmental outcomes of stock exclusion stated in Policy 2(f).

[751] We were provided with no references to appeals specifically requesting the proposed changes and no evidence nor any kind of s 32AA evaluation to support his proposed amendments. Mr Trebilco stated elsewhere in his rebuttal evidence that that he could not say whether “10° or 15° is the right number”.³⁹⁰ This is one of a number of issues where amendments were accepted by Mr Trebilco in his designated role for WRC but we were not provided with evidence to show what investigations, if any, and what evaluations in accordance with s 32AA were undertaken.

[752] Such evaluations are an important part of plan making and necessary to ensure that the provisions are the most appropriate to meet the objectives. This was a significant concern for the Court and a number of submitters commented on the lack of s 32AA evaluations. Officer opinions on PC1-wide provisions stating that a proposed change is appropriate in s 32 terms, on their own with no evidential support, give rise to questions of weight. That is illustrated by our own evaluation of the slope issue below.

[753] We note that the ability to define land slopes reliably and practicably was a concern to a number of parties and experts. As all the LIDAR data is now available

³⁹⁰ Mr Trebilco EIR at [321].

on the LINZ Data Service website, it should be possible to develop a 15° slope map and possibly higher slope maps.

[754] Schedule C of WRC’s Final Proposal, which is reproduced above, includes Mr Trebilco’s proposed change of slope from 15° to 10° as well as other changed requirements, which we do not need to address here.

[755] We received a number of submissions on the topic. The WRA submitted that the change in slope from 15° to 10°, on its face, would be a step backwards from the Decisions Version and that there is insufficient evidence to justify this change. The Authority was concerned that there had been no real analysis (including in terms of s 32AA) of the impacts of the proposed amendment on water quality and in particular on the ability to achieve the interim and long-term water quality targets set out in PC1.

[756] Mr Pinnell submitted in opening that the 10° proposed by Mr Trebilco be reinstated as 15°. In his evidence he explained that land is “too steep” for fencing where the contour cannot safely be traversed by a 4-wheel drive tractor during dry soil conditions, which “... is generally accepted to be 15°”. Other parties supporting the retention of the 15° slope included Fonterra and Fish and Game.

[757] Federated Farmers and Beef and Lamb opposed a change back to 15°. In closing, they submitted that:³⁹¹

While stock exclusion up to 15 degrees slope might be appropriate in the longer term, this should not be required by PC1. 77 percent of total stream length on dairy and drystock land is on a slope of 10 degrees or less. That proportion increases to 96 percent for land under 15 degrees. In our submission, the priority for fencing should be on lower (flatter) land that has the highest intensity of use, is easier and cheaper (and therefore faster) to fence, and which is the best “bang for buck”.

[758] Lochiel Farmlands supported the change to 10°.

³⁹¹ Closing submissions at [36], with reference to Responses to the Court’s Questions about Estimates of Costs for Stock Exclusion from PC1 Waterbodies – 14 November 2023 at 9.

F15 Our evaluation and findings relating to the proposed change in slope from 15° to 10°

[759] As noted above, the Notified Version required stock to be excluded from any river that continually contains surface water, any drain that continually contains surface water, any wetland, including a constructed wetland and any lake. Stock exclusion was a major issue of contention at the Council hearing and we consider that the decision relating to sloping land was appropriate based on the evidence presented at that hearing. It was through that process that the change to the provisions to include slope considerations was introduced.

[760] The Recommendation Report recorded that there was a general consensus that steeper land was land greater than 15° slope and the Hearing Panel agreed in principle that this was an appropriate standard. The Report also recorded that drystock farmers who appeared at the hearing largely accepted that slopes less than 15° should be fenced.³⁹² Schedule C of the Decisions Version required stock exclusion from water bodies with a slope of up to 15° and above 15° when stock numbers exceeded 18 per grazed ha.

[761] As part of our evaluation, we considered the areal extent of the PC1 area that would be exempted from controls on land with slopes greater than 10°. Dr Depree estimated the different areas of dairy and drystock farming with slopes greater than 10° and greater than 15°. He estimated the area greater than 10° indicatively as 113,800 ha of drystock compared to 64,000 ha greater than 15°, a difference of approximately 50,000 ha. For dairy farming, the equivalent indicative figures would be 46,000 and 21,000 ha, and a difference of 25,000 ha.³⁹³ Broadly speaking that would reduce the area subject to controls by 75,000 ha or by around half. Dr Depree's estimates were not challenged.

[762] Based on our evaluation of all relevant evidence, including the benefits of fencing streams, and in the absence of any evaluation to the contrary by Mr Trebilco, we are satisfied that the benefits of excluding stock from water bodies over

³⁹² Recommendation Report at [1546], [1547] and [1651].

³⁹³ Dr Depree EIC from [6.16].

such a large area are sufficiently significant as to require fencing up to the 15° slope contour as far as practicable. That is consistent with the Council decision and is necessary to make a start on the restoration and protection of the river systems.

[763] Further, while Beef and Lamb argued for a 10° slope at the hearing, the relevant relief sought in its appeal was to amend the standards in Schedule C as follows “1. The water bodies on land with a slope of up to 15° must be fenced ...” No appeals sought the reduction in slope from 15° to 10°, meaning there is no scope for Mr Trebilco’s proposed changes.

[764] Of relevance, the need for and timing of fencing can only be addressed on a farm-by-farm basis, rather than on a PC1-wide basis. Time must be allowed for farm specific investigations and planning of expenditure to ensure that available funds are directed to achieving the most benefit to the environment in the shortest time-frame. That may not always be the fencing of streams. This is supported by Federated Farmers’ appeal at [12], which is reproduced in Part E22.

[765] We agree in part with the closing submissions of Federated Farmers and Beef and Lamb referred to above and consider a staged approach to be appropriate. We find that as an initial stage for permitted activities, all stock must be excluded from all water bodies on land with slopes of up to 10° as soon as practicable and in all cases within five years of PC1 becoming operative, as proposed in WRC’s Final Proposal (subject to limited exceptions as discussed in Part F31).

[766] For consented activities, all stock must be excluded from all water bodies specified in Schedule C on land with slopes of up to 10° as soon as practicable and in all cases within an appropriate specified period as a condition of consent. Within five years of PC1 becoming operative, all FEPs must identify all unfenced streams on land with slopes between 10° and 15° and set out a programme to complete all fencing within a further five years or, alternatively, such other timeframe considered to be a more appropriate specified period or set in the next plan change.

[767] As we have already stated, an overall 10-year timeframe is consistent with the 10 years required in the Notified Version.³⁹⁴ It is the timeframe within which mitigations anticipated to achieve the interim water quality targets must be in place, even though monitoring is unlikely to show that the targets have been met. In its appeal, Federated Farmers sought an amendment to the timeframes in paragraph 4 of Schedule C: Minimum Farming Standards to require the completion of fencing for permitted activities in 10 years from the date PC1 becomes operative, not two.³⁹⁵ In combination, these factors provide scope to amend the timeframes in accordance with this decision.

[768] In terms of s 32AA, information available to the Court did not allow a robust analysis of costs and benefits to be undertaken. However, *Norris et al* estimated it would take a further 20 years from 2017 to complete the fencing of all pastoral waterways in the region based on the rates achieved over the previous 15 years, with the rates progressively increasing.³⁹⁶ Broadly speaking that should be around 10 to 12 years after PC1 becomes operative. That indicates to us that if it was affordable over the last 15 years, there is no reason to expect it to have become unaffordable moving forward.

[769] Stock exclusion was required as a priority mitigation in the both the Notified and Decisions Versions.³⁹⁷ We have already referred to benefits of fencing that have been achieved in terms of reduced stream bank erosion and we accept the importance of fencing as recorded in various documents before us. The risk of not acting would be greater than the risk of acting, indisputably in our view. However, the above approach recognises the need to make progress while also acknowledging practical and affordability constraints. It is consistent with the requirement to take a staged approach to achieving the Vision of Te Ture Whaimana and recognises the

³⁹⁴ Notified Version at [15].

³⁹⁵ Except in sub-catchments identified as a priority for *E. coli* in Table 3.11-2 when the extension sought was from 1 to 5 years.

³⁹⁶ At [4.1].

³⁹⁷ Background and explanation.

need to provide reasonable time for farmers to plan, finance and implement the works.

[770] The requirement to fence streams on land with slopes up to 15° is consistent with the Decisions Version and no issues of scope arise.

F16 Our evaluation and findings relating to proposals to require wider riparian buffers

[771] In her appeal, the Director General sought the inclusion at the beginning of Schedule B of a statement which identifies the multiple environmental benefits that can be achieved from riparian management including stock exclusion. Fish and Game identified riparian zones in its reasons for appeal but did not specify any specific relief sought.

[772] We received evidence from a number of experts as to the benefits of riparian planting and increased set-back distances from water bodies. We agree with the Council hearing panel that the evidence of Waikato Pastoral Ltd, in particular, showed what well-directed corporate farming can achieve with extensive planted riparian margins, engineer-designed sediment traps and the like.³⁹⁸

[773] We accept that riparian margins have in-stream ecological benefits and do not question that they can reduce sediment, phosphorus and microbial pathogen discharges in particular environments where the topography is sufficiently uniform that water flows are distributed reasonably uniformly across the riparian margin. However, that is rarely the case in a typical farm environment, particularly on farms in hilly country. The experts promoting the planting of riparian margins of various widths provided no evaluation as to how practical and effective they would be, or the associated costs, if required in a blanket rule framework in the diverse topographical and soil conditions that exist across the PC1 area. We agree with the Council hearing panel when they said:³⁹⁹

³⁹⁸ Recommendation Report at [187].

³⁹⁹ Recommendation Report at [1654].

While there was considerable evidence presented to us regarding the environmental benefits of riparian buffers, we found it difficult to pin down any consensus regarding the quantitative relationships associated with reductions in the inputs of *E. coli*, nutrients and sediment to waterways relative to the width of a setback or the vegetation that it supported.

[774] Mr Pinnell submitted in closing⁴⁰⁰ that he was most concerned about the assumed benefits of filtering runoff from pasture by grassed buffers, when there are many other reasons taken from the science that demonstrate the low effectiveness of buffer zones in the natural landscape, which he set out. We received evidence from farming witnesses relating to the maintenance of such buffers, including from Mr Pinnell, who stated:⁴⁰¹

Grass buffers are an invitation for weeds. Blackberry, convolvulus and inkweed are just 3 weeds that are constantly invading buffers in our area. Selective herbicides need to be used, all of which are hazardous to the aquatic environment. Spot spraying at least annually is required to control these weeds before they encroach over water.

[775] There are other reasons why blanket set-back distances may not be appropriate, including:

- (a) natural levees adjacent to streams commonly form as a result of deposition of sediments on the floodplain during floods. These levees block runoff from the plain directly discharging into the stream.⁴⁰²
- (b) streams meandering across flood plains often have reaches that flow across the general slope of the plain, resulting in only runoff from one side of the stream directly discharging into the stream.⁴⁰³

[776] We received other evidence that shade provided by woody vegetation can attract farm animals to spend more time in the locality, increasing the potential for the contaminants to be deposited nearer to the streams than they otherwise would. Overall, the evidence as presented to us does not demonstrate that setting blanket

⁴⁰⁰ From [11].

⁴⁰¹ Mr Pinnell EIC at [6].

⁴⁰² JWS Farm Systems in response to Question 37.

⁴⁰³ Mr Pinnell closing submissions at [9].

requirements for wider riparian margins would be the most appropriate to achieve the objectives of PC1. Essentially, we agree with the findings of the Hearing Panel relating to riparian planting as set out above.

[777] From a cost perspective, fencing to meet regulatory requirements⁴⁰⁴ was estimated to cost just over \$70 million, as set out above. In combination, the cost of fencing all water bodies and providing increased buffer widths and riparian planting would be many hundreds of millions of dollars more in physical costs and more again when the loss of productive land was taken into account. We consider substantially increased certainty as to the benefits of the additional measures would be required before such expenditure could be justified in s 32 terms.

[778] The Decisions Version of Policy 2f is “[e]ncouraging creation of riparian buffers (with appropriate riparian vegetation where necessary) adjacent to rivers, streams, drains, wetlands, lakes and springs to reduce overland flow of contaminants and improve freshwater habitat quality”. WRC’s Final Proposal modified the policy (now h.) to read “[e]ncouraging creation of riparian buffers where practicable (with appropriate riparian vegetation) adjacent to rivers, streams, drains, wetlands, lakes and springs to reduce overland flow of nitrogen, phosphorus, sediment and microbial pathogens and improve freshwater habitat quality”.

[779] We find that the version in WRC’s Final Proposal is clearer, as it removes the reference to “where necessary” which raises the question “for what purpose and in what circumstances?” and its removal does not alter the intent. We also find that the addition of “where practicable” is appropriate to reflect the need to consider both benefits and costs.

F17 Set-backs from rivers and streams

[780] We summarised the range of appeals relating to set-back distances in Part F11.

⁴⁰⁴ Resource Management (Stock Exclusion) Regulations 2020.

[781] The Director General submitted in closing that she does not support Clause 2d of WRC's Final proposal, stating that a 10 m set-back provides optimum water quality benefits. She proposed 3 m set-backs on stream orders 1 and 2 and 10 m set-backs on stream orders 3 and higher. She also stated:⁴⁰⁵

The ephemeral stream network in the region is extensive. Research suggests 77% of the contaminant load comes in through this network and, while it might be hard and impractical to fence, the inconvenient truth is, if contaminant discharges are not reduced by the degree that is necessary in order to reach some of the targets, then those areas will need to be targeted for management.

The Director-General does not support the wording of Schedule C Clause 5(a) in WRC PC1 Version that proposes to exempt ephemeral water bodies or ephemeral springs from setbacks. The Director-General's position is that given ephemeral streams are CSAs that transport contaminants into waterbodies, and then into the catchment network, a 3 m setback should apply to ephemeral streams and springs.

[782] She expressed concern with the extent of discretion that rests with Farm Environment Plan certifiers and ensuring clarity in relation to fencing requirements under permitted activity rules. She also expressed concern about the extent of training of farm certifiers required and accreditation requirements. The Director General's position is that where it is practicable to fence with wider setbacks than 3 m, this should be required in the Farm Environment Plan.

[783] Fish and Game and Forest and Bird relied on the closing submissions for the Director-General regarding stock exclusion provisions and set-backs.⁴⁰⁶

[784] Beef and Lamb and Federated Farmers submitted in closing, that consistent with their agreement with Fonterra and Dairy NZ, for permanent and intermittent waterbodies they proposed:

- (a) 3 metre setback from the outer edge of the bed for any permanently flowing river unless a Certified Farm Planner certifies that distance is not practicable, in which case a 3 metre average would apply.
- (b) 1 metre setback from any intermittently flowing river (including any spring, stream and modified river or stream) or artificial watercourse.

⁴⁰⁵ Closing submissions at [42] and [47], referring to Mr Matheson's cross examination of Ms McArthur, NOE at 758.

⁴⁰⁶ Closing submissions at [2].

[785] Mr Pinnell submitted in closing that there needs to be a limit on how much land is expected to be taken out of production and maintained as a riparian zone, stating that:

The costs of riparian buffer zones are significant in terms of loss of productive land, the weed control costs of grass buffers or the establishment costs of buffers planted in trees. I have suggested a maximum setback distance of 10 metres. In other words, if a fence line has to be sited further than 10 metres from a water body to find suitable terrain for erecting a fence, it is unreasonable and therefore impracticable.

[786] The Director General's submission did not address costs or overall efficiency and the assertion that a 10 m set-back provides optimum water quality benefits was not supported by evidence. Based on our evaluation of the evidence as whole, the environmental benefits of a blanket 10 m set-back from stream edges above second order were not demonstrated in any quantifiable way. On the other hand, the costs when fencing and associated riparian planting are included would be substantial, as outlined in the various tables above. As noted above, the evidence before the Hearing Panel suggested that planting and maintaining a 20 m riparian margin would cost in the order of \$2 billion.

[787] Further, practical realities mean that decisions on increased set-backs from rivers and streams can only be made on each of the 5,000 or so farms in the PC1 area by on-the-ground inspections. Based on scale alone, we do not consider it possible to define a "one size fits all" approach in regional plan provisions specifying which of lower order, ephemeral and intermittent streams must be treated in prescribed ways to effectively reduce, in particular, discharges of the primary contaminants in surface water run-off. It is not possible to assess benefits and costs or demonstrate that to be the best way of meeting the objectives. For that reason, we consider that the risks of discharges of the four primary contaminants to all streams that do not meet the criteria for a wide river should be considered as part of the FEP process and, where there is a need to do so, they can be considered as critical source areas.

[788] Based on our evaluation of riparian buffers and the matters considered in this Part F17, we do not find that blanket increases in set-back distances across the

PC1 area are the most appropriate way to achieve the objectives. We find the existing regulatory requirements for set-backs from wide rivers and the setbacks from drains included in Schedule C of WRC's Final Proposal to be the appropriate minimum distances. Any blanket increased set-backs could not be justified without a comprehensive risk assessment process that considers the environmental benefits, costs and practicality.

[789] Subject to reg 8 of the Stock Exclusion Regulations, we accept the amendment in WRC's Final Proposal Schedule C2d to require fencing to be located no less than "3 metres from the outer edge of the bed for any other waterbodies" by adding "unless a certified Farm Environment Plan has specified particular locations where 3 metres is not practicable, in which case the distance must be as close as practicable to 3 metres".

[790] The proposed timeframes in Schedule C3 must be amended to reflect our findings above.

[791] We acknowledge the concern raised by the Director General relating to the extent of discretion that rests with Farm Environment Plan certifiers. The requirement for freshwater farm plan certifiers and auditors to be trained in a national programme provided by Government owned assurance scheme provider AsureQuality should result in a generally consistent approach. In addition, WRC consent officers will no doubt undertake an appropriate level of review of any reviewed, certified and/or audited plans as part of the resource consent process. We anticipate that WRC will have monitoring procedures in place to ensure the requirements of PC1 are being met.

F18 Lakes

[792] We described lakes in Part C18.

Relevant plan provisions

[793] Schedule C(2)(b) of WRC’s Final Proposal requires that in addition to any requirements of the Stock Exclusion Regulations, new temporary, permanent or virtual fences must be installed no less than 10 m from the outer edge of the bed of the 58 shallow lakes named in Table 3.11.3. That compares to the 3 m distance specified in reg 8 of the Stock Exclusion Regulations and the Decisions Version. These lakes are greater than 1 ha in area.⁴⁰⁷

[794] WRC’s Final Proposal includes a new PC1 Policy 1f. which requires farming activities to be managed by recognising the particular vulnerability of lakes in the Lake FMUs. Policies 2B)f and 2B)h of WRC’s Final Proposal require farming activities to be managed to generally exclude farmed cattle, horses, deer and pigs from lakes and encourage the creation of riparian buffers where practicable (with appropriate riparian vegetation) adjacent to lakes to reduce overland flow of the four contaminants. Policy 14 requires contributions to the restoration and protection of lakes by the reduction of both diffuse and point source discharges of the four contaminants entering the catchments of those lakes. These are broadly similar to the requirements of the Decisions Version.

Legal submissions

[795] The Director General submitted that the majority of lakes in the PC1 area are degraded and some of the most degraded lakes in Aotearoa/New Zealand are located in the Waikato catchment. Based on the JWS Wetlands, the Director General submitted that experts agreed that lakes and wetlands are the most nutrient-sensitive receiving environments within the PC1-area. The Director General sought a 10\ m set-back distance from the edge of the bed of all lakes.⁴⁰⁸

[796] Fish and Game sought different FMU categories for lakes, referring to Mr Klee’s recommendation that each lake have its own FMU, or where clusters of lakes in close proximity have similar ecosystem health drivers, these be grouped in one

⁴⁰⁷ November 2023 expert conference JWS at 9.

⁴⁰⁸ Opening submissions at [68].

FMU.⁴⁰⁹ The set-back distance from lakes sought in submissions was 10 m, reduced from 20 m in its appeal.

Expert evidence

[797] There was no dispute among experts that lakes generally have poor water quality. Dr Scarsbrook stated that monitoring results show that almost all shallow Waikato lakes are below the national bottom line (under the NPSFM 2020) for at least one attribute and that water quality tends to be worst in shallow lake catchments dominated by agriculture.⁴¹⁰ Dr Simon Stewart, a freshwater scientist at the Cawthron Institute, who gave evidence for the Director General, stated that the majority of lakes are in a degraded state and the primary cause is nutrient inputs from pastoral land use in their catchments.⁴¹¹ He identified a number of concerns about PC1, including that there are no quantitative reductions required to reduce nutrient loads to sustainable levels. He went on to say:

The stock exclusion and setback rules do not account for lake ecosystem processes (e.g., water level fluctuations and nutrient loss from riparian soil associated with the Birch Effect) and are insufficient to protect lakes from pastoral land use.

[798] While he considered that set-back distances for stock exclusion should be increased to 20 m, that was not what was sought by the Director General.

[799] Mr David Klee stated that:⁴¹²

Many of the 58 identified lakes in PC1 already have significant setbacks. From personal knowledge of these systems the majority will already have 10m for some, if not all their circumference. A smaller number will also already meet the 20m setback distance. Peat lakes, have received a lot of attention and would require less in the way of further setbacks to achieve a 20m minimum standard than some of the larger riverine lakes.

⁴⁰⁹ Opening submissions at [80] and confirmed in closing submissions.

⁴¹⁰ Dr Scarsbrook EIC at [18] and [188].

⁴¹¹ Dr Stewart EIC at [2].

⁴¹² JWS setting out responses to the court's questions about estimates of costs for stock exclusion from PC1 water bodies at 24.

[800] He considered that nutrient reduction targets that are “highly achievable”, could encourage improvements for some lakes. He referred to Lake Rotomanuka, which is located about 12 km south of Hamilton City, where estimated “reductions of 42% TP and 49% TN are feasible through potential land management actions” and “[s]cenario modelling has shown that a 50% reduction in external TN and TP load across the catchment moved Lake Rotomanuka’s simulated [NPSFM National Objective Framework (**NOF**)] classification out of the bottom line (D) to a C value”.

[801] He also referred to Lake Ngaroto, which has had a restoration programme for 25 years, including fencing and large riparian buffers but despite this, the lake still fails to meet national bottom lines for many attributes. He stated that simulation modelling showed that external and internal nutrient reductions of up to 50% would be insufficient to promote its NOF status from D-band.⁴¹³

[802] Ms Marr considered that individual lake FMUs should be developed that nest a lake in its contributing catchment, and individual water quality targets should be set that reflect the characteristics of each lake FMU. She set out guidance and criteria for setting appropriate FMUs and stated:

FMUs are the fundamental spatial building block of freshwater management in the NPS-FM. FMUs or part FMUs are the scale at which the National Objectives Framework is applied. They are the default spatial unit at which long-term visions are set, values are identified, attributes are identified, action plans are prepared and progress towards goals is monitored, assessed and reported.

[footnotes omitted]

[803] Her evidence went no further than expressing her opinion that individual lake FMUs should be established and setting out what needed to be done to establish FMUs.

⁴¹³ Mr Klee EIC from [9.13].

Evaluation and Findings relating to lakes

[804] Mr Klee’s evidence clearly indicates the challenges that will have to be overcome before lake water quality will achieve the outcomes sought by Te Ture Whaimana. Solutions will need to be lake specific and will require comprehensive investigation programmes and analysis under s 32 of the RMA. Dr Scarsbrook stated that WRC recommends lake specific action plans to address lakes not meeting national bottom lines. These action plans could include land-use control and catchment load limit setting or targeted within lake restoration options.⁴¹⁴

[805] Fundamentally, there is no dispute as to the degraded condition of lakes in the PC1 area. However, the scale of measures required to reduce nutrient loads and restore lakes in accordance with Te Ture Whaimana is substantial and outside the scope of what can be achieved in PC1. While Forest and Bird sought more refined FMUs for lakes, referring to the evidence of Ms Marr,⁴¹⁵ the establishment of 58 individual FMUs is a matter for WRC through a formal Schedule 1 process, not something that can be undertaken by the Court as part of PC1.

[806] There was no dispute relating to the 10 m set-back distance from identified shallow lakes and we accept the relevant provisions relating to lakes in WRC’s Final Proposal.

[807] No issues of scope arise.

F19 The Whangamarino Wetland

[808] We described the Wetland in Part C19.

The relevant provisions of PC1

[809] Objective 5 of the Decisions Version and WRC’s Final Proposal is:

Restoration and protection of the health and wellbeing of the Whangamarino Wetland, over time and in relation to nitrogen, phosphorus, sediment and

⁴¹⁴ Dr Scarsbrook EIC at [97].

⁴¹⁵ Opening submissions from [79].

microbial pathogens at the latest by 2096, consistent with its status as an outstanding waterbody with significant values, including habitat for threatened species and sensitive raised bog ecosystems.

[810] The issue of hydrological impacts was raised at the Council hearing. It had been raised previously in Fish and Game’s submission on Variation 1 to the Notified Version, which sought that Objective 6 (current Objective 5) be amended to achieve “[p]rotection of the significant values of wetlands, including their ecosystems, hydrological functioning and extent” or “[a]n integrated approach is taken and the hydrological regime of the Whangamarino wetland is actively managed to ensure the short, medium and long term targets can be achieved”. In relation to Policy 15, it sought an amendment to include “c. Managing the hydrological regime including the impacts of the Lower Waikato Waipa Flood Control Scheme, to: ...”.

[811] The Hearing Panel considered it to be outside the scope of PC1 and stated, “[w]hile we accept that hydrology can affect wetland ecosystem health, we consider, we have no ability to recommend regulation of hydrological drivers for wetlands in this plan change”.⁴¹⁶ However, they added the reference to hydrological drivers in Policy 15 because:⁴¹⁷

While we regard those hydrological drivers as out of scope, for the reasons Dr Robertson identifies, it is important that they form the background to implementation of Policy 15. We therefore suggest a reframing of the cross-reference to hydrological factors to express that more clearly.

[812] Policy 16 of the Decisions Version (original Policy 15) was amended to include a requirement to contribute to the restoration and protection of the Whangamarino Wetland to achieve specified outcomes “while taking account of the hydrological drivers that affect water quality”. The reference is retained in WRC’s Final Proposal.

[813] Farming in Whangamarino Wetland catchment is a Restricted Discretionary Activity in both the Decisions Version and WRC’s Final Proposal and effects on the Whangamarino Wetland is a matter over which WRC restricts its discretion in both

⁴¹⁶ Recommendation Report at [1426] and [1001].

⁴¹⁷ Recommendation Report at [1432].

cases. Rule 3.11.4.6 5.v in WRC's Final Proposal reinforces this by requiring FEPs to provide evidence that the significance and sensitivity of the Whangamarino Wetland has been considered in development of the FEP.

Appeals

[814] Fish and Game sought an amendment to Map 3.11-1 to include a specific FMU for the Whangamarino wetland, an amendment to Table 3.11-1 to include appropriate targets for “nutrients, sediment as well as the hydrological regime”, amendments to Policies 16 and 17 and the following underlined amendment to Objective 5:

Restoration and protection of the health, ~~and~~ wellbeing and ecosystem function of the Whangamarino Wetland, over time and in relation to contaminants including nitrogen, phosphorus, sediment, ~~and~~ microbial pathogens and associated hydrological drivers, at the latest by 2096, consistent with its status as an outstanding waterbody with significant values, including habitat for threatened species and sensitive raised bog ecosystems.

[815] The Director General sought amendments to Policy 17, specific reference to the Whangamarino Wetland in Implementation Method 3.11.3.1 and amending Table 3.11-1 to include attribute states for the Whangamarino catchment.

Legal submissions

[816] Fish and Game sought a separate FMU boundary for the Whangamarino Wetland, supported by the evidence of Mr Klee and Dr Robertson.⁴¹⁸ They also sought insertion of “hydrological drivers of the transport and deposition of contaminants” in Objective 5, which “recognises the Whangamarino Wetland as an outstanding waterbody”.⁴¹⁹

Expert evidence

[817] Expert evidence relating to the existing state of the wetland is summarised in Part C13, which clearly demonstrates the serious degradation that has occurred. In

⁴¹⁸ Fish and Game, opening submissions from [26].

⁴¹⁹ Fish and Game opening submissions at [23].

this Part F19, we address Fish and Game’s submission that the wetland should have its own FMU, before setting out our overall findings relating to the Whangamarino Wetland.

[818] Dr Robertson stated:⁴²⁰

Given the hydrologically connected nature of Whangamarino Wetland to its sub-catchments, and the need for an integrated approach to set and achieve water quality target attribute states to reduce the frequency and impact of future water quality events for the outstanding water body, I recommend the re-arrangement of FMUs (and sub-catchment) in PC1 to create a specific FMU for Whangamarino Wetland.

[819] Dr Scarsbrook stated he does not object to the Wetland having its own FMU, as he considered that would be an appropriate unit for freshwater management and accounting purposes.⁴²¹ He went on to say:

Long-term solutions will require careful consideration of many potential options, including land use change and re-design of the hydrology of the wider catchment. In my opinion, the development of an integrated approach to management of Whangamarino Wetland and its contributing sub-catchments does not require Whangamarino to be designated as an FMU – the response and management plan will happen regardless. I support Mr Trebilco’s view, as set out in his rebuttal evidence, that establishment of a Whangamarino FMU for the purpose of significant changes in management should follow the NOF process as part of the Freshwater Policy Review.

[820] The experts in the JWS Wetlands agreed that without significant intervention, ongoing deterioration of Whangamarino ecosystem health would be unavoidable and that both contaminants and hydrological drivers need to be addressed. They also agreed that:

Water levels/hydrological drivers directly dictate where sediment and nutrients are deposited in the wetland. i.e. water levels and movement in the wetland dictate how the contaminants being managed through PC1 will affect Whangamarino wetland.

Hydrological drivers are inherently associated with the management of water quality contaminant impacts. The volume of water coming from different water sources and its associated contaminant loads has an impact on achieving the target PC-1 attribute states for Whangamarino Wetland.

⁴²⁰ Dr Robertson EIC at [125].

⁴²¹ Dr Scarsbrook EIR from [65].

[821] They recommended a major revision of the Lake Waikare and Whangamarino Wetland Catchment Plan within clear timeframes and with measurable actions. Given the highly degraded status of Lake Waikare, the continued discharge from Lake Waikare to Whangamarino provides a significant impediment to halting decline or improving the ecosystem health of Whangamarino.⁴²²

[822] The JWS records that Dr Scarsbrook considered that “PC1 is not sufficiently broad to deliver improved wetland health outcomes for Whangamarino Wetland. For example, PC1 does not include hydrological controls that will be needed to address issues”.

WRC’s closing submissions

[823] WRC submitted that:

WRC does not support the proposed amendment to Objective 5 for the reasons set out in paragraphs 47-48 of Mr Trebilco’s rebuttal evidence. Hydrological drivers of the transport and deposition of contaminants is a matter that is not within the ambit of PC1. There are no policies, rules or other methods that would achieve the amended objective.

WRC does not support amendments to make the Whangamarino a separate FMU (including consequential changes to Policy 16 and Rule 3.11.4.6). Dr Scarsbrook considers that integrated management of Whangamarino Wetland can be achieved without a separate FMU designation. He considers that FMUs are less important than the targets set for each sub-catchment. It would also not be appropriate to accord Whangamarino Wetland FMU status without following the proper process under the NPSFM 2020.

[footnotes omitted]

[824] For completeness, we record that Mr Trebilco’s evidence included:

Ms Marr has not proposed policies or methods to manage the hydrological regimes to achieve the Objective. In my view, it is not appropriate to add to an Objective in a way that would signal the need for additional provisions to ensure it is achieved, without considering and testing in section 32 terms the effectiveness and efficiency of those provisions for achieving the Objective. Ms Marr has not done this. For these reasons, I do not support the requested amendment to Objective 5.

⁴²² JWS dated 30 August 2023 at 6.

Views expressed by previous decision-makers as to whether the Whangamarino Wetland should have a separate FMU

[825] The FMUs in PC1 were delineated in June 2015 by the CSG in accordance with the NPSFM 2014. In early 2016, the CSG considered but did not progress the option of having a FMU for Whangamarino Wetland. They considered it was likely to be appropriate to establish a separate FMU for the wetland in the future, given the values and pressures on the system.⁴²³

[826] The Council Hearing Panel considered submissions asking for a separate FMU for the Whangamarino Wetland in recognition of the significant values associated with this wetland complex and recorded:⁴²⁴

While we have not elected to carve out a separate and new FMU for the Whangamarino Wetland catchment, we have made provision for TN and TP attributes specific to it and increased the priority rankings in (now) Table 3.11-3 for all sub-catchments that drain into it. We regard these changes as providing the appropriate recognition of the wetland within the broader catchment.

[827] Mr McAuliffe stated that WRC staff have identified draft FMUs for the Waikato Region, which are being consulted on as part of the engagement process for the 2024 plan change. He went on to say that WRC staff are not proposing any changes to the eight FMUs established by PC1.⁴²⁵

Should Objective 5 for the Whangamarino Wetland include reference to hydrological drivers?

[828] Fish and Game, supported by the Director General, sought that hydrological drivers should be included in the Objective. This was not supported by WRC for the reasons set out above.⁴²⁶

[829] We agree with the reasons given by the Hearing Panel and as set out WRC's closing submissions. However, we accept the reference to hydrological drivers added

⁴²³ Dr Scarsbrook EIC from [33].

⁴²⁴ Recommendation Report at [1013].

⁴²⁵ Mr McAuliffe EIC at [60].

⁴²⁶ WRC closing submissions at [10.4].

to Policy 16 by the Panel as it assists in drawing attention to the issue without going outside scope.

Findings in relation to the Whangamarino Wetland

[830] We are satisfied from the evidence that anthropological hydrological changes contribute to the degraded state of the wetland, and that this requires a planning response. However, hydrological effects on the wetland cannot be considered in isolation from the hydrology of the wider catchment, meaning the work required to address the issue is extensive. That is more appropriately addressed in a future plan change, rather than in PC1.

[831] The NPSFM 2020 requires regional councils to identify FMUs in their regions.⁴²⁷ As noted above, Mr McAuliffe's evidence is that WRC staff are not proposing that the Wetland should have its own FMU.

[832] It would be inappropriate for the Court to attempt to stand in the place of the Council in this process. However, it is evident that the Whangamarino Wetland is an important natural feature of the Waikato region that has international recognition. The evidence before us is that the wetland is under serious threat for two main reasons - changes to the hydrology and increased contaminant loads, particularly nitrogen, phosphorus and sediment.

[833] It is difficult to avoid the conclusion that without what are likely to be very significant changes to present management approaches to restore the wetland by addressing both causes of adverse effects, further deterioration of the wetland will be inevitable. As the significance of the site has been recognised by RAMSAR, it appears to us that WRC needs to give serious consideration to whether restoration of the wetland is likely to be achieved more effectively and efficiently if the Wetland has its own FMU or not.

⁴²⁷ NPSFM 2020, cl 3.8.

[834] The social, cultural, environmental and economic issues that need to be addressed in making that determination are extensive and go well beyond the Court's ability to comment further based on the limited evidence presented and matters of jurisdiction. While we accept the validity of the concerns expressed by both the Director General and Forest and Bird, we consider that the next steps should be for WRC to consider the matters they and we have raised.

[835] We find that the objectives and policies relating to the Whangamarino Wetland in the Decisions Version of PC1 are appropriate without amendment.

F20 Other wetlands

[836] We described other wetlands in Part C20. By way of a brief overview:

- (a) current information on wetlands in the PC1 area is limited;
- (b) Dr Scarsbrook indicated that the most up to date information WRC has on wetland extent in the Lower Waikato FMU is that there are more than 3000 individual wetlands greater than 500 m², although the mapping is incomplete and preliminary;
- (c) he considered an estimate of around 10,000 wetlands of a size greater than 500 m² within the PC1 area was reasonable but we accept the figure must be treated with considerable caution.

[837] The experts agreed that "[t]he number of wetlands that fall between 50 m² and 500 m² is unknown but likely to be a greater number than for wetlands greater than 500 m²". The JWS recorded that an estimated 9,000 approximately were greater than 500 m², leaving an estimated 26,000 wetlands between 50 and 500 m² in

area. The JWS also provided different estimates to the above in places and we accept that these numbers need to be treated with caution.⁴²⁸

Relevant statutory requirements and applicable higher order provisions

[838] As noted in Part B2, in accordance with the NPSFM 2020, WRC incorporated clause 3.22(1) of the NPSFM relating to natural inland wetlands in the WRP in June 2021 without using a Schedule 1 process. This requires “[t]he loss of extent of natural inland wetlands is avoided, their values are protected, and their restoration is promoted, except where: ...” The exceptions do not include farming activities.

[839] In accordance with clause 3.21 of the NPSFM, a natural inland wetland 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, as defined on the RMA, but excludes a wetland that:

- (i) is within an area of pasture used for grazing; and
- (ii) has vegetation cover comprising more than 50% exotic pasture species (as identified in the National List of Exotic Pasture Species using the Pasture Exclusion Assessment Methodology (see clause 1.8)); unless
- (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.

[840] The Stock Exclusion Recommendations require that “[a]ll stock must be excluded from any natural wetland that is identified in a regional or district plan or a regional policy statement that is operative on the commencement date”.

⁴²⁸ JWS dated 14 November 2023 at 43-44. “40,000 total wetlands of mixed size consisting of 10000 @ 0.9ha (>500m²), 10000 @ 300m², 10000 @ 100m², 10000 @ 50m². ... [It was noted that] of the 1969 wetlands identified in Lake Whangape catchment, the majority of these (1509 wetlands) were exotic grassland/herbfield/rushland that may not meet the NPS-FM wetland definition”. Dr Robertson considered the 40,000 total wetlands is not supported by available data and this is likely to overestimate costs.

Relevant provisions included in PCI

[841] Policy 1c of the Notified Version was “[p]rogressively excluding cattle, horses, deer and pigs from rivers, streams, drains, wetlands and lakes”. Schedule C required “[n]ew fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs cannot be within one metre of the bed of the water body (excluding constructed wetlands)”. Wetland was defined in the Regional Plan⁴²⁹ as “[i]ncludes 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”.

[842] The Hearing Panel considered the absence of policy direction regarding wetlands other than Whangamarino to be unsatisfactory.⁴³⁰ The Panel recommended an amendment to widen set-backs for stock exclusion to 10 m⁴³¹ to improve the protection of listed wetlands in the operative WRP Table 3.7.7⁴³² and recommended a 3 m set-back from the outer edge of the bed for any other water bodies, which would include wetlands not in Table 3.7.7.

[843] New policies in the Decisions Version included:

Policy 2d.	Generally excluding farmed cattle, horses, deer and pigs from ... wetlands,
...	
Policy 2f.	Encouraging creation of riparian buffers (with appropriate riparian vegetation where necessary) adjacent to ... wetlands
...	

[844] The Panel asked a number of expert witnesses if there was any accepted or scientific consensus on the minimum size of a wetland that should be protected (fenced) to ensure its ecological functioning but none was able to provide “a number”. As there was no full s 32 evaluation on fencing off/excluding stock from all wetlands, the Panel was reluctant to impose a blanket rule for all wetlands,

⁴²⁹ Operative 28 September 2007.

⁴³⁰ Recommendation Report at [1435].

⁴³¹ The Decisions Version refers to a 3 m distance but that has been corrected to read 10 m in WRC’s final proposal.

⁴³² 35 listed wetlands of which the JWS dated 14 November 2023 records 20 were lakes.

irrespective of their size and recommended that the stock exclusion controls not apply to wetlands less than 50 m² in area other than those identified in the WRP as being significant.⁴³³ Schedule C required the exclusion of stock from any wetland, including a constructed wetland, greater than 50 m² in area, but did not set time limits. The requirement applied on land with slopes of up to 15°. No s 32AA evaluation was evident to support this recommendation.

[845] The minimum size issue took on some prominence in the appeal process and in WRC's Final Proposal, Policies 2B)f and 2B)h require farming activities to be managed to generally exclude stock from wetlands and encouraging creation of riparian buffers where practicable (with appropriate riparian vegetation) adjacent to wetlands to reduce overland flow of the four contaminants. We note that the policy does not place any limit on the size of wetlands, or other waterbodies, from which stock must be excluded and may need to be qualified by a reference to Schedule C.

[846] Schedule C in WRC's Final Proposal requires that in addition to any requirements of the Stock Exclusion Regulations, new temporary, permanent or virtual fences must be installed no less than 10 m from the edge of any wetlands listed in Table 3.7.7 of the WRP on land with a slope up to and including 10°. ⁴³⁴ The Schedule also required that stock must be excluded from:

Any wetland, including a constructed wetland, greater than 500 m², and any wetland greater than 50 m² that:

- i) supports a population of threatened species as described in the compulsory value for threatened species in the National Policy Statement for Freshwater Management 2020; or
- ii) flows into, or receives water from, a water body that stock are required to be excluded from.

[847] Farming enabled as a permitted activity must exclude stock as soon as practicable, and in all cases, no later than five years after Chapter 3.11 becomes

⁴³³ Recommendation Report at [1682] and [1683].

⁴³⁴ Assumes wetlands are all located on land with a slope of 10° or less.

operative, with steady progress toward compliance over the time required. No time limits were set for activities requiring resource consents.

Appeals

[848] Forest and Bird sought an amendment to Schedule C to require stock exclusion from all wetlands, regardless of size, and specifically to delete the 50 m² threshold in the Decisions Version.

[849] Federated Farmers sought an amendment to Schedule C to delete the 50 m² threshold so that stock had to be excluded only from wetlands listed in Table 3.7.7 of the WRP.

Legal submissions

[850] WRC submitted in closing:

The decisions version of PC1 requires any wetland greater than 50 m² to have stock excluded from it. There is considerable opposition among the farming parties to this requirement. WRC proposes to amend this provision to protect only wetlands greater than 50 m² that have important ecological values, and those which can be more easily fenced because they flow into, or receive water from, a water body that stock are required to be excluded from.

[851] The Director General sought that the 10 m set-back apply to all wetlands with an area greater than 50 m². Fish and Game sought that stock be excluded 10 m from all wetlands.

[852] Beef and Lamb and Federated Farmers submitted that the requirement to exclude stock from all wetlands down to 50 m² in area is impracticable and inappropriate, given the sheer number of wetlands at that size. They did not agree with WRC's latest proposal to require smaller wetlands greater than 50 m² to be fenced if they flow into or receive water from a water body that stock are required to be excluded from because there has not been any assessment as to the

practicalities of this type of standard and circumstances are likely to differ on each farm.⁴³⁵

Expert evidence

[853] We have covered relevant expert evidence in earlier parts of our decision.

Estimated costs of fencing wetlands, different set-backs and riparian planting

[854] The experts estimated during conferencing the additional costs of fencing for wetlands > 500 m² and >50 m² on different slopes thresholds with 3 m and 10 m set-backs as shown in the following Table 14.⁴³⁶

Table 14
Estimated additional costs of fencing for wetlands > 500 m² and >50 m² on different slopes thresholds with 3 m and 10 m set-backs

Size	Set-back	Sector	0-5 slope	0-10 slope	0-15 slope
>500m ²	3 m	Dairy	\$28,100,835	\$39,172,711	\$43,721,369
		Drystock	\$4,179,475	\$12,630,188	\$17,745,015
		Total	\$32,280,310	\$51,802,899	\$61,466,384
>500m ²	10 m	Dairy	\$100,128,436	\$129,298,942	\$141,283,056
		Drystock	\$12,107,532	\$24,330,940	\$31,729,205
		Total	\$112,235,969	\$153,629,882	\$173,012,262
>50m ²	3 m	Dairy	\$48,927,440	\$151,898,829	\$165,747,445
		Drystock	\$13,150,887	\$38,400,455	\$48,544,429
		Total	\$62,078,327	\$190,299,283	\$214,291,874
>50m ²	10 m	Dairy	\$175,425,334	\$223,515,956	\$243,273,020
		Drystock	\$35,516,805	\$58,879,895	\$73,020,497
		Total	\$210,942,139	\$282,395,851	\$316,293,516

[855] They estimated the additional costs of riparian planting for “wetlands waterways” on slopes 0 to 5° captured under the national stock exclusion regulations (rather than PC1 requirements) with a 10 m set-back as \$51.5 million for dairy and \$36.8 for drystock, a combined cost of approximately \$90 million.

⁴³⁵ WRC closing submissions at [15.30], proposed amendment to Schedule C(4)(c).

⁴³⁶ JWS dated 14 November 2023.

[856] They estimated the costs of riparian planting for wetlands on different slope thresholds with 3 m and 10 m set-backs as shown in the following Table 15.

Table 15

Estimated costs of riparian planting for wetlands on different slope thresholds with 3 m and 10 m set-backs

Riparian planting costs Wetlands >500 m² by slope, 3 m and 10 m set-back

Sector	Set-back	0-5 degrees slope	0-10 degrees slope	0-15 degrees slope
Dairy	10 m	\$51,463,925	\$64,395,447	\$69,708,102
Drystock	10 m	\$36,815,470	\$64,395,447	\$64,938,298
	Total	\$88,279,396	\$128,790,894	\$134,646,400

Dairy	3 m	\$10,307,407	\$15,212,354	\$18,181,093
Drystock	3 m	\$24,716,014	\$33,241,463	\$37,697,611
	Total	\$35,023,421	\$48,453,817	\$55,878,704

Riparian planting costs Wetlands >50 m² by slope, 3 m and 10 m set-back

Sector	Set-back	0-5 degrees slope	0-10 degrees slope	0-15 degrees slope
Dairy	10m	\$59,421,019	\$87,697,477	\$104,811,912
Drystock	10m	\$142,484,983	\$191,633,215	\$217,322,399
	Total	\$201,906,001	\$279,330,692	\$322,134,312

Dairy	3m	\$35,674,276	\$132,965,850	\$150,790,444
Drystock	3m	\$0	\$0	\$0
	Total	\$35,674,276	\$132,965,850	\$150,790,444

Evaluation and findings

[857] We first acknowledge and thank the experts for their work on providing the cost estimates under difficult circumstances and with very little definitive information on which to base assumptions. It is clear that with the major uncertainties involved, any s 32AA evaluation based on available cost information must be treated with caution and should only be relied on as a broad indication of

likely costs. Similarly, attempting to reliably quantify region-wide environmental benefits without evidence that provides a much clearer of understanding of local conditions and other mitigation measures that are practicable would have no meaningful value.

[858] We consider this is illustrated by the Lake Ngaroto experience referred to in Part F18 where, after an extensive 25-year restoration programme, the lake still fails to meet national bottom lines for many attributes. Substantial reductions in catchment nutrient loads of up to 50% would be insufficient to promote its NPSFM NOF status from D-band, and many other catchments are likely to require significant nutrient load reductions before significant restoration of the water bodies will be possible.

[859] We were provided with no evidence of any kind to demonstrate what environmental enhancement, if any, would result from such fencing of wetlands, particularly those as small as 50 m² in area, and particularly if they were undertaken before the necessary contaminant load reductions have been achieved. We were provided with no evidence as to the practicability of reliably determining the presence of threatened species in what is likely to be very large numbers of individual wetlands. The estimated cost implications of implementing 10 m compared to 3 m set-back distances with riparian planting are substantial. The estimated cost of fencing wetlands 500 m² and above with riparian planting and a 3 m set-back, the option involving least uncertainties, could be \$120 million. This would amount to approximately \$25,000 per farm averaged over 5,000 farms and substantially more in some cases.

[860] Indicatively, 60% of all activities could be permitted. If the estimated cost of \$170 million is correct in Table 14 for fencing only of wetlands 500 m² in area or greater with a 10 m buffer on land with a slope up to and including 15°, on a pro rata basis the cost to be carried by permitted activities would be around \$100 million, shared between perhaps 2,800 farms or approximately \$36,000 per farm. If riparian planting of the 10 m buffer was required, the combined cost for each farm would exceed \$60,000. If they were unable to complete the required fencing within

five years, they would have to apply for a discretionary activity consent under Rule 3.11.4.8.

[861] The above costs would be significantly higher if the fencing costs quoted to Mr Cameron were to apply.

[862] The importance of fencing waterways is agreed by all parties and not in dispute. However, based on our evaluation of the evidence as a whole relating to fencing and riparian planting, there does not appear to have been any consideration given to the cost of policy provisions relating to fencing and/or riparian planting for individual farms either on their own or collectively, nor what actual environmental benefits would result from excluding stock from different small areas of wetland.

[863] If effect is to be given to Te Ture Whaimana, substantial reductions in nutrient loads will be required in some sensitive catchments. Before there is a clear understanding of what that might mean, setting blanket region-wide provisions requiring that fencing and providing riparian vegetation to many thousands of small, isolated wetlands in those catchments, at least, would be unlikely to result in any significant environmental benefits. It would almost certainly not be the best way to achieve the objectives of PC1 unless and until a much clearer road map is developed to guide how Te Ture Whaimana will be given effect to.

[864] The expected major changes required to give effect to Te Ture Whaimana will have associated major social and economic consequences. It will be important that the limited funding available to effect restoration and protection of the river systems is prioritised to achieve “the best bang for the buck” to use the language of some at the hearing. The evidence before us fell well short of demonstrating that fencing wetlands as small as 50 m² in area, with or without riparian planting, would achieve that and until priorities are set in the next plan change, we consider it premature to require the expenditure of possibly hundreds of millions of dollars with no certainty of a justifiable environmental benefit.

[865] We will direct WRC to amend Schedule C of WRC’s Final Proposal to:

- (a) replace the 10° with the 15° slope included in the Decisions Version; and
- (b) delete 4c of Schedule C and replace it with “any natural wetland that supports a population of threatened species as described in the compulsory value for threatened species in the NPSFM 2020”.⁴³⁷

F21 Farm Environment Plans

[866] PC1 requires Farm Environment Plans (**FEPs**) to be prepared for activities carried out in accordance with Rules 3.11.4.3 to 3.11.4.9. Their purpose is to demonstrate a general improvement in farming practice to reduce diffuse discharges of the four primary contaminants and contribute to the achievement of the target attribute states in Table 3.11-1 in accordance with the provisions of PC1. As discussed in Part B5, amendments to the FEP provisions in the Decisions Version were made to align them with the Freshwater Farm Plan Regulations, which came into force on 1 August 2023. The Regulations provided further requirements for the contents of freshwater farm plans for the purposes of Part 9A of the RMA.

[867] On 25 October 2024, Amendment Act 2024 came into force and revoked the Resource Management (Application of Part 9A—Freshwater Farm Plans) Order 2023 so that Part 9A ceased to apply. This required further amendments to the PC1 provisions to be made and the Court directed WRC to initiate discussions with the parties to develop a proposal which brings aspects of Part 9A of the RMA and the Freshwater Farm Plan Regulations relating to certification and auditing into PC1.⁴³⁸

[868] WRC circulated an initial proposal to parties on 13 February 2025 and eight substantive responses were received.⁴³⁹ WRC amended the proposal as a result of comments received from parties and included a Final Proposal with its comprehensive memorandum dated 27 March 2025.

⁴³⁷ To be consistent with Regulations 16 and 17 of the Stock Exclusion Regulations.

⁴³⁸ Minute dated 19 December 2024.

⁴³⁹ Joint Farming Parties, Fish and game, Fonterra and Dairy NZ, Deer Industry New Zealand (DINZ) on behalf of New Zealand Deer Farmers' Association, Mr Pinnell, HortNZ, Waikato and Waipā River Iwi and WRA.

[869] The relationship between PC1 rules and the Freshwater Farm Plan Regulations was an issue common to several submitters. WRC stated that it considered the changes proposed by the Sector Representative Parties and included those which it supports in its Final Proposal and that:

WRC agrees in principle that duplication and conflict between PC1 requirements for FEPs and future national regulations for freshwater farm plans should be removed, to the extent it does not weaken PC1 as a result of future changes to the FWFP Regulations. WRC considers that it is crucial that changes are not made to PC1 that potentially reduce the effectiveness of PC1 provisions in achieving the objectives and giving effect to Te Ture Whaimana. WRC supports provisions to ensure that farmers are only required to produce one farm plan.

Because WRC and the Sector Representative Parties are generally aligned in wishing to avoid duplication and conflict between regional plan requirements and national requirements, WRC has accepted many of the changes proposed by the Sector Representative Parties.

[870] We considered all parties' responses to WRC's initial proposal included in Annexures B and E of the memorandum. We also considered further comments on WRC's memorandum and Final proposal dated 27 March 2025 made in response to a Court invitation on 28 March 2025. In doing so, we kept in mind our approach of ensuring that PC1 stands alone to the extent possible, addresses the particular circumstances that exist in the PC1 area and best meets the requirements of s 32 of the RMA.⁴⁴⁰

[871] In view of the level of agreement reached between the parties and because the certification and audit procedures proposed by WRC are closely aligned with the Freshwater Farm Plan Regulations⁴⁴¹, we generally accept WRC's Final Proposal set out in Annexure C of the memorandum, subject to further consideration being given to audit procedures and the matters set out in (a) to (e) below.

[872] We acknowledge that HortNZ continues to seek that the Court approves the use of industry approved FEP certifiers and auditors for use in PC1 processes going

⁴⁴⁰ Part A8 of this decision.

⁴⁴¹ Joint Farming Party feedback on WRC's initial proposal in Annexure B of the memorandum.

forward.⁴⁴² We accept that such an approach could be an efficient and effective way to achieve the objectives of PC1, subject to appropriate checks and balances. We did not receive sufficient evidence to make a determination as to what these should be or what process should apply, for example in relation to the PC1-specific concerns raised by WRC. We would also need to be satisfied there is scope to introduce such a change and if there is not, a s 293 process could be required.

[873] We do not consider it would be acceptable to further delay PC1 becoming operative to include the necessary provisions and until any relevant new regulations take effect, we cannot frame provisions to ensure consistency with them. We do not preclude the possibility of incorporating appropriate provisions but any changes would need to be supported by a robust s 32AA evaluation and include appropriate measures to address WRC's concerns. Potentially, consideration could be given to an interim step as outlined below.

[874] The proposed audit procedures also were of concern to the Joint Farming Parties, which supported an approach based on the risk to water,⁴⁴³ and to Mr Pinnell, who also supported a risk-based approach and the use of random audits as an alternative to the proposed procedures. Amendments to Schedule D3, Part C2 should be considered to provide greater clarity⁴⁴⁴ as, for example, it is not immediately clear to us if and why audits are required following each recertification, nor is it clear why recertification will be required at five-yearly intervals unless intermediate changes to circumstances arise, while audits are required within three years of the previous audit. Further, it is not clear to us that frequent audits of low-risk farming activities in particular would be the most appropriate way to achieve the objectives.

[875] There is general agreement among parties that both certification and auditing are important and we agree, subject to the processes being efficient and effective.

⁴⁴² HortNZ memorandum dated 4 April 2025.

⁴⁴³ Memorandum dated 4 April 2025.

⁴⁴⁴ "Unless otherwise specified in a resource consent, a farm operator must also, arrange for a subsequent audit of the farm against the actions specified in the action plan within three years of the previous audit."

There is uncertainty about the adequacy of appropriately trained professional resources necessary to undertake both processes and WRC and farming interests agree that duplication and conflict should be avoided. Until there is national direction on the use of industry managed certification processes, we accept that WRC's proposals for certification and five-yearly recertification are appropriate.

[876] However, we consider there could be significant efficiency benefits if WRC were to rely on audits carried out by industry bodies and reported to WRC at appropriate intervals, with WRC undertaking random audits in addition. This would be consistent with the Court's view that available resources should be used for environmental improvements where possible, subject to appropriate regulatory checks. We will direct parties to consider the practicability of this approach and other matters raised by Mr Pinnell, from the perspective of efficiency and effectiveness and s 32 of the RMA. In our preliminary view, the alternative proposed by Mr Pinnell appears to have merit and needs reconsideration by WRC and justification if it still considers it is not appropriate.

[877] Other matters requiring consideration by parties are:

- (a) permitted and controlled activity standards and/or conditions could be included that require compliance with industry-based audits.
- (b) plans are implemented, not managed, meaning the proposed change to rules requiring a FEP to be "prepared and managed" would be changed more appropriately to "prepared and implemented";
- (c) with regard to Schedules D1 and D2, consideration should be given to whether the type of riparian planting should be recorded;
- (d) reconsideration of whether the dates specified in Table 3.11-2 should be the dates by which FEPs must be submitted or certified, for the reasons set out by Mr Pinnell; and

- (e) proposed addition 2h to Part C of Schedule D2: The location of critical source areas is to be qualified to take account of the matters raised in Part F22 of this decision.
- (f) any other relevant matters raised elsewhere in this decision.

[878] We considered Fish and Game’s comment that a FEP should be prepared and that both the farm and the FEP are managed in conformance with Schedules D1 and D2. We generally agree with WRC’s response and consider that the amended wording set out in (b) in the above paragraph will achieve the outcome sought by Fish and Game.

F22 Critical sources areas

[879] During the hearing, the identification of Critical Source Areas (**CSA**) (and therefore the definition of them) was something that farmers were very concerned about. In closing, the Joint Farming Parties referred to them as “like an elephant, difficult to describe but you know one when you see one”. The Joint Farming Parties subsequently advised that their farmer representatives “have again raised concern about how a requirement to map all CSAs will be implemented (in a consistent and practical way) and the importance of getting the definition of CSA right. Depending on how a CSA is defined, and potentially the time of year and person undertaking the assessment, a requirement to map *all* CSAs could be a very complex and resource intensive process.”⁴⁴⁵

[880] In both the Decisions Version and WRC’s Final Proposal, Policy 2 requires that “... adverse effects of stock on waterbodies are minimised, including by the identification and management of critical source areas, ensuring that access of stock to waterbodies does not cause conspicuous pugging and exacerbated erosion; ...”. Policy 4 requires the identification of “... land most vulnerable to diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens including critical source areas for overland flow of sediment, phosphorus and microbial pathogens ...” and

⁴⁴⁵ WRC Memorandum dated 27 March 2025, Annexure B, Joint Farming Party feedback on WRC amendments to farm plan schedules dated 13 February 2025.

taking “... a risk-based approach to managing land use, including adaptive management, to reduce diffuse discharges ...” and identifying suitable mitigating actions.

[881] While perhaps a minor point in the context of PC1 as a whole, the policy conflates contaminants that travel via diffuse discharges, which means via soil water and groundwater, with contaminants delivered via overland flow. The provision would read more correctly if “including” was replaced by “and”. However, as the policy applies only to diffuse discharges, consideration could be given to rewording the provision as the identification of “... land most vulnerable to diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, which for the purposes of PC1 includes critical source areas for overland flow ...”. We leave it to WRC’s discretion as to whether it wishes to make the change.

[882] There was no definition of critical source area in the Notified Version or the WRP. The following definition was included in the Decisions Version:

For the purposes of Chapter 3.11, means those areas of farmed land that contribute a disproportionately large amount of sediment, phosphorus and microbial pathogens to surface water.

[883] A matter of appeal raised by Federated Farmers was:

Federated Farmers is concerned that the definition proposed is too vague and broad e.g. it raises the question of “disproportionately large” compared to what? Federated Farmers considers that any definition must be clear, able to be applied by plan users and Council to any situation and based on farming practices or common sense and consistency with industry and farming practice.

[884] The Court explored the appropriate definition of critical source areas in some detail through the hearing process but eliciting an appropriate definition proved elusive. Our primary concern was that there would be room for very different interpretations by different farmers, FEP reviewers, certifiers or auditors and consent officers. The Joint Farming Parties proposed a definition in closing and WRC proposed the following definition in its memorandum dated 27 March 2025:

For the purposes of Chapter 3.11, means a landscape feature on farm such as a gully, swale or depression, or infrastructure feature such as a gateway, race or water trough that –

- a) accumulates surface runoff comprising nitrogen, phosphorus, sediment or microbial pathogens from adjacent land in high concentrations; and
- b) is linked to downstream surface waterbodies through permanent, intermittent or ephemeral flow paths.

For example:

- a landscape feature like a gully, swale or a depression (including ephemeral flow paths) that accumulates runoff from adjacent flats and slopes and delivers it to surface water bodies (including lakes, rivers, artificial watercourses and modified watercourses) or subsurface drainage areas; or
- an infrastructure feature that has high levels of contaminant losses, such as silage pits, fertiliser storage areas, stock camps and laneways.

[885] WRC’s proposed definition closely aligns, in effect, to the Joint Farming Parties’ proposed definition. However, critical source areas more accurately “result in” rather than “accumulate” surface runoff comprising nitrogen, phosphorus, sediment or microbial pathogens from adjacent land in high concentrations; surface runoff may be relatively clean before it reaches the critical source area. The definition of “high concentrations” will be open to different interpretations. While there is no easy way to avoid some uncertainty, consideration could be given to rewording a) to read: “results in surface runoff containing nitrogen, phosphorus, sediment or microbial pathogens in concentrations significantly above average for the farm”. We also consider that areas of unstable ground with high erosion potential need to be recognised as critical source areas. Subject to these matters being addressed to our satisfaction, we accept WRC’s definition as appropriate for the purposes of Chapter 3.11.

[886] The Joint Farming Parties made a drafting note that the definition should include reference to guidance documents or photographs as appropriate. We share that view as we found WRC’s document identified as Exhibit 6 in the Court record, “Critical source areas” provided a good example of “a picture is worth a thousand words” and will direct WRC to submit an appropriate guidance document for consideration by the Court to be included in PC1 by reference.

[887] While we acknowledge the concern raised by the farming parties about the difficulty of mapping critical source areas, we consider appropriate mapping to be an essential starting point for a longer-term process to effectively manage them. The first step would be to identify areas with the greatest potential to generate run-off with high contaminant loads and we do not accept that would be a difficult or onerous task for farmers familiar with their land.

[888] Practically, the focus should be on these areas as it will not be possible to address all critical source areas within the term of PC1. Greater certainty of expectation would be provided by amending the proposed change to Schedule D2, Part C2.h along the lines “[t]he location of critical source areas with the highest potential to generate surface runoff comprising nitrogen, phosphorus, sediment or microbial pathogens from adjacent land for which mitigation measures will be implemented during the anticipated 10-year term of PC1”. We will direct WRC to propose appropriate wording for determination by the Court.

[889] As discussed in Part F17, if an ephemeral stream presents a significant risk of discharges of any of the primary contaminants, it could be considered as a critical source area and managed accordingly. The same could apply to unfenced drains.

F23 Intensive winter grazing

[890] In response to WRC’s proposals to amend the FEP provisions, Fish and Game sought clarification of why intensive winter grazing rules have not been retained as a minimum standard in PC1. WRC noted that in subsequent correspondence, Fish and Game queried whether the original PC1 provisions should be reinstated as the relevant provisions of Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (**NESFW**) have been repealed.

[891] Schedule 1 of the Notified Version required a minimum cultivation setback of 5 m but no specific requirements relating to winter grazing. Permitted activity Rule 3.11.5.2 required that no part of the property or enterprise over 15° slope is cultivated or grazed.

[892] The 5 m setback requirement was retained in Schedule C of the Decisions Version. The hearing Panel recorded that:⁴⁴⁶

... standards have also been included in Schedule 3 relating to the use of sacrifice paddocks and the grazing of winter forage crops. These include retaining a 10 metre un-grazed vegetated buffer adjacent to any waterbody where an area is to be utilised for winter forage crop grazing or as a sacrifice paddock; and that no cattle older than 2 years or greater than 400kg lwt are grazed on forage crops on LUC class 6e, 7 or 8 land from 1 June to 1 September.

As above, notified Rule 3.11.5.1 had a standard precluding cultivation or grazing on slopes over 15 degrees. We heard from many Hill Country farmers whose farms are substantially or principally over 15 degrees. They told us that a general exclusion of grazing on slopes greater than 15 degrees would put them out of business.

The general standard inserted into Schedule C related to grazing forage crops addresses the greatest risk to erosion-prone land. We also recommend an additional restriction on grazing of heavier stock on land over 25 degrees to ensure that effects of the activities authorised by Rule 3.11.4.1 are minor.

[893] Under the heading of sacrifice paddocks and winter forage crop grazing, Part D of Schedule D1 of the Decisions Version relating to permitted activities includes the following requirement:

When any land adjacent to a Schedule C Clause 5 waterbody is being utilised for the grazing of a winter forage crop (from 1 June to 1 September) or as a sacrifice paddock, an un-grazed vegetated buffer at least 10 metres from the edge of the waterbody shall be maintained.

[894] Other requirements are included relating to winter grazing on LUC class 6e, 7 or 8 land, including where slope exceeds 20°, break feeding and temporary fencing of ephemeral streams. Cultivation must not occur within critical source areas. Condition 8 of permitted activity Rule 3.11.4.1 requires that no stock above 400kg shall be grazed on land with a slope of 25° or greater.

[895] The following appeals related to cultivation setbacks, winter grazing and related matters:

⁴⁴⁶ Recommendation Report from [1548].

- (a) HortNZ and the Pukekohe Vegetable Growers Association sought that commercial vegetable production is excluded from the 10 m setback requirement;
- (b) Beef and Lamb sought that the setback distance be reduced from 10 m to 5 m and amendments to Schedule C (8) and (9) relating to winter grazing of forage crops on LUC class 6e, 7 or 8 land, live weight and age limits;
- (c) Federated Farmers sought, among other things, that the setback distance be reduced from 10 m to 5 m and amendments to Part D of Schedule D1 to refer to strip grazing of winter forage crops on any land where slope exceeds 25° and delete reference to LUC 6e, 7 and 8 and to 30 cattle grazed in an individually fenced area. Federated Farmers also sought an amendment to the definition of cultivation to provide further clarity about the activities that are excluded or amend the definition itself to clarify the nature of the activity.
- (d) WRC sought the removal of references to LUC and replacement with slope-based criteria, including “No winter grazing of forage crops occurs on land with a slope greater than 25° from 1 June to 1 September where the number of cattle grazed exceeds 30 in an individually-fenced area”;
- (e) WPL considered that the provisions should restrict winter grazing on forage crops on steep land rather than on LUC class 6e, 7 or 8 land and be amended so that no cultivation takes place on any land where slope exceeds 25°.
- (f) the Director General sought that the setback from cultivation to water bodies be increased from 5 m to 10 m and sought additional wording relating to environmental outcomes that can be achieved from the exclusion of stock and from requiring setbacks for activities such as

fertiliser application, sacrifice paddocks and winter forage crop grazing and cultivation;

[896] Mr Trebilco stated that a number of appellants requested that Schedule C (8) and (9) of the Decisions Version relating to sacrifice paddocks and winter forage crop grazing be deleted because they considered the provisions too restrictive and inflexible. We were unable to find appeals requesting this. He also stated that he considered the NESFW requirements were more stringent and likely to be more effective than the PC1 provisions that managed winter forage crop grazing.⁴⁴⁷

[897] Key requirements of the NESFW for intensive winter grazing to be permitted were that livestock must be kept at least 5 m from the bed of any river, lake, wetland or drain; the area of the farm used for intensive winter grazing is no greater than 50 ha or 10% of the area of the farm; and the mean slope of the paddock that is used for intensive winter grazing is 10° or less. We largely agree with Mr Trebilco in relation to stringency and effectiveness, but note that the setback requirement of the Decisions Version is significantly more stringent than that of the regulations.

[898] To avoid confusion between the two sets of provisions, Mr Trebilco considered that the PC1 provisions relating to winter forage crop grazing should be deleted but did not refer to scope to do so. He also considered that having PC1 provisions that regulate “winter forage crops” and NESFW provisions that manage “intensive winter grazing”, where the definitions of these two phrases are not aligned, creates confusion for farmers and regulators. WRC’s Final Proposal includes no reference to winter grazing but Schedule D1 retains provisions relating to sacrifice paddocks as these are not addressed in the NESFW, including the requirement for them to be setback 10 m from water bodies. We agree with Mr Trebilco in relation to his confusion point and it would benefit from being addressed by WRC.

⁴⁴⁷ Mr Trebilco EIC at [293] and [407].

[899] The NESFW provisions Mr Trebilco relied on before deleting the PC1 provisions were subsequently replaced and now require:

- (a) a 5-metre buffer strip between intensive winter grazing and any river, lake, wetland, or drain; and
- (b) no intensive winter grazing of critical source areas and maintenance of vegetated ground cover in critical source areas.

[900] In its 27 March 2025 memorandum, WRC stated that the combination of these changes has increased the risk of contaminant losses from intensive winter grazing to fresh water, with the potential to adversely affect water quality and:

Of particular concern is the removal of limits on slope of land that can be used for intensive winter grazing, the limits on the area of the farm that can be used for intensive winter grazing, and the reduction in setback from waterways.

... the inclusion of specific intensive winter grazing provisions would better ensure that losses from intensive winter grazing (which potentially have a significant impact) will be minimised.

[901] By way of a summary, WRC considers there is now a regulatory gap which requires further consideration, “although it is not in a position to suggest changes to PC1” which “... may be a matter addressed in the Court’s interim decision”.

[902] We observe first that the drafting of provisions is a matter for WRC and not the Court. We also observe that if WRC is not in a position to suggest changes, it is unclear to us how the Court would be. However, we kept abreast of the changing regulations and proposals relating to intensive winter grazing from the time of the hearing. Based on the above summary and the submissions and evidence received, we set out our preliminary evaluation below. We will direct WRC to propose provisions that take account of this evaluation, after consultation with other parties, for our final determination.

[903] For the avoidance of doubt, we note that s 6(1) of the NESFW provides for a regional rule or resource consent to be more stringent than the regulations.

Legal submissions

[904] Fish and Game sought that stock be excluded from waterbodies with a slope of up to 15° or over 15° where any paddock adjoining the waterbody is used for intensive winter grazing or where the number of stock units in any paddock adjoining the waterbody exceeds 18 per grazed hectare at any time.

[905] No other changes to the provisions relating to winter grazing were sought in opening or closing submissions.

Evidence

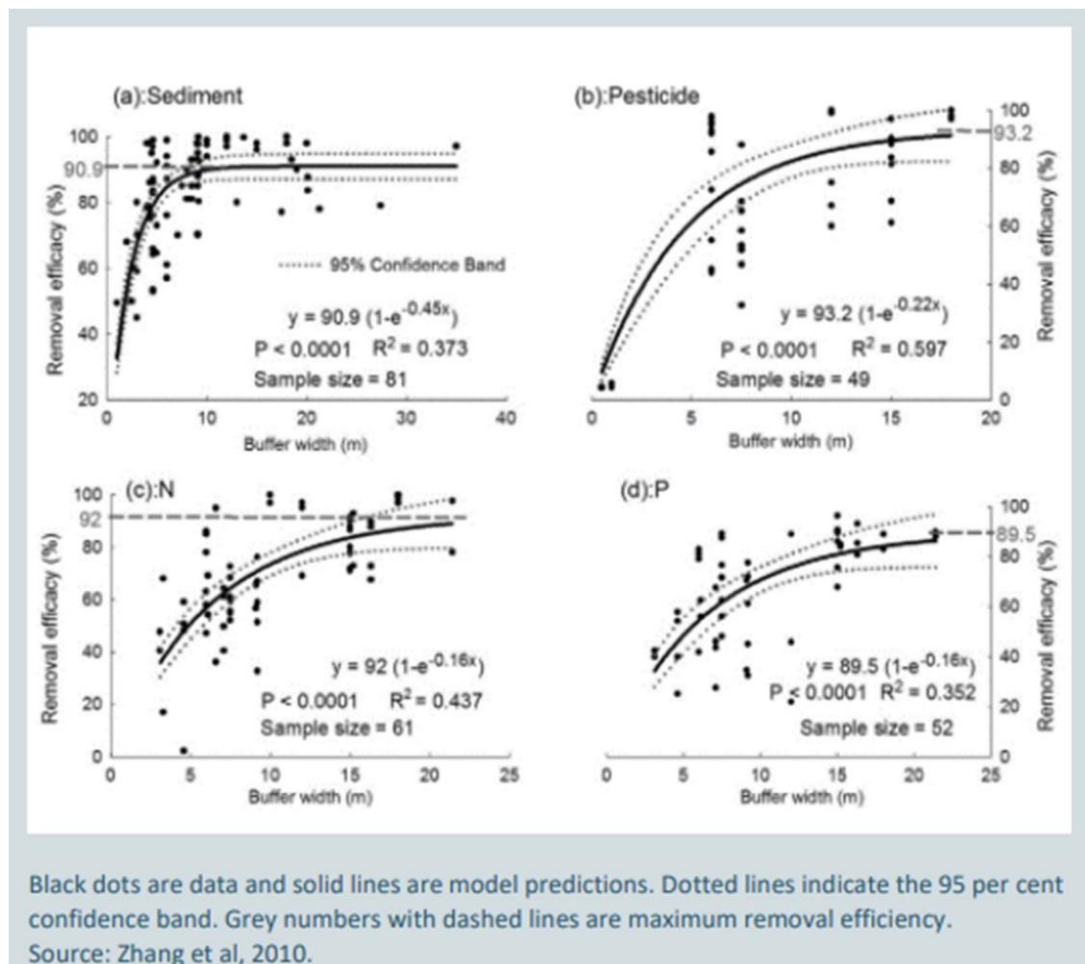
[906] Mr Brocksopp included the following graphs of recently published data by MfE,⁴⁴⁸ from which he concluded that a 10 m buffer strip is appropriate as a minimum for sacrifice paddocks.⁴⁴⁹ In the preamble to the graph in the MfE document, it states:

Despite wide data scatter, the meta-analysis shows that for a land slope less than 10 degrees, a buffer width of 5 metres can potentially remove more than 60 per cent of sediment and less than 50 per cent of nitrogen and phosphorus in surface run-off (figure 3). In all cases, the ability of the buffer to remove contaminants and sediment increases quickly as it gets wider with this rate of increase slowing as the buffer width increases until the effectiveness approaches a maximum value.

[907] It went on to say that the meta-analysis was not considered in the context of intensive winter grazing areas where contaminant run-off is typically higher than in areas of grazed pasture, which in our view means that limited weight can be given to it in the context of managing intensive winter grazing.

⁴⁴⁸ MfE: Critical source areas: Guidance for intensive winter grazing” (March 2023)

⁴⁴⁹ Mr Brocksopp EIC at [110] and [111].



[908] Mr Colin Guyton, a dairy Farmer and president of the Rotorua-Taupō Federated Farmers stated that Fonterra requires its suppliers to prepare a winter grazing plan to show how cows will be grazed during winter.⁴⁵⁰ Mr Aslan Wright Stow, who is the Senior Manager - Environment at DairyNZ and gave evidence on behalf of Fonterra, provided a copy of a Tiaki Farm Environment Plan for a farm in Southland which described how winter grazing is managed. He stated that:

While quantifying improvements in water quality related to implementation of FEPs is challenging, FEPs delivered on dairy farms at catchment-scale, that are supported by one-on-one advice and follow up, have been demonstrated to reduce nitrogen and phosphorus by 8% and 21% respectively, in one study, and improve two thirds of contaminant concentrations in another – all without consents.

⁴⁵⁰ Mr Guyton EIR at [26].

[909] Mr Reon Verry, a sheep and beef farmer giving evidence on behalf of Federated Farmers, described his experience of proactively managing his winter grazing activities based on a forage management plan. He referred us to MfE's Intensive Winter Grazing Module, dated November 2022.⁴⁵¹ This states "Undertaking IWG on steeper slopes increases the risk of runoff into waterbodies. The risk rises significantly on slopes greater than 10°, ... Areas with a slope above 10° fall outside the permitted activity conditions, and you will need to obtain a resource consent or a certified Freshwater Farm Plan to undertake IWG in these areas." He stated that "I have seen many cases of bad winter grazing practices on pasture by dairy farms on hillsides in winter months leading to sediment loss to waterways which are fenced but with non-existent buffer zones."⁴⁵²

[910] Dr Depree referred to research which found that activities involving bare soil, including winter grazing, can have soil losses that are an order of magnitude higher than pastoral grazing.⁴⁵³

[911] Dr Chrystal identified contour as a key driver for sediment generation. She stated that during winter grazing, stock density can rise to 300 to 600 cows/ha or 2,250 to 4,500 SU/ha and the impacts on both soil structure and N leaching are increased when the area is grazed by larger animals. She considered the risk to be managed is grazing intensity (the number of stock unit equivalents grazing an area at a time), which needs consideration of the size of the individually fenced area and the length of time animals spend in it. She identified a range of other factors that need to be considered when assessing risk, noting that risk assessment can be effectively done through an FEP.⁴⁵⁴

[912] Mr Brocksopp accepted that slope requires consideration when assessing risk and that certain restrictions required by Schedule D1, Part D4b should only apply

⁴⁵¹ <https://www.mpi.govt.nz/dmsdocument/44866-20212022-Intensive-Winter-Grazing-Module>.

⁴⁵² Mr Verry EIR at [49].

⁴⁵³ Dr Depree EIR at [2.2].

⁴⁵⁴ Dr Chrystal EIC at [37], [51](e) and [241].

on land with a slope greater than 20°. ⁴⁵⁵ When questioned by Ms Tumai for the Director-General, Ms McArthur stated that in the Southland Water and Land Plan, setback distances in relation to intensive winter grazing and pasture based wintering of cattle and cultivation were 10 m at a slope less than 10° and 20 m at a slope 10° or greater. ⁴⁵⁶

[913] Dr Depree considered the relative proportion of dairy and drystock on steeper land and their respective contributions to soil losses. ⁴⁵⁷ He found that the percentage of drystock farmland on slopes steeper than 5, 10, 15, 20 and 25° is 53%, 31%, 17%, 9% and 4%, respectively. By comparison the percentage of dairy farmland on slopes steeper than 5, 10, 15, 20 and 25° is 31%, 13%, 6%, 3% and 1%, respectively.

[914] He estimated the area greater than 10° indicatively as 113,800 ha of drystock compared to 64,000 ha greater than 15°, a difference of approximately 50,000 ha. For dairy farming, the equivalent indicative figures are 46,000 and 21,000 ha, and a difference of 25,000 ha. Indicatively, there are 30,000 ha of drystock farms on slopes between 15 and 20°, 18 000 ha between 20 and 25° and 15,000 ha above 25°. The corresponding figures for dairy are 12,000 ha on slopes between 15 and 20°, 6,000 ha between 20 and 25° and 4,000 ha above 25°.

[915] The areas of drystock and dairy land with slopes greater than 15° are 64,000 ha and 21,000 ha respectively. There is no requirement for these areas to be fenced under PC1, but we anticipate that meaning stock intensively winter grazing would be excluded from streams by temporary fences needed to maintain a buffer.

Further submissions in response to WRC's proposals dated 27 March 2025

[916] WPL challenged the restrictions placed on LUC class 6e, 7 or 8 land, a matter raised in its appeal, and stated it would not oppose the retention of winter

⁴⁵⁵ Mr Brocksopp EIR at [55] by reference to the evidence of Ms Dines, Mr Tresler and Mr Ford, witnesses for WPL.

⁴⁵⁶ NOE at 741.

⁴⁵⁷ Dr Depree EIC from [6.17].

grazing clauses provided there is no reference to LUC class 6e. It was clear from the submission that WPL was not opposed to appropriate restriction on IWG on slopes greater than 20°.

[917] For completeness, we note that WPL stated that because it was content with the changes made in the post-mediation version in relation to these parts of its appeal, no evidence was called. The Joint Faming Parties responded that they reserved their position as the time available had not allowed them to consider the matter.⁴⁵⁸ The point was not clear to the Court but in any event, any changes agreed at mediation would still need to be within scope.

[918] Federated Farmers and Beef and Lamb confirmed that they maintained their position on the amendments to the Schedules at Annexure E of WRC's memorandum.

Our preliminary evaluation

[919] We are satisfied based on the evidence that winter grazing can present significant risks of diffuse or overland flow discharges of the four primary contaminants and that the risks increase as land slope increases. As the Hearing Panel stated "[t]he grazing of winter fodder crops is a recognised high-risk activity with respect to the loss of sediment, bacteria, P, and N to water."⁴⁵⁹ We are also satisfied that FEPs provide the most appropriate method of managing diffuse discharges from intensive winter grazing on individual farms, and that some can be permitted subject to certain conditions being met. The concept of winter grazing plans in FEPs appears to have merit in terms of practicability.

[920] As noted above, WRC sought that no winter grazing of forage crops occurs on land with a slope greater than 25° under specified conditions, meaning it would be a prohibited activity. We received no evidence to support such a proposal but as

⁴⁵⁸ Memoranda dated 4 April 2025.

⁴⁵⁹ Recommendation Report at [1701].

will be seen later, we consider that any intensive winter grazing on slopes greater than either 10° or 15° should require a resource consent.

[921] The Hearing Panel included standards relating to the use of sacrifice paddocks and the grazing of winter forage in the Decisions Version, stating in the Recommendation Report that:

These include retaining a 10 metre un-grazed vegetated buffer adjacent to any waterbody where an area is to be utilised for winter forage crop grazing or as a sacrifice paddock; and that no cattle older than 2 years or greater than 400kg lwt are grazed on forage crops on LUC class 6e, 7 or 8 land from 1 June to 1 September.

Notified Rule 3.11.5.1 had a standard precluding cultivation or grazing on slopes over 15 degrees. We heard from many Hill Country farmers whose farms are substantially or principally over 15 degrees. They told us that a general exclusion of grazing on slopes greater than 15 degrees would put them out of business.

Those farmers accepted the need to manage hill country erosion, but they said they

did that by retiring the steepest slopes and limiting winter grazing to sheep and young cattle.

[922] The evidential basis relied on by the Panel is not clear from the Recommendation Report and the findings are contrary to some of the evidence before us. Unless WRC provides evidence to the contrary, any determination we make will need to be based on pragmatism as the currently available evidence falls well short of what is required to undertake a robust evaluation in accordance with s 32AA of the RMA. We expect the Hearing Panel found itself in a similar position. However, we are satisfied that slope and stocking rate are important considerations. We will direct WRC to consider the following preliminary views when proposing intensive winter grazing provisions for final determination by the Court.

[923] Based on a 10 m buffer being required by the original regulations for slopes of 10° or less and the MfE advice referred to above, it appears to us that wider buffers would be required for any intensive winter grazing on slopes greater than 10°. We note the Southland provisions referred to by Ms McArthur but have

received no PC1 specific evidence relating to the issue. This is a matter that WRC needs to consider.

[924] We are satisfied that there is less of a case for wider buffers on land with a slope of 10° or less, but at any time before a water body is fenced, we consider a minimum buffer of 10 m must be provided for intensive winter grazing to be permitted and the FEP must set out how the land would be managed to minimise discharges of the four primary contaminants from the grazed area until fencing is in place. Once the area has been fenced, where it has been set back a minimum of 10 m from a water body, grazing up to the fence could be permitted. Where the set back is less, grazing up to 5 m from the fence could be permitted as a minor incentive to encourage fencing to occur sooner.

[925] Our current view is that intensive winter grazing on any land with a slope greater than either 10° or 15° should require a restricted discretionary or discretionary resource consent, but WRC will need to consider but not be necessarily limited to both options as part of a s 32AA evaluation to confirm the slope at which this requirement should apply and the appropriate minimum buffer width. As part of the evaluation, the provisions relating to land with a slope between 10° and 20° require consideration of a number of matters, including:

- (a) indicatively, the area of land greater than 10° and up to 20° exceeds 100,000 ha, which suggests that without effective controls on intensive winter grazing, effects on the environment could be significant and contrary to the objectives of Te Ture Whaimana; and
- (b) would a 10 m buffer on land with a slope of between 10° and 20° reduce discharges of the four primary contaminants sufficiently to enable the activity to be permitted and, if so, what conditions should apply? and
- (c) if not, what wider buffer would be required for an activity to be permitted and would there be scope to require that without a s 293 process?

[926] It is unclear to us that setting regional rules relating to stocking rates and LUC is the most appropriate way to meet the objectives or whether they might be addressed more appropriately by way of FEPs and consent conditions. Our preliminary view is that references to LUC may unnecessarily complicate the provisions, taking into account the uncertainties associated with mapping accuracy, the current state of knowledge about many other aspects of the PC1 environment and there being no evidence of demonstrated benefit before us. Several appeals sought the removal of the references and unless any party can demonstrate why that is not appropriate, we will direct their removal.

[927] WRC is also to propose provisions to manage intensive winter grazing on slopes exceeding 20°, and the most appropriate activity status.

[928] By way of final observations on this topic, the evidence is clear that drystock farming is the main contributor of sediment in the PC1 area by a significant margin and that winter grazing is a significant source of sediment discharges. We consider that both dairy and drystock farming must meet the buffer zone requirements finally included in PC1; that activities to which the buffer zones apply requires clarification; and that any confusion arising from use of “winter forage crops” and NESFW provisions that manage “intensive winter grazing” is addressed.

F24 Definitions of “property” and “Single operating unit” and Rule 3.11.4.9

Background

[929] Rule 3.11.5.7 in the Notified Version, renumbered 3.11.4.9 in the Decisions Version and WRC’s Final Proposal, - Non-Complying Activity Rule – Land Use Change, was:

Notwithstanding any other rule in this Plan, any of the following changes in the use of land from that which was occurring at 22 October 2016 within a property or enterprise located in the Waikato and Waipa catchments, where prior to 1 July 2026 the change exceeds a total of 4.1 hectares:

1. Woody vegetation to farming activities; or
2. Any livestock grazing other than dairy farming to dairy farming; or

3. Arable cropping to dairy farming; or
4. Any land use to commercial vegetable production except as provided for under standard and term g. of Rule 3.11.5.5

[930] The following definition of enterprise was included in the Notified Version

Enterprise/s: means one or more parcels of land held in single or multiple ownership to support the principle land use or land which the principle [sic] land use is reliant upon, and constitutes a single operating unit for the purposes of management. ...

[931] While there was no definition of single operating unit or property in the Notified Version, property was defined in the operative WRP as “[f]or the purposes of Chapter 3.3 [*Water Takes*] and 3.4 [*Efficient Use of Water*] means one or more allotments contained in single certificate of title, and also includes all adjacent land that is in the same ownership but contained in separate certificates of title”. In Variation 1 to the Notified Plan, the WRP definition was amended to include Chapter 3.11, which is the operative version of PC1.

[932] The Hearing Panel stated, “[i]t was clear from the discussions at the hearing (mainly Blocks 2 and 3) that a property was intended to refer to a ‘single’ property or farm, while an enterprise referred to multiple properties which were “*a single operating unit for the purposes of management*”.⁴⁶⁰ The Panel cited the following views expressed by officers, which they largely accepted:

The Block 2 report did not make recommendations with respect to “enterprise”, there being a general recognition that the definition of enterprise and how enterprises are managed could have had an overlap with the sub-catchment planning submissions. Setting that aside, Officers consider that enterprises can at times be complex, particularly in terms of the management of discharges of the four contaminants, uncertainty with respect to assigning NRP loss rates or other contaminant losses, and the application of FEPs. These matters are particularly pertinent when a piece of land may enter or leave an enterprise.

If the Hearing Panel was of a mind to continue to use “enterprises”, Officers consider that the complexity of management make it unlikely that a permitted or controlled activity status would be appropriate for an enterprise. A restricted discretionary activity status, while possible, may need a large list of restrictions of discretion in order to capture every possible permutation of “enterprise”. In any event, if the term is to be retained, Officers recommend that the same

⁴⁶⁰ Recommendation Report from [1881].

condition applying to other rules, that triggers a noncomplying activity status for intensification, ought to apply to the whole enterprise, and a definition that is mutually exclusive with property be used.

...

Officers recommend that a new policy be introduced to support resource consents for multiple properties, but overall consider that there are complexities and risks involved with farming operations spread across multiple properties, or multiple properties coming under the same resource consent, such that a controlled activity status is not considered appropriate or sufficiently precautionary.

[footnotes omitted]

[933] After considering the evidence, the Panel recommended deletion of the term enterprise, which is reflected in the Decisions Version, and amended the definition of property to read:

For the purposes of Chapter 3.11, means, to the extent that the land is within the Waikato and Waipā River catchments shown in Map 3.11-1, one or more allotments contained in single Computer Freehold Register (certificate of title), and also includes all adjacent land that is in common ownership but contained in separate certificates of title, including certificates of title separated only by a road, river or utility corridor, and is a single operating unit for the purpose of management.

[934] Single operating unit was not defined.

[935] We are satisfied from the plan provisions themselves, the s 32 report, the Recommendation Report and the submissions and evidence presented to the Court that the provisions relate to the management of individual farm operating units. These may be a stand-alone drystock, arable or CVP activity or, in the case of dairy farming, a single milking platform and associated effluent disposal system.

Relevant appeals

[936] Federated Farmers gave a reason for appeal as:

The notified version of PC1 provided for a “farm enterprise” approach, which considered the farming activity as a whole. Unfortunately, the decisions version has effectively adopted a property approach, which effectively divides an existing activity by property location. The implication is that many farming activities would default to the discretionary activity rule because they are carried out on more than one property.

[937] The relief sought was such other amendments to policies, rules and definitions to ensure that a “farm enterprise” approach is adopted. The following amended definition of farming enterprise or enterprise was sought where necessary to achieve a farm enterprise approach:

Enterprise/s: means one or more parcels of land held in single or multiple ownership to support the principle [sic] land use or land which the principle [sic] land use is reliant upon, and constitutes a single operating unit for the purposes of management. ...

[938] WPL submitted in its appeal that the lack of consistency of terminology and phrasing used in PC1 relating to property, farming, farming enterprise and the like could be improved by minor drafting corrections and that:

The definition of Property in the Decision Version of PC1 is a combination of the two defined terms – Property and Enterprise – in the Notified Version. The addition of “and is a single operating unit for the purpose of management” from the Enterprise definition adds nothing but confusion and the risk of properties not otherwise meeting the definition.

[939] The relief sought was to amend the definition of Property to delete reference to “and is a single operating unit for the purpose of management” or such other relief that better reflects how farming actually occurs on multiple land areas.

[940] WPL also raised the following matters of concern:

7e. The lack of any flexibility to farm on more than one property as either a permitted or controlled activity (Rule 3.11.4.7(7A)) and the confusion as to whether doing so is considered a “collective” as per the heading, a “group” as suggested in Schedule A, clause 4(g), a “sector scheme” as envisaged in Schedule E but not referenced elsewhere or simply on a land area that does not meet the defined term.

...

7m. The blanket control imposed on changes in land use since 22 October 2016 in Rule 3.11.4.9 which requires retrospective consent to be obtained as a non-complying activity for lawful change that has already occurred, guided by policies that inappropriately restrict the opportunity to obtain consent, such as Policy 2(c) and 5, or seek to broaden the scope of PC1, such as Policy 19 with no regard to the NLLR or the effects of such land use change.

...

56. It is a non-complying activity to change more than 4.1 hectares of a property from woody vegetation to farming, or from any land use to dairy farming. The area of change is measured cumulatively from the date PC1 was notified, 22 October 2016.
57. The use of 22 October 2016 was appropriate in the notified version of PC1 to “halt further land use change” until PC1 was in place. The moratorium could only be on land use change that could not be lawfully carried out in reliance on existing rights. ...
58. However, retaining that date in the Decision or the operative version of Rule 3.11.4.9 will catch any land use change that has been lawfully carried out in reliance on a certificate of compliance or resource consent. The retrospective nature of the rule is inappropriate. Replacing 22 October 2016 with the operative date of PC1 in the final version of the rule will be entirely consistent with the purpose and intent of the rule as notified, while removing the unlawful retrospectivity of the rule.

[footnotes omitted]

[941] WPL sought that Rule 3.11.4.9(2) be deleted and replaced with a new discretionary activity rule as discussed below and that the date referenced in 4(d) of Schedule A is amended to when PC1 is made operative.

Legal submissions

[942] Federated Farmers and Beef and Lamb sought changes to the definition of property to include all adjacent land that is leased, not just adjacent land that is in common ownership. They submitted that:⁴⁶¹

Where one farm plan is prepared for more than one property – to clarify that the drafting gate and applicable standards cannot be averaged across multiple properties (which could have the effect of resulting in a more lenient activity status) and must be met on each property.

Where more than one farming activity occurs on one property – to clarify that it is the highest risk farming activity that determines the activity status, ...

[943] At the hearing, WPL submitted in opening that Rule 3.11.4.9 is *ultra vires*:

Unlike the other rules in PC1, it is not a hybrid rule covering both land use and the associated diffuse discharges. Nor does it authorise any use of the land. As Mr Trebilco confirmed, any consent granted under this rule would simply allow the farmer to change the use of the land but would not allow them to undertake the new use. That new use (and its associated discharges) would then need to be either permitted or consented under one of the other rules.

⁴⁶¹ Opening submissions dated 29 September 2023 at [6.13].

In my submission, such a rule is ultra vires.

As a Full Court bench confirmed in *Re Auckland Council*, a resource consent can only be required for an “activity” and “activity” means physical activity or a dynamic use of land. The change envisages under Rule 3.11.4.9 is not an “activity”.

...

In my submission, as a consent issued under 3.11.4.9 does not allow the consent holder to use the land it is ultra vires the RMA and should be deleted.

In the alternative, WPL requests the reference date be amended and the activity status changed to discretionary.

...

[WPL] considers there is no justification for requiring a landowner to split their landholding into multiple “single operating units” for consenting and/or management purposes.

...

A definition of “single operating unit” has since been recommended for inclusion in the glossary. WPL is not opposed to the inclusion of that new definition, ***provided*** that the phrase “single operating unit for the purpose of management” is deleted from the definition of property. Without that deletion, it opposes the introduction of the new definition as the Estate will go from one property to in excess of 25 properties.

[footnotes omitted]

[944] WPL also submitted that there is no scope to amend the rule to address the *vires* issue, meaning instead that it must be deleted.⁴⁶²

[945] WPL’s submissions recorded that the Estate is in common ownership.

[946] We also note that Rule 3.11.4.9 was the subject of appeals by Iwi parties. We address those appeals separately in Part F28.

WRC responses to the appeals

[947] In closing,⁴⁶³ WRC referred to WPL’s position in relation to the above definitions, stating:

WPL seeks to delete the phrase ‘and is a single operating unit for the purpose of management’ from the definition of ‘property’. If that deletion is not made,

⁴⁶² Opening submissions, by reference to Mr Trebilco’s preliminary comments, NOE at 383 and *Re Auckland Council* [2016] NZRMA 319.

⁴⁶³ Closing submissions at [18], including by reference to Mr Trebilco EIC at [360] and EIR at [388].

WPL opposes the introduction of the definition of ‘single operating unit’, because Wairakei Estate has 20 milking platforms and would be considered at minimum as 20 properties each of which would require separate FEPs and consents.⁴⁶⁴

It is important to note that the significance of Wairakei Estate being considered as multiple properties is that it cannot be considered for a single controlled activity consent. If a single consent and FEP is preferred, then that would be available as a discretionary activity under Rule 3.11.4.7.

... If an operation like Wairakei Estate had one consent and one FEP, these would necessarily be lengthy and complex documents. It may be much more difficult for all the individual farm operators on a large corporate farm (e.g. with many separately managed dairy platforms and drystock operations) to be fully involved with the requirements specific to their operation.

[footnotes omitted]

[948] WRC went on to submit that:

... a single controlled activity consent and FEP would not be appropriate for large properties comprising many independent operations. The operating unit is the appropriate scale for assessing and managing effects, for example each milking platform would have its own effluent disposal system. As noted above, if a larger set of operations wanted a single consent, it is able to apply for that as a discretionary activity. WRC therefore does not support the amendments to the definition of ‘property’ sought by WPL.

Mr Trebilco also proposed the following note to precede the rules in Section 3.11.4 of PC1:

Note:

Where the use of land for farming involves different types of farming activities on a property or single operating unit as defined in the Glossary:

- a) Where a Farm Environment Plan is to be prepared, it may be prepared for a single property or a single operating unit as defined in the Glossary; and
- b) Where a resource consent is required for the farming operation, the activity status will be that which applies to the highest risk farming activity being undertaken on the property or single operating unit. ...

[949] When responding to the appeals in his EIC, Mr Trebilco referred to the complexity of multiple property farming operations.⁴⁶⁵ He proposed the inclusion of the following definition of single operating unit to provide for more than one

⁴⁶⁴ NOE from 497.

⁴⁶⁵ Mr Trebilco EIC from [323].

property, provided there are limitations so that implementation of the rule is not compromised:

Single operating unit means farming occurring on one or more parcel(s) of land, including non-adjacent land, where the parcel(s) of land support a principal farming activity and are managed as a single integrated unit. For the avoidance of doubt, this includes:

- i. A dairy farm and supporting parcels of land used for the purpose of growing feed for the dairy cattle and/or grazing of dairy support cattle;
- ii. A drystock farm where stock, irrespective of type and/or class, are grazed across non-adjacent parcels;

But does not include those activities in the nature of:

- i. Dairy farm land comprising of more than one milking platform, where a milking platform is the land dedicated to the grazing or growing of feed for those dairy cattle serviced by a milking shed;
- ii. Arable cropping across non-adjacent parcels, where it is grown for market supply of supplementary feed.

[950] In response to WPL's submission that Rule 3.11.4.9 it is not a hybrid rule, Mr Trebilco amended it in WRC's Final Proposal as follows:⁴⁶⁶

Notwithstanding any other rule in this Plan, the use of land for farming including any associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens into water or onto or into land in circumstances which may result in those contaminants entering water is a ~~following changes in the use of land~~ ~~are non-complying activities~~ activity, where the activity results from one or more of the following circumstances:

...

- 2. Any of the following changes in land use within a property, where the change exceeds a cumulative net total of 4.1 ha from that which was occurring at 22 October 2016:
 - (a) woody vegetation to farming; or
 - (b) any land use to dairy farming.

Certificates of compliance (CoC)

[951] WPL's appeal states that Rule 3.11.4.9 will catch any land use change that has been lawfully carried out in reliance on a certificate of compliance or resource consent.

⁴⁶⁶ WRC's version of PC1 dated 16 November 2023.

[952] WPL obtained CoC from WRC relating to a range of future conversion activities before PC1 was publicly notified.⁴⁶⁷ Mr Alex Tressler, WPL's Commercial Manager, stated that the CoC's covered future land use change and associated diffuse discharges. This was not disputed by WRC and we accept that evidence. The authorised land use change was undertaken after 22 October 2016.⁴⁶⁸

[953] WRC wrote to WPL on 21 December 2016 advising that:

It is our understanding that, in the absence of the certificates you have been issued, resource consent for the land use which is the subject of the certificates would otherwise have been required from 22 October 2016 under Rule 3.11.5.7.

In accordance with the requirements of s 20A of the Resource Management Act, it is our view that that consent (for a non-complying activity) will still be required under Plan Change 1, if Rule 3.11.5.7 remains in its present form when Plan Change 1 becomes operative (as defined in s43AA of the RMA).

Whilst we do not, in any way, pre-empt the outcome of the consent application process, we do draw your attention to Policy 6 of the Plan Change which states that ... "*land use change consent applications that demonstrate an increase in the diffuse discharge of nitrogen, phosphorus, sediment or microbial contaminants will generally not be granted*". ...

[954] Mr Tressler acknowledged under cross examination that while WPL's conversion of 1,452 hectares of land to dairy farming was lawful under the CoC, it was at its own risk due to the operation of s 20A.⁴⁶⁹

[955] In closing, WRC submitted that:

WRC does not support these amendments, because it would undermine PC1's intention to regulate large-scale land use change from 22 October 2016 onwards. While WRC acknowledges that WPL's land use change was able to be carried out lawfully under the certificates of compliance, the effect of section 20A of the RMA is that certificates of compliance for activities regulated under the RMA have a limited duration, for the very reason of ensuring that regional plan changes are able to effect changes to permitted activities.

...

⁴⁶⁷ WRC letter dated 21 December 2016 to WPL relating to the CoCs issued.

⁴⁶⁸ Tressler EIC at Appendix 2, resulting in a net increase of 1,452.5ha in dairy and 249.8ha in farm.

⁴⁶⁹ NOE at 1658.

In the context of an over-allocated catchment and the need to achieve meaningful progress towards restoration and protection of the awa, it is submitted that the most appropriate way to achieve the objectives of PC1 is for all land use change after 22 October 2016, including that carried out by WPL, to be subject to Rule 3.11.4.9.

Our general evaluation of the appropriate basis on which individual dairy farming and other types of farming operations are to be considered in terms of the risk of diffuse discharges of the four primary contaminants

[956] The provisions in PC1 are required to manage the risk of diffuse discharges of the four primary contaminants in a way that is the most appropriate way to meet the objectives, with a primary focus on the management of the risk of diffuse discharges of nitrogen. Other than in the case of non-complying activities in accordance with Rule 4.11.4.9, the discharges are authorised by way of hybrid land use and discharge consents under s 9(2) of the RMA.

[957] The management of the effects of discharges of nitrogen from individual dairy farming operations in New Zealand is almost universally based on managing the effects of discharges from a single dairy shed with its effluent disposal system, and associated discharges from the contributing herd and feed growing operations. There are established and effective methods of management tailored to address each operation's particular circumstances. These include herd characteristics, biophysical characteristics, the skills and management strategies of the operator and more. Drystock and CVP operations have their own management approaches and whichever of the three activity types is the principal source of discharges, PC1 is based on managing them as "single operating units".

[958] For land use activities which produce discharges of moderate and high intensity, this allows operation-specific conditions of consent to be determined, monitored and enforced as required to suit each operation's particular circumstances. This provides a robust basis for effective resource management that is as clear on its face, certain, workable, practicable, enforceable and treats everyone the same as far as that is possible in the varied and complex circumstances in which farming operations need to be managed.

[959] Based on the evidence before us, it appears that WPL proposes that 20 dairy and five other operations should be combined together and treated differently because of the way property is defined in PC1. There was no evidence to enable us to conclude that the proposal was for resource management reasons, or that combining them would result in improved environmental outcomes. There is still a need for an activity-specific evaluation of the discharges from each of the 25 individual operations carried out on WPL's land on the same basis as that for 25 generally similar operations on their own individual land packages.

[960] It is essential in our view that if the objectives of PC1 are to be met in the most appropriate way, each individual operating unit must be treated the same as all other similar operating units. Each must have its own FEP with a tailored approach to managing the risks of its discharges, with the on-the-ground managers directly involved in preparation and held accountable for the effective management of their operations and for consent compliance.

[961] We find that all single operating units must comply with the relevant PC1 provisions that apply to individual farming operations however they are defined, whether undertaken on the WPL estate or elsewhere.

Our evaluation of the definitions of “property” and “single operating unit” and whether reference to “enterprise” should be reinstated

[962] “Enterprise” and “property” were referenced throughout the Notified Version. The Hearing Panel observed that attempting to manage discharge of diffuse contaminants from farming enterprises within the context of PC1 is complex and recommended the deletion of the word “enterprise” from the provisions of PC1.⁴⁷⁰ The Panel recommended the provision of “a specific policy and rule addressing collectives - sub-catchment groups (including what may have otherwise been enterprises) which 'recognises' that farming can and does operate across multiple properties”. This included a discretionary pathway in accordance with 3.11.4.7 for a collective with high intensity farming.

⁴⁷⁰ Recommendation Report at [1877], [1882] and [1885].

[963] In relation to activity status, Mr Trebilco agreed with the views of the s 42A planner for the Council hearing that a controlled activity rule would not be appropriate for large enterprises comprising many properties, particularly when spread over large areas. He proposed a change to allow consents for more than one property, where the new definition for single operating unit he proposed (above) is satisfied.⁴⁷¹

[964] It appears to us that the purposes of all of these definitions are linked in some way to defining the scale at which the management of farming operations is to be regulated in PC1. We are satisfied that this was clearly intended to be at a single operating unit level, which we consider to be the most appropriate way to meet the objectives, as noted above.

[965] In that case, the definition of most relevance is “single operating unit” for which no definition was provided in the Notified Version. We agree that a definition must be included in PC1 and generally agree with the definition proposed above by Mr Trebilco in his delegated role for WRC. We consider it should be made clear that where land is referred to in the definition, it includes leased land that is used for the operation.

[966] Consideration needs to be given to whether a definition of “property” remains appropriate with the inclusion of the definition of “single operating unit” in PC1 and how leased land is to be provided for.⁴⁷² We will direct WRC to propose any further amendments it recommends should be made and to address the issue of scope to make any changes proposed.

[967] Overall, we agree that the amendments proposed by WPL are not appropriate for the reasons stated by WRC.

⁴⁷¹ Mr Trebilco EIC at [325] and [334].

⁴⁷² In response to opening submissions of the Joint Farming Parties at [1.24(j)(i)]. and [6.44].

Our evaluation of the appropriateness of a non-complying rule

[968] The undisputed purpose of PC1 is to give effect to Te Ture Whaimana. The vision and strategy were developed and published in 2008 under the watch and direction of the Guardians Establishment Committee. Consultative hui, public open days and meetings with stakeholders with an interest and connection with the Waikato River were held. In addition, submissions were called for and received which guided the formation of the vision and strategy.⁴⁷³

[969] The objectives supporting the vision and strategy are explicit and unequivocal in requiring restoration and protection of both the River and the relationship of Waikato River iwi according to their tikanga and kawa with the Waikato (objectives a to d). They require the adoption of a precautionary approach towards decisions that may result in significant adverse effects on the River (objective f), the recognition and avoidance of adverse cumulative effects on the health and wellbeing of the River (objective g) and the recognition that the River is degraded and should not be required to absorb further degradation as a result of human activities (objective h).

[970] A plain reading of the objectives is that there must be a reduction in adverse effects on the River and on the River Iwis' relationships with it. There is no credible alternative interpretation that could give rise to the expectation that changing land use to increase discharges and adverse effects on the River and the River Iwis' relationships with it would be authorised once the provisions of PC1 took legal effect without stringent testing in accordance with the principles of the RMA. A rule that relates to water has immediate legal effect on public notification of the plan change.⁴⁷⁴

[971] Mr Trebilco considered that:⁴⁷⁵

⁴⁷³ Vision-and-Strategy-for-the-Waikato-River.pdf, WRA, Restoring and protecting the health and wellbeing of the Waikato River, Vision and Strategy for the Waikato River.

⁴⁷⁴ RMA s 86B(3)(a).

⁴⁷⁵ Mr Trebilco EIC at [156].

A non-complying activity rule is appropriate where there are clear policy directives against which resource consent applications with ‘more than minor’ adverse effects should be tested before they can be considered for approval. The non-complying activity status appropriately provides for a more rigorous assessment of the application for land use change than would a discretionary activity rule. An assessment of a discretionary activity only needs to have regard to relevant plan provisions, rather than ensuring the adverse effects of the activity on the environment will be minor or the activity is not contrary to the objectives and policies.

... I consider that resource consent applications should be tested against all objectives and policies before an application can be considered for approval, including Objectives 1 and 2.

[972] The Rule was notified as non-complying for any changes in the use of land from that which was occurring at 22 October 2016. The s 32 Report stated:⁴⁷⁶

This option (Policy 6, Rule 3.11.5.7) is an interim measure to control specified land use changes in the catchment that, should they occur, are expected to result in additional diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens.

...

The changes in land use specified under Rule 3.11.5.7 would become a non-complying activity. These particular changes in land use have been selected as they represent the highest risk of increases in discharges.

[973] The Hearing Panel, having considered the Council’s position and the legal submissions, retained the non-complying activity for land use change in the Decisions Version. However, they removed the 10-year moratorium, giving no explanation as to why.

[974] The non-complying rule is also retained in WRC’s Final Proposal and we agree with Mr Trebilco that retaining it is appropriate in most circumstances that apply in PC1. However, we do not agree with the Hearing Panel that the 10-year moratorium should be removed without a clear reason, particularly as no party sought its removal. Based on the evidence before us, there was no scope to remove the provision and we will direct WRC to reinstate it from the date PC1 becomes operative.

⁴⁷⁶ At [185].

[975] One circumstance in which we do not consider non-complying activity status to be appropriate is where Tangata Whenua Ancestral Land is involved, because it would result in a continuation of adverse effects on the relationships of River iwi with the River. We return to this in Part F28.

Our evaluation of the vires of Rule 3.11.4.9

[976] In supporting its submission that Rule 3.11.4.9 is *ultra vires*, WPL referred to the *Re Auckland Council* case.⁴⁷⁷ WRC submitted that the facts in that case are distinguishable,⁴⁷⁸ stating that:

WRC submits that a change in land use is an ‘activity’ in the sense contemplated by the Court in *Re Auckland Council*. It involves the physical act of changing from one land use to another, for example converting from forestry to dairy. *Re Auckland Council* does not require that all aspects of an activity be covered by the same rule.

[977] We agree with WRC that the circumstances of that case are significantly different to those which are the subject of appeals before us. Auckland Council sought declarations concerning the lawfulness of the inclusion of Framework Plan provisions in its proposed Auckland Unitary Plan. The decision recorded that similar provisions were being included in plans by different names like “structure plans”, “concept development consents”, “comprehensive development plans”, “outline development plans” and “management plans”.

[978] The purpose of a Framework Plan was clarified as the authorisation of a range of land use activities within certain precincts. In its final decision,⁴⁷⁹ the Court was satisfied that a rule enabling consent to be applied for a bundle of land use activities that would authorise the key enabling works necessary for the integrated development of land is *intra vires* the Act and made a declaratory order accordingly. The Court stated that “[i]f the consent does not authorise the consent holder to use

⁴⁷⁷ *Re Auckland Council* [2016] NZEnvC 056.

⁴⁷⁸ Closing submissions at [12.3].

⁴⁷⁹ *Re Auckland Council* [2016] NZEnvC 65.

land in a manner that contravenes a district rule, but instead purports to authorise a **plan** about the future use of land, such a rule would be *ultra vires* the Act”.

[our emphasis].

[979] One aspect of the Court’s interim decision in *Re Auckland Council* of relevance to the question before this Court, was whether a resource consent to change land use can authorise the activity undertaken on the changed land use. The Environment Court recorded that:

... the Court of Appeal held in 1998 that “‘Activity’ is not a defined term but in general appears to have the same meaning as ‘use’, as can be seen from ss 9 and 10”: see *Bayley v Manukau City Council* [1999] 1 NZLR 568; [1999] NZRMA 513, at 515; (1998) 4 ELRNZ 461.

[980] Rule 3.11.4.9 in PC1 is about classifying certain activities or uses as non-complying, consistent with Policy 2c of the Decisions Version. The Rule is not a precursor to further plan-making, which was the issue in *Re Auckland Council*. The Rule is consistent with the above interpretation by the Court of Appeal and we saw no conclusions reached in *Re Auckland Council* that support the submission that Rule 3.11.4.9 is *ultra vires* and we reject WPL’s submission that it is.

[981] However, unlike Rules 3.11.4.1 to 3.11.4.8 of PC1, which are regional land use rules under s 9 of the RMA and include any associated diffuse discharges of the four primary contaminants into water or onto or into land, Rule 3.11.4.9 provides for changes to the use of land only.

[982] This means that separate resource consent applications would need to be made for the discharges. There is no legal impediment to implementing a plan that has one rule to authorise a change of land use and a second set of provisions to authorise diffuse discharges from the changed land use.

[983] While Mr Trebilco proposed an amendment to the rule to include the associated land use and discharges, no party sought such an amendment on appeal and accordingly there is no scope for the proposed amendment.

The consent activity status that applies to activities on WPL's land

[984] It is not necessary for the Court to make a determination on this matter as the provisions are clear on their face.

F25 Alternative models for calculating nitrogen loss rate

[985] The Notified Version required the Nitrogen Reference Point to be calculated using the current version of the Overseer or any other model approved by the Chief Executive of the Waikato Regional Council. As noted in Part E1, the Hearing Panel determined that it should recommend enabling alternative models. Clause A.3 of Schedule B of the Decisions Version provides for the NLLR rate to be calculated using an alternative model to Overseer, where a suitably qualified and experienced nutrient loss modeller can demonstrate and has certified to WRC that the model has been developed through a robust review and quality control process; has appropriate supporting documentation, user guides and input standards; and can produce comparable modelling outputs to those of Overseer.

[986] WRC appealed its own decision, seeking that clause A3(a) of Schedule B be retained but sought clarity as to the meaning of “suitably qualified and experienced nutrient loss modeller”. Ballance Agri-Nutrients Ltd supported the ability to use approved alternatives to Overseer in its appeal, considering that Clause 3 of Schedule B does not provide enough detail on how equity and data consistency for outputs between models will be ensured. No party sought the deletion of clause A3(a).

[987] However, Mr Trebilco considered that the rule thresholds need to be clear and certain and should be such that there is one method through which they are calculated. He did not therefore support alternative tools for determination of the rule thresholds⁴⁸⁰ and deleted clause A.3 in WRC's Final Proposal.

⁴⁸⁰ Mr Trebilco EIR at [313].

[988] We have determined that there is no scope to allow the deletion of a provision included in the Notified Version and retained following a full Schedule 1 process.

[989] Further, we do not accept the Hearing Panel's inclusion of a requirement that an alternative model must produce comparable modelling outputs to those of Overseer, as we do not agree that reliance on Overseer as the drafting gate for moderate and high intensity/risk dairy farms was the most appropriate way to meet the objectives based on the evidence available to the Panel, for the reasons set out above. In our view, it is also necessary to keep in mind that with further development, an NRS may have an appropriate regulatory role in the future and that should not be precluded by a requirement to provide similar results to a model that cannot reliably allocate permitted, controlled or restricted discretionary/discretionary activity status to particular land use activities.

[990] We will direct WRC to reinstate clause A3(a) of Schedule B to allow appropriately tested and peer reviewed alternative models to Overseer approved by the Chief Executive for use in specified regulatory processes. WRC is also to consider the matters raised in the appeals by WRC and Ballance and providing an alternative method of monitoring nitrogen losses from CVP activities.

F26 Offsetting and compensation

[991] Policy 11 of the Notified Version provided that in relation to point source discharges “[w]here it is not practicable to avoid or mitigate all adverse effects, an **offset** measure may be proposed in an alternative location or locations to the **point source discharge**, for the purpose of ensuring positive effects on the environment to lessen any residual adverse effects of the discharge(s) that will or may result from allowing the activity ...”.

[992] There was no equivalent policy relating to diffuse discharges in the Notified Version but Policy 5 of the Decisions Version provided for offsetting and compensation that better achieves the objectives of Te Ture Whaimana where:

- (a) There is an overall reduction in the relevant sub-catchment(s) of the diffuse discharge of each of nitrogen, phosphorus, sediment and microbial pathogens from the property(s); or
- (b) There is a sufficient reduction in the diffuse discharge of nitrogen, phosphorus, sediment and/or microbial pathogens from the property(s) so that the positive benefits to restoration and protection of the health and wellbeing of the Waikato and Waipā Rivers demonstrably exceed the adverse effects from any increases in the diffuse discharge of any of those contaminants, provided any increases are not of a contaminant that Table 3.11-2 identifies as a priority for reduction in that sub-catchment.

[993] A range of appeals were lodged in relation to offsetting and compensation. The Director General sought that Policy 5 be retained but with amendments as the current wording does not adequately include the principles which underpin good biodiversity offsetting.

[994] One of Oji Fibre Solutions (NZ) Ltd's particular reasons for its appeal was "[t]hat the Decisions [version] fail[s] to appropriately provide for the continued operation and development of industry or infrastructure in circumstances other than where it protects and restores the river". It sought that Policy 5 be deleted and amendments be made to other policies.

[995] Forest and Bird sought that references to offsets and compensation be deleted as they are not appropriate in a water quality context. "Even if there was a place for offsetting or compensation in the freshwater context. It needs to comply with the mitigation hierarchy, avoid, remedy and then mitigate."⁴⁸¹

[996] HortNZ sought the deletion of the offsetting and compensation requirement for CVP.

⁴⁸¹ Appeal relating to Policies 3(d)(iv), 5, 12(b), and 13.

[997] Mr Trebilco addressed offsetting and compensation in considerable detail.⁴⁸² He understood that the Hearing Panel had expansion of CVP in mind when they designed Policy 5, stating that:⁴⁸³

The Panel recognised that it may not be possible to allow expansion of CVP without the expansion having some increase in contaminants, particularly of nitrogen loss. They therefore allowed expansion provided that any increase in the discharge of nitrogen, phosphorus, sediment or microbial pathogens is offset (Policy 5(a)), or compensated by a decrease in any of the contaminants that are not increasing, ...

[998] The proposed provisions were the subject of considerable dispute through our hearing. We do not consider it necessary to revisit the Hearing Panel's reasons for amending the Notified Version or to describe matters of dispute in general. However, we note that one area of particular dispute before us was alignment between the offsetting and compensation provisions of PC1 and those of the NPSFM 2020.⁴⁸⁴

[999] Policy 5 in WRC's Final Proposal is:

Where land use change would otherwise result in a material increase in the risk of diffuse discharges of nitrogen, phosphorus, sediment or microbial pathogens to water compared to the land uses as at 22 October 2016, provide for a reduction in that risk at an alternative location that better achieves the objectives of Te Ture Whaimana o Te Awa o Waikato where:

- a. There is an overall reduction in the relevant sub-catchment(s) of the risk of diffuse discharge of each of nitrogen, phosphorus, sediment and microbial pathogens from the property(s); or
- b. Any increase in the risk of diffuse discharge of one or more of nitrogen, phosphorus, sediment or microbial pathogens from the property(s) is addressed by a reduction in the risk of diffuse discharge of those contaminants that are not increasing, so that on balance, there is a clear net benefit to the restoration and protection of the health and wellbeing of the Waikato and Waipā Rivers; and

There are no increases of a contaminant of most concern in the sub-catchment as identified in contextual information provided in accordance with Method 3.11.3.6 (Contextual information for Farm Environment Plans).

⁴⁸² Mr Trebilco EIC primarily from [203] to [244] and EIR primarily from [134].

⁴⁸³ Mr Trebilco EIC at [187].

⁴⁸⁴ Mr Trebilco EIR at [135].

[1000] Policy 12b of WRC's Final Proposal is:

Where, despite the adoption of the best practicable option there remain residual adverse effects of nitrogen, phosphorus, sediment or microbial pathogens, measures should be proposed for the purpose of ensuring an overall net positive benefit for the environment, in the following manner:

- i. where the load of any or all of nitrogen, phosphorus, sediment or microbial pathogens does not provide for the reduction in residual adverse effects at the discharge location consistent with achieving the interim target attribute states or steady progression towards the 80-year target attribute states in Table 3.11-1, then a greater reduction in load of the offending contaminant(s) shall be offered at an alternative location; and
- ii ...

[1001] WRC is to recommend if a consequential amendment to Policy 13e is required where it refers to offsetting/compensation proposed in accordance with Policy 12.

[1002] Having considered the evidence and what the provisions are seeking to achieve, we support the removal of the reference to offsetting and compensation in both Policies 5 and 12b. The proposed alternative wording provides greater clarity as to what each policy is seeking to achieve in a way that better reflects the vision and strategy of Te Ture Whaimana and the objectives of PC1. It also removes one obvious avenue for differences of opinion as to the meaning of offsetting and compensation and the methodology or process to be used to address it. However, it does not remove a concern we raised during the hearing about how it will be possible to demonstrate there will be a net benefit by dissimilar contaminants being reduced when another contaminant increases.

[1003] Of further relevance, Policy 3b.iii in WRC's Final proposal relating to CVP requires that:

There is no material increase in the risk of diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens associated with the grower's existing and expanded commercial vegetable production (in combination) relative to what would have occurred on the land under the land use to be displaced by new commercial vegetable production;

[1004] This may obviate the need to make provision for offsetting and compensation for CVP activities considered necessary by the Hearing Panel and for any policy in addition to 3b.iii to be included in PC1. That would address our concern about demonstrating a net benefit. We will direct WRC to consult with the parties as to whether both policies are required and, if so, how our concern will be addressed.

F27 Point source discharges

[1005] We described point source discharges in Part C16.

[1006] Point source discharges are subject to the provisions of Chapter 3.5 of the WRP, which is the discharges section of the water module. WRP Policy 3.5.3.2: Managing Discharges to Water with More than Minor Adverse Effects is “Control, through resource consents, discharges to water that are likely to have more than minor adverse effects so that: a. adverse effects on surface water bodies that are inconsistent with the policies in Section 3.2.3 of this Plan are avoided as far as practicable and otherwise remedied or mitigated ...”. The discharges are discretionary activities under Rule 3.5.4.5.

[1007] Relevant policies in PC1 are Policies 11, 12 and 13, which changed significantly through the plan development process and we do not reproduce them in our decision because of their length.

Appeals and evidence relating to point source discharges

[1008] The WRA sought improvements and to tighten standards for point source discharges in its appeal. Mr Robert Penter, Chief Executive of the WRA, stated that the WRA does not support all of WRC’s proposed amendments to the point source discharge provisions, to the extent that these assume reasonable mixing will occur, or do not require appropriate offsetting or compensation if that is to occur

downstream of the activity.⁴⁸⁵ He was concerned that it should not be assumed that reasonable mixing zones are always acceptable.⁴⁸⁶

[1009] No other appeals relating to point source discharges were lodged by organisations representing tangata whenua and the subject was not addressed in any detail in their evidence. No remaining relief was sought by tangata whenua parties prior to the point source discharge part of the hearing.⁴⁸⁷

[1010] The reasonable mixing provisions were appealed by a number of local authorities, including Waipā District Council, which sought that Policy 13 be amended to apply reasonable mixing in accordance with Policy 3.2.3.8 of the WRP.

[1011] Mr Martin Mould, who is the Water Services Manager for Waipā District Council, described his Council’s approach to upgrading the Cambridge Wastewater Treatment Plant. This is a staged process to upgrade a more than 50-year old oxidation pond system with a state of the art facility with a Stage 1 budget of \$100 million. Mr Mould stated that the Council engaged extensively over a number of years with tangata whenua regarding the long-term upgrades to the plant, resulting in their support for the long-term upgrades. A commitment was made to tangata whenua to match the quality of the new Pukekohe Wastewater Treatment Plant, which Mr Mould understood to represent the best treatment quality in New Zealand at present.⁴⁸⁸

[1012] In response to questions from the Court, Mr Mould confirmed the Council has formalised co-governance arrangements with hapū and iwi “as most local councils do in the Waikato region”. Counsel for Hamilton City also confirmed that “[t]he level of engagement with Waikato River Iwi and, say for example, Hamilton City Council is high”. These arrangements are underpinned by joint management agreements and there are relationship agreements. He said it is almost impossible to conceive of a situation where territorial authorities would make an application to the

⁴⁸⁵ Mr Penter EIC at [7.8].

⁴⁸⁶ Mr Penter EIC at [3.7] and EIR at [5.4].

⁴⁸⁷ Memorandum of WRC dated 20 October 2023.

⁴⁸⁸ Mr Mould EIC from [5.9].

Regional Council for a point source discharge in relation to their three waters infrastructure which does not represent a partnership approach with iwi.⁴⁸⁹

Addressing cultural concerns relating to point source discharges at the time of resource consent applications

[1013] Tangata whenua appeals and evidence before us were limited to the issue of zones of reasonable mixing, which we address below. However, PC1 must be able to address cultural concerns that will arise when applications are made to renew a point source discharge consent. It must be able to ensure that te Tiriti obligations are recognised that it takes into account the principles of te Tiriti,⁴⁹⁰ and that it recognises and provides for s6(e) and have particular regard to s 7(a) of the RMA and the developing jurisprudence around te Tiriti and tikanga.

[1014] At the time of future resource consent applications, we anticipate that the working relationships between Councils and Tangata Whenua will provide a forum for other aspects of point source discharges to be worked through and it will be important that similar processes are in place for all such discharges. In terms of those relationships, we note that there are Joint Management Agreements between Tuwharetoa, Waikato Tainui, Raukawa, and Te Arawa with WRC⁴⁹¹ that refer to the parties agreeing to a new age of co-management over the Waikato River with the overarching purpose being to restore and protect the health and wellbeing of the Waikato River for future generations.⁴⁹² Co-Governance Committees were established as a result of those agreements.⁴⁹³

[1015] There was no evidence put to us about the extent to which WRC engaged with these committees, in relation to PC1. We note that appropriate engagement with these bodies would give practical effect to the intent outlined in Policy 2.3.4.25 of the WRP. It may be that the WRA has acted as a surrogate for these committees.

⁴⁸⁹ NOE at 1744 and 1745.

⁴⁹⁰ In accordance with s 8 of the RMA.

⁴⁹¹ See for example the Joint Management Agreement between Waikato-Tainui Te Kauhanganui Inc and Waikato Regional Council dated 18 June 2013.

⁴⁹² At clause 1.3.

⁴⁹³ Co-Governance Committee documents- Terms of Reference document pp 62-108.

The evidence for the WRA, who has a general function of engaging with, and providing advice to Council to ensure PC1 gives effect to Te Ture Whaimana,⁴⁹⁴ was that they were heavily involved in the PC1 process from the outset.

[1016] The evidence also acknowledges the collaborative approach taken by the Council, river iwi and the WRA when PC1 was being developed.⁴⁹⁵ However, it goes on to say that, whilst accepting that reasonable mixing zones may be required, the WRA does not generally support the use of reasonable mixing zones as they impede the ability to achieve objectives and realise the vision in Te Ture Whaimana.⁴⁹⁶ The key question is whether they are appropriate.⁴⁹⁷

[1017] There is a duty on WRC to recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga. There is also a duty for it to have particular regard to kaitiakitanga and to take into account the principles of the Treaty of Waitangi, principles such as active protection and the matters of national importance set out in the RMA and reinforced through the WRPS and WRP.

[1018] We also note that s 81 of the Local Government Act 2002 provides that a local authority must establish and maintain processes to provide opportunities for Māori to contribute to the decision-making processes of the local authority⁴⁹⁸ and consider ways in which it may foster the development of Māori capacity to contribute to the decision-making processes of the local authority.⁴⁹⁹

[1019] In our view, this would provide for the position in *Ngāi Tai ki Tāmaki v Minister of Conservation* where the Court expressed concern that the principles of Te Tiriti/the Treaty are being treated as “merely” being part of an exercise “balancing it against the other relevant considerations”.⁵⁰⁰ The Court went on to say that “in

⁴⁹⁴ Mr Penter EIC at [6.2].

⁴⁹⁵ Mr Penter EIC at [6.5].

⁴⁹⁶ Mr Penter EIR at [5.1], Ms Rademaker EIR at [6.2].

⁴⁹⁷ Ms Rademaker EIR at [6.3].

⁴⁹⁸ Local Government Act 2002, s 81(1)(a).

⁴⁹⁹ Local Government Act 2002, s 81(1)(b).

⁵⁰⁰ *Ngāi Tai ki Tāmaki Tribal Trust v Minister of Conservation* [2018] NZSC 122 at [54]-[55].

some contexts, active protection may require preferential treatment of Māori, but it does not act as a general veto over other interests”. The balancing is the key.

[1020] We consider that a real voice at the table for tangata whenua at the time that new or renewed consents are being sought for point source discharges is an important and culturally appropriate way to address and consider any concerns tangata whenua may have. This will assist in finding “the balance” that the Court in *Ngāi Tai ki Tāmaki* alluded to.

[1021] We accept that there has been no appeal seeking this. Nonetheless, there is nothing restraining WRC from implementing this proposition and actively providing for that relationship as a matter of national importance, consistent with s 6(e) of the RMA.

Process followed by the Court in relation to point source discharges

[1022] Submissions and evidence relating to point source discharges were heard at a stand-alone part of the hearing on 24 and 25 October 2023. The Court issued a minute on 2 November 2023 setting out our preliminary observations for consideration by parties, seeking submissions in due course and indicating certain matters likely to be taken into account when reaching our decision on the provisions of PC1. Our collective view was that the provisions as then proposed lacked clarity in a number of important areas and would likely be subject to very different interpretations by different plan users.

[1023] Among other matters addressed, we advised parties that a review of Policies 11, 12 and 13 was required and suggested possible amendments for their consideration which could address our concerns. WRC considered the minute and produced a revised version of the relevant policies and provided them for the consideration of parties. By way of memoranda, the parties responded to the minute and WRC’s proposed amendments. WRC then produced a further revised version which formed the basis of closing submissions from the parties.

[1024] In our minute, we also responded to a matter of appeal lodged by Taupo District Council that the definition of “Regionally Significant Infrastructure” in the WRPS does not include reference to municipal stormwater systems. For the record, we confirm our response was as follows:

We were provided with no evidential basis on which we could make a properly informed decision on this issue and for that reason, we agree with the views of both the hearing panel and Mr Trebilco as set out above that it is not appropriate to amend PC1 to include stormwater drainage networks in the definition of regionally significant infrastructure. We agree with Mr Trebilco that this is a matter that should be addressed as part of the 2024 plan change.

Matters raised by other parties in closing

[1025] Parties generally supported or did not indicate any significant objection to the second version as amended by WRC but did propose some amendments. Having reviewed WRC’s amended proposal, the closing submissions and suggested amendments to the policies, we prefer the version proposed by WRC except as outlined below. For the avoidance of doubt, we confirm that we accept WRC’s proposed amendment to make Policy 11 subject to Policy 12 to provide clarity that providing for regionally significant infrastructure and regionally significant industry does not mean that appropriate requirements of the RMA do not need to be met.

[1026] The revised version of Policy 12a.ii in WRC’s Final Proposal is “... address adverse effects on the relationship tangata whenua as Kaitiaki have with water and in particular their taonga such as waahi tapu and sources of mahinga kai identified in the locality of the point of discharge”. A number of parties submitted in various forms that this be amended to be determined having regard to WRP Policy 3.5.3.6., which is:

Ensure that the relationship of tangata whenua as Kaitiaki with water is recognised and provided for to avoid significant adverse effects and remedy or mitigate cumulative adverse effects on

- a. the mauri of water;
- b. waahi tapu sites;
- c. other identified taonga.

[1027] Policy 3.5.3.6 is not the subject of an appeal before us, but Policy 12 of PC1 is and requires the application of the BPO. Defining the point at which adverse effects are significant and must be avoided is not a simple matter. When considering the best practicable option requirements of Policy 12, it would be appropriate to require the continued operation and development of regionally significant infrastructure to be located, as far as practicable, to avoid adverse effects of contaminant discharges on the relationship that tangata whenua as Kaitiaki have with water and their taonga such as waahi tapu and sources of mahinga kai identified in the locality of the point source discharge. Where adverse effects cannot be avoided, they should be remedied or mitigated to the extent reasonably practicable. We will direct WRC to consider this matter and, following discussions with the parties, make recommendations to the Court.

[1028] A number of submissions addressed proposed Policy 12d.vii. – “[r]eliance on a zone of reasonable mixing (assessed in accordance with Policy 3.2.3.8) may be acceptable as an alternative to relocating a long-established discharge location as a transitional measure during the life of this Chapter”. We consider the intent of the policy in WRC’s Final Proposal is generally appropriate but it requires clarification to remove a possible interpretation that reasonable mixing is only appropriate as an interim measure. Zones of reasonable mixing are required in most if not all cases to provide a transition zone in which contaminants in a discharge are mixed with the receiving water until the concentrations are reduced to the required levels in the receiving environment. The only time when this may not be necessary is if the discharge quality is the same or better than the receiving water quality requirements.

[1029] When considering zones of reasonable mixing, Policies 2.3.4.18 and 19 of the WRP relating to Customary Uses and the Discharge of Human-based Sewage effluents are relevant to the consideration of cultural effects. To address the concerns of tangata whenua, Policy 12d.vii. of PC1 is to be reworded, possibly along the following lines:

Where a point source discharge is proposed, any provision for reasonable mixing shall be assessed in accordance with WRP Policies 3.2.3.8, 2.3.4.18 and 2.3.4.19. When considering the best practicable option to avoid adverse effects of contaminant discharges, consideration should be given to whether the

mixing zone should apply for the term of the consent or as a transitional measure as an alternative to relocating a long-established discharge location and subject to periodic review.

[1030] We agree with the submission of Fish and Game and Forest and Bird that the words “relating to the load of nitrogen, phosphorus, sediment or microbial pathogens” should be inserted following the words “[f]or the purpose of establishing if a discharge will have a residual adverse effect ...” in Policy 12c.

F28 Providing headroom for Tangata Whenua Ancestral Land (TWAL)

Issues for tangata whenua relating to TWAL

[1031] Ensuring tangata whenua have the ability to use their ancestral land was an important issue throughout the PC1 process. Issues requiring determination include:

- (a) what is the appropriate definition of TWAL?
- (b) should provision be made for tangata whenua to be able to develop their TWAL and, if so, how is that provided, to what extent and by when?
- (c) what is the appropriate policy and rule framework for the development of TWAL?
- (d) should the rule be limited to land use change or include subsequent use and associated diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens?
- (e) is a non-complying activity rule appropriate?

[1032] We start by considering the appropriate definition, then setting out some general background considerations and a brief summary of relevant appeals and submissions, before considering the appropriateness of providing a nitrogen load allowance or “headroom” for TWAL and land use change. We then consider the plan provisions themselves.

Definition of TWAL

[1033] The definition of TWAL in the Notified Version was:

means land that has been returned through settlement processes between the Crown and tangata whenua of the catchment, or is, as at the date of notification (22 October 2016), Māori freehold land under the jurisdiction of Te Ture Whenua Maori Act 1993.

[1034] The definition in the Decisions Versions was:

means land that has been returned through settlement processes between the Crown and tangata whenua of the catchment, or is, as at the date of notification, Māori freehold land under the jurisdiction of Te Ture Whenua Maori Act 1993.

[1035] Evidence submitted by all iwi parties was that the definition was too restrictive. It fails to make provision for general land held by Māori and fails to provide for lands returned through the treaty settlement process but obtained at a later date whether by deferred settlement process or through a Rights of First Refusal process or by other such means.

[1036] WRC acknowledged that an updated definition of TWAL is needed but considered that the definition should still be restricted to Māori freehold land under Te Ture Whenua Maori Act as well as Treaty settlement land.

[1037] WRA iwi and CNI agreed the following definition for TWAL.⁵⁰¹

- (a) has been returned to, or acquired by, tangata whenua through Treaty settlement processes or mechanisms; or
- (b) is Māori freehold land within the meaning of Te Ture Whenua Maori Act 1993.

⁵⁰¹ See Joint Closing Submissions at [9(f)].

[1038] Iwi of Hauraki sought an expansion of that definition to include General land owned by tangata whenua.⁵⁰²

[1039] Given that there is scope for further refinement of the definition of TWAL in later plan changes, we find that the definition agreed by WRA iwi and CNI should be applied at this time.

[1040] The parties may wish to consider the following as an alternative:

Tangata whenua ancestral lands means land, within the catchment, that has been returned to, or acquired by tangata whenua through Treaty settlement process or mechanism (such as rights of first refusal or deferred selection process) and is Māori freehold land or General land held by Māori who are tangata whenua⁵⁰³ within the definition of Te Ture Whenua Maori Act 1993.

Background considerations

[1041] The objectives supporting the vision and strategy are explicit and unequivocal in requiring restoration and protection of both the River and the relationship of Waikato River iwi according to their tikanga and kawa with the Waikato (objectives a to d). The relationship of iwi with the River, requires that they are able to use, care for and protect their land and resources. That is how iwi exercise mana and rangatiratanga.

[1042] Policy 16 of the Notified Version, in particular, was developed in order to provide tangata whenua with flexibility and the opportunity to develop ancestral lands that they received through a Treaty settlement process, in a way that provides for the relationship tangata whenua have with their lands, that provides for the exercise of kaitiakitanga and the creation of positive economic, social and cultural benefits for tangata whenua now and into the future. The equivalent policy number changed in subsequent versions.

⁵⁰² Joint Closing Submissions at [9(f)(ii)].

⁵⁰³ The reference to tangata whenua is deliberate. Tangata whenua refers to those who have mana in the rohe, and does not include hapū or iwi who are not mana whenua and purchase land within the rohe.

[1043] The Notified Version stated that any future allocation must consider “[a]llowance for flexibility of development of tangata whenua ancestral land”,⁵⁰⁴ provide for [e]ngaging early with tangata whenua ...”,⁵⁰⁵ provide increasing availability of mahinga kai,⁵⁰⁶ and allow flexibility for development of land returned under Te Tiriti o Waitangi Settlements and multiple owned Māori land.⁵⁰⁷

[1044] The s 32 Report stated in relation to the preferred staged approach that:⁵⁰⁸

The constraints on land use change (refer to the section evaluating E.4 'Restricting land use changes') are proposed as an interim measure, until a future plan change introduces a new approach to allocating discharges of sediment, nutrients and microbial pathogens from point sources and diffuse discharges. At that point, the principles for allocation that are described in Plan Change 1 can be brought into the allocation framework to support property-level limits.

...

Controls on land use change are designed to be interim, with the intent that they be removed from the Regional Plan in future plan changes.

...

A key factor in the acceptability of this policy and rule is its interim nature, which foresees that these provisions will be replaced by future plan changes. It was judged to be unacceptable to lock in current land uses indefinitely without this specified timeframe. Therefore an important part of the non-complying activity rule for land use change is the end date of 2026.

...

The use of a non-complying rule supported by the policy aims to provide guidance for decision makers that land use change from lower discharging to higher discharging land uses is not contemplated by Plan Change 1, except in certain circumstances, and one such circumstance is where the change in use occurs on Māori freehold land under Te Ture Whenua Māori Act 1993 and settlement land, and this change needs to be managed through a resource consent process.

[1045] The s 32 Report recorded that modelling of three levels of Māori freehold land under Te Ture Whenua Māori Act 1993 and settlement land changing use to higher discharging land uses had been undertaken. The results showed that sites that

⁵⁰⁴ Policy 7 entitled, “Preparing for allocation in the future”.

⁵⁰⁵ Policy 9 of the Notified Version, entitled Sub Catchment (including edge of field) mitigation planting, refers at 9(a).

⁵⁰⁶ Policy 15 of the Notified Version, entitled Whangamarino.

⁵⁰⁷ Policy 16.

⁵⁰⁸ At [134], [185], [188] and [212].

met the short-term targets without this land use change, in most cases continued to meet these targets under all three levels of land use change, and in our view any differences were minor. We note that the targets referred to at that time were related to a 10% improvement in water quality.

[1046] The Notified Version included a non-complying activity rule for changing use of TWAL with an end date of 2026, which was 10 years after notification. The rule was considered by the Hearing Panel,⁵⁰⁹ who referred to the Block 2 s 42A Report, which stated:

The inclusion of an end date to Rule 3.11.5.7 was intended to make it clear that PC1 represents a transition to a future allocation for diffuse and point source contaminants, and to commit WRC to putting out a new plan before the ‘end date’.

[1047] Other relevant statements in the s 42A report, which were not referenced by the Panel, included:⁵¹⁰

Flexibility for development of Māori Land was included in PC1 due to historical and contemporary legal impediments to the use and development of Māori Land. Certain factors over time have meant that there have been specific barriers to development, which effectively resulted in the loss of decision-making control by the owners over how the land was used. ... During the development of PC1, it was identified that PC1 would create further impediments to the use of Māori Land and there was a need, because of the historical restrictions, to provide for flexibility to ensure that use and development opportunities were not further inhibited.

...

The provisions for flexibility of use for Māori Land give effect to the Vision and Strategy by providing for and acknowledging the relationship of River iwi according to their tikanga and kawa. ... Therefore, to give effect to and ensure the full achievement of the Vision and Strategy, providing provisions for flexibility of the use of Māori Land is important.

...

There is clear precedent for this approach. Lake Taupō Variation 5 to the WRP included specific provisions for Māori land and those provisions were implicitly endorsed by the Environment Court in 2008.

[footnotes omitted]

⁵⁰⁹ Recommendation Report from [347].

⁵¹⁰ Block 2 s 42A Report at [939], [954] and [956].

[1048] While the Hearing Panel stated that they regarded policy provision to facilitate iwi development of TWAL to be consistent in principle with s 6(e) of the RMA and acknowledged that the rule was essentially intended to function as a moratorium, they retained the non-complying rule and deleted the end date. We were unable to find their reason for the deletion but note that they considered that PC1 must be consistent with putting the Waikato and Waipā catchments on a track towards restoration and protection of their health and wellbeing and keeping them on that track, which we return to below.

[1049] WRC acknowledged that the Hearing Panel’s decision to remove the sunset clause from 3.11.4.9 would only be within scope if a submission can be identified which fairly and reasonably raises that relief. No party identified such a submission and we find that there was no scope to remove the sunset clause.

Relevant appeals

[1050] Waikato and Waipā River Iwi sought an amendment to Policy 4(c) to read “a. new impediments to the flexibility of the use of tangata whenua ancestral lands are minimised” and sought discretionary activity status for the development of TWAL. Iwi of Hauraki sought that change of use for TWAL be a restricted discretionary activity. CNI considered that the “protect and restore” imperatives of Te Ture Whaimana should apply to existing land uses in a manner that better recognises the particular historic disadvantage faced by the owners of Tangata Whenua Ancestral Land. Specific relief sought included:

- (a) Amending Objective 4b to read:
~~Any impediments to the flexibility of the use of tangata whenua ancestral lands and land returned via treaty settlements are minimised restricted to those necessary to give effect to Te Ture Whaimana o Te Awa o Waikato;~~
- (b) Amending Rule 3.11.4.9 to read:
 Notwithstanding any other rule in this Plan, the following changes in the use of land are non-complying activities until 1 July 2026:
- (c) Adding a new discretionary activity rule relating to Tangata Whenua Ancestral Lands use change.

[1051] Oji's appeal stated that there was a lack of scope or jurisdiction for the deletion of the end date and no submission requesting retention of the Rule sought deletion of the expiry date. If the Rule is not deleted, they sought the reinstatement of the expiry date of 1 July 2026, as notified.⁵¹¹

Legal Submissions

[1052] Waikato and Waipā River Iwi, Iwi of Hauraki and CNI Iwi Land Management Ltd presented a joint closing statement regarding TWAL on 4 December 2023, in which they confirmed their united views regarding the approach to TWAL within PC1 as a matter of intent and general principle. They agreed that PC1 must reasonably and fairly include a real, discrete and express policy and rule pathway for the development of TWAL and that the proposed non-complying activity rule on development of TWAL was unconscionable and contrary to both Part 2 of the RMA and Te Ture Whaimana. Reasons included but were not limited to the classification of high-risk activities as restricted discretionary and enabling the expansion of CVP as discretionary activities.

[1053] In closing, WRA submitted that it would support a discretionary (as opposed to non-complying) activity status for land use change, specifically for TWAL. The WRA would continue to support such a change, if that is still sought by iwi. Federated Farmers and Beef and Lamb reiterated their opening submission that as part of an enduring, equitable and effective community-wide solution iwi must be able to utilise land returned to them as part of Te Tiriti settlements. Fish and Game and Forest and Bird sought that TWAL use change remain as a non-complying activity.

The appropriateness of providing headroom for TWAL and land use change

[1054] It is apt to consider first the principle of equity which derives from article 3 of te Tiriti, in which Māori were promised the same rights and privileges as British subjects. It obliges the Crown to address disparities in the circumstances of Māori

⁵¹¹ At [4.11(a)] and [4.11(b)].

and non-Māori that have resulted from te Tiriti breaches and take positive action to redress the imbalance.

[1055] As noted in Part A2 and later in this Part F28, in addition to the objectives of Te Ture Whaimana relating to the restoration and protection of the Waikato River, there are other objectives that include and require the restoration and protection of Waikato River iwi according to their tikanga and kawa, including their economic, social, cultural and spiritual relationships with the Waikato River. In giving effect to Te Ture Whaimana, it is necessary to give effect to all of these objectives, not just some or provide a priority to some as considered appropriate by WRC.

[1056] As quoted above from the s 42A report, there is clear precedent for providing flexibility of use for Māori Land in the Lake Taupō Variation 5 to the WRP. Policy 1f of section 3.10.3 of the WRP relating to the Lake Taupo catchment states that the Ngāti Tuwharetoa's unique relationship with the lake catchment means it is appropriate to enable them to develop their currently undeveloped or forested lands in a manner and to an extent that has no long term adverse effect on the water quality of the lake. In the Background and Explanation to section 3.10 of the WRP it states "Ngāti Tuwharetoa is the iwi with mana whenua in the Lake Taupo catchment. Generations of Ngāti Tuwharetoa have lived within the Taupo rohe and as a result, have developed tikanga and kawa that reflect a special and unique relationship with the environment. Taupo nui-a-Tia, 'the great cloak of Tia,' is their taonga".

[1057] River iwi have their own unique relationships with the Waikato and Waipā Rivers and we consider that the same principle should apply in the PC1 area to give effect to Te Ture Whaimana.

[1058] By way of background, WRC advised that:⁵¹²

The Taupo provisions as notified allowed a small increase in nitrogen leaching to enable development of TWAL. Rule 3.10.5.4 was notified as a controlled activity rule for Development of Ngāti Tuwharetoa Undeveloped and Forested Land, which allowed an additional total of 11,000 kg of nitrogen per year from

⁵¹² Memorandum dated 2 September 2024 at 34.

such development. Because of Overseer-related difficulties, the relevant plan change was amended to refer to “2752 Standard Animal Equivalents defined for the purpose of this rule as Angus steers, 13 months old in July and present all year, on rolling topography and browntop pasture”. These standard animal equivalents could then be modelled in the latest version of Overseer to give a tonnage of nitrogen that could be converted into other land uses. While this works in the Taupo catchment where soil type, drainage and climate are fairly consistent, it may not work for the whole PC1 area.

[1059] A further relevant consideration is that provision of a small nitrogen allocation to TWAL was also provided in the 2019 Bay of Plenty PC10 relating to the Lake Rotorua catchment. While the Notified Version made no allocation, the Court directed the Council to provide further evidence as follows:⁵¹³

What changes to the rules are considered appropriate, following consultation with NCG, to address the matters raised in relation to an additional allocation to Treaty Settlement land similar to “Provide for the development of multiple owned Māori land in a manner which enables Māori to develop papakainga, marae and associated community facilities or housing or enables Māori to develop multiply owned Māori land and resources to provide social and economic benefits” in accordance with RPS Policy IW 1B(b) and (c).

[1060] In the subsequent Operative Version of the Bay of Plenty Regional Plan, Policy LR P12A provides a nitrogen allocation of 5 tN/y to land held under the Te Ture Whenua Maori Act (an area of around 15,000 ha) out of a total allowable catchment load of 435 tN/y in 2032. The allocation is to enable conversion from plantation forestry and bush/scrub to other activities for use in accordance with an approved Nutrient Management Plan to provide for the owners’ social, economic and cultural wellbeing while maintaining and safeguarding the land’s mauri. Land use change is a restricted discretionary activity and the area of land that can be converted is limited to 800 ha.

[1061] Based on the evidence in PC10, the Court considered it unlikely there would be any significant conversion from forestry or bush and scrub to pastoral use on economic grounds alone.⁵¹⁴ The area allowed to be converted was 5% of the available area and the nitrogen allocation was 1% of the total available catchment

⁵¹³ *Federated Farmers of New Zealand Inc v Bay of Plenty Regional Council* [2019] NZEnvC 136 at [374].

⁵¹⁴ *Federated Farmers of New Zealand Inc v Bay of Plenty Regional Council* at [227].

load. The allocation took account of the anticipated limited likelihood of significant land use change and the fact that any allocation would need to come from existing authorised discharges, which were already required to make significant reductions. The same circumstances apply to PC1 and need to be considered.

What extent of TWAL development is appropriate and by when?

[1062] The direct evidence as to what level of land use change might be anticipated, possible or appropriate within the PC1 area over time was limited, yet the question is highly relevant when determining plan provisions. We considered the issues from a range of perspectives in line with the concept of adopting a multi-evidence-based approach. Our starting point was that the over-arching goal of PC1 is to achieve Te Ture Whaimana by 2096 using a staged approach. Currently, there is no road map to guide how that will be achieved and some flexibility can be accommodated.

[1063] Our evaluation is limited to the consideration of nitrogen as the only contaminant quantified in the evidence. Dr Ausseil provided an estimate of the improvement required in nitrogen loads in the Waikato catchment required to meet interim and long-term Target Attribute States in the river at the bottom of the catchment. The information is based on 2023 data and is reproduced in Table 1 of our decision. In simple terms, the total anthropogenic nitrogen load of 7,330 tN/y reaching the river needs to be reduced by 530 tN/y to meet the interim year 10 targets and by 2,690 tN/y to meet the 80-year targets.⁵¹⁵ Approximately 90% of the anthropogenic loads comes from diffuse sources and 10% from point sources. The numbers suggest that on a pro-rata basis, the sustainable nitrogen load on the river from diffuse sources is around 4,200 tN/y.

[1064] If the 530 tN reduction is to be achieved in 10 years, an average reduction of 53 tN/y will be required. Over the longer term, the load will need to be reduced by 2,690 tN in 70 years or an average of approximately 40 tN/y.

⁵¹⁵ All numbers rounded to the nearest 10 tN/y.

[1065] As noted in Part F3, Dr Olubode-Awosola modelled the effects of converting 9,200 ha of iwi land that are currently in forestry and drystock farming, but which he considered suitable for conversion into intensive drystock and dairy farming. This is equivalent to just over 1% of the 750,000 ha of dairy, dairy support and drystock land use in the PC1 area.⁵¹⁶ While the area of “Māori land” was not addressed in evidence, a reference in the s 32 Report⁵¹⁷ estimated the total area of Māori owned land as approximately 70,000 ha in the Waikato and Waipā FMUs. Thus, Dr Olubode-Awosola’s modelling allowed for developing approximately 13% of the Māori land in the PC1 area, which we adopted as the basis for our evaluation.

[1066] In the short-term (currently anticipated as being within 10 years), Dr Olubode-Awosola’s modelling results estimated a 33% reduction in nitrogen losses from dairy farms (as opposed to reduced loads reaching the receiving waters) and a 20% overall reduction of 3,300 tN/y. In the Court’s view, a 33% reduction is likely to be difficult to achieve with good or best management practices alone, meaning more mitigation is likely to be required depending on what improvements have already been made since the baseline date. We accepted the estimate for current purposes. Based on an assumed average attenuation rate of 35%, the corresponding short-term load reduction in the river would be $0.65 \times 3,300$ or 2,150 tN/y.

[1067] Dr Olubode-Awosola estimated the development of one third of the 9,220 ha in the short-term would increase the estimated nitrogen load discharged by 80 t/y. Assuming 35% attenuation, the increased load reaching the river would be 50 tN/y. We consider that level of development would be unlikely to be achieved until towards the end of the term of PC1 and even if it was, it would not be detectable in the receiving waters. It would be largely imperceptible within the bounds of modelling accuracy.

[1068] As a comparison with the modelling estimate, we used a pro rata area basis starting with the above sustainable anthropogenic catchment-wide estimated diffuse

⁵¹⁶ From Table 1.

⁵¹⁷ Waikato Regional Council 2015. Extent of Māori owned land within the Healthy Rivers sub-catchments and current land-use categories. Report to the Collaborative Stakeholder Group - for Information, dated 17 November 2015. Document #3609413.

discharge load on the river of 4,200 tN/y. That would suggest an additional short-term load on the river of $3,100 \text{ ha} / 750,000 \text{ ha} \times 4,200 \text{ tN/y}$ or indicatively 20 tN/y. By way of a further comparison, we assumed an average 40 kgN/ha/y as an indicative 75th percentile value nitrogen loss rate across the PC1 area as an absolute upper limit. That would equate to an additional short-term load of around 125 tN/y discharged from farms and 80 tN/y reaching the river.

[1069] We consider it unlikely that a third of all TWAL land would be developed within 10 years but if it was, it would represent a worst-case situation and add an additional 50 tN/y to the load in the river following a delay of possibly five to 10 years, allowing for lag times. For the interim target to be met, nitrogen load in the river will have had to be reduced by 530 tN/y. The modelling estimates it will have been reduced by 2,150 tN/y, which we consider needs to be treated with caution.

[1070] In the short-term, the additional load would represent less than 5% of the reduction anticipated to have been achieved through on-farm management improvements. Dr Olubode-Awosola found that “intensification on iwi lands could be expected to increase the extent of breaches [of the interim water quality targets] slightly, especially where there are already breaches. Few new breaches in other sub-catchments would be expected”. In the longer term, the additional load to the river would be 150 tN/y compared to the anticipated reduction of almost 2,700 tN/y, or just over 5%.

[1071] We do not consider that, based on currently available information and the above evaluation, there is any valid basis to delay developing an initial alternative pathway for TWAL as part of PC1. This can be further developed in the next plan change to enable the development of 9,200 ha of TWAL, or some other area determined at that time, to be undertaken in a way that does not compromise the achievement of Te Ture Whaimana.

[1072] In addition to the above evaluation, there are directly relevant precedents to support provisions that enable the development of TWAL and the reasons set out in the s 32 and s 42A reports relating to the development of TWAL remain as relevant

today as they were at the time they were written. We agree with the reasons and consider that in view of the long-standing grievances and impediments tangata whenua have faced and the impediments to their ability to develop and utilise their land, greater certainty must be provided in PC1 and appropriate provision must be made.

[1073] We find first that it is appropriate to remove both the sunset clause and the non-complying activity rule relating to TWAL and replace them with a new policy and rule specific to TWAL. We discuss this further below.

Evaluation against the relevant objectives and strategies of Te Ture Whaimana and other planning instruments requiring consideration

[1074] The objectives to be pursued to realise the Vision of Te Ture Whaimana include clear directives relating to restoration and protection of the Waikato and Waipā Rivers. They also include:

- b. The restoration and protection of the relationship of Waikato-Tainui with the Waikato River, including their economic, social, cultural, and spiritual relationships.
- c. The restoration and protection of the relationship of Waikato River iwi according to their tikanga and kawa, with the Waikato River, including their economic, social, cultural and spiritual relationships.
- ...
- e. The integrated, holistic and coordinated approach to management of the natural, physical, cultural and historic resources of the Waikato River.

[1075] Tangata whenua consider that they are one with the river and the objectives must work together in accordance with Te āo Māori. The first four objectives of Te Ture Whaimana require restoration and protection and there is no stated priority to restore and protect any one of them in preference to any other. PC1 does not provide any guidance on how these objectives are to be achieved and without the ability to use TWAL in accordance with tikanga and kawa, historical constraints on economic, social, cultural and spiritual relationships with TWAL will continue.

[1076] In WRC's Final Proposal, Policy 17 is proposed to read:

For the purposes of considering land use change applications enabling the use and development of tāngata whenua ancestral lands, including any associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water:

- a. Recognise the historical and contemporary barriers and legal impediments to the development of tāngata whenua ancestral lands; and
- b. Recognise the reduction in point source and diffuse source discharges of nitrogen, phosphorus, sediment and microbial pathogens cumulatively achieved through the progressive implementation of Chapter 3.11 in the relevant sub-catchments; and
- c. Recognise and provide for:
 - i. The relationship of tāngata whenua with their ancestral lands; and
 - ii. The exercise of kaitiakitanga; and
 - iii. The creation of positive economic, social and cultural benefits for tāngata whenua now and into the future, in a way that is consistent with Te Ture Whaimana o Te Awa o Waikato.

[1077] The above policy requires tangata whenua values and mātauranga Māori to be accorded appropriate respect and acknowledgement and that there is the ability to utilise tangata whenua lands in the catchment area that they may hold and/or receive by way of Treaty Settlements. The policy is unlikely to be delivered when land use change for TWAL is a non-complying activity, meaning there is a lack of coherence and internal consistency in the provisions.

[1078] Evidence filed in relation to Mātauranga Māori prior to the Notified Version of PC1 stated the following:⁵¹⁸

Matauranga Māori was defined as:

... the knowledge, comprehension or understanding of everything tangible or intangible [such as spiritual and metaphysical values] that exists across the universe from a Māori perspective.

It takes many forms including te reo (Māori language), taonga tuku iho (treasure handed down) and mātauranga (traditional, environmental knowledge) and knowledge of cultural practises, such as rongoa (healing and medicines) and mahinga kai (hunting, fishing and cultivation of food).

More specifically for Waikato and Waipa River iwi Mātauranga Māori includes:

⁵¹⁸ Healthy Rivers Waioira Info Sheet October 2015, Tab 12 in Volume 501 of the casebook.

The historical and spiritual association that iwi have with the river, the range of activities undertaken, the different relationships with the river, the dependence of these activities and relationships on the state of water quality and the health of aquatic ecosystems, and the changes that have been observed over the centuries.

[footnotes omitted]

[1079] Mr Trebilco considered it would not be consistent with s 32 if the requirements of Policy 17 resulted in Objectives 1 and 2 not being met.⁵¹⁹ Objective 1 is to restore and protect the Waikato and Waipā Rivers by 2096. Objective 2 requires progress to be made towards the restoration and protection by meeting interim water quality targets within 10 years.

[1080] As our evaluation has shown, some appropriate development of TWAL would not prevent Objective 1 being met, it would simply mean that over the remaining life of Te Ture Whaimana, the extent of reductions in existing discharges would need to be increased by relatively small amounts to compensate for the discharges from TWAL. If that is not the intention, Objective 4, which addresses tangata whenua's ability to manage their own lands and resources, has no utility and would or should not have been included.

[1081] Similarly, some development of TWAL would not stop progress being made as required by Objective 2. The interim water quality targets, which Mr Trebilco may be relying on as part of his reasons for precluding such development are arbitrary, have no scientific basis, there is no certainty they will be met with or without some development of TWAL and it is unlikely that achievement will be able to be demonstrated. That is not a robust or appropriate foundation for excluding provisions to achieve Objectives b, c and e of Te Ture Whaimana.

[1082] Accordingly, we disagree with Mr Trebilco that Policy 17 will result in Objectives 1 and 2 and/or Te Ture Whaimana not being met. We also consider WRC's reference to "unlimited" development of TWAL⁵²⁰ to be inappropriate as no

⁵¹⁹ Mr Trebilco EIC at [152].

⁵²⁰ Memorandum of WRC dated 2 September at [33].

party is seeking that. At worst, some development of TWAL would require a relatively limited adjustment to the delivery pathway.

[1083] Further, s 32 of the RMA requires us to examine whether the provisions are the most appropriate to meet “the objectives” of PC1, not just some of them. When “giving effect to” Te Ture Whaimana, which was cited by WRC,⁵²¹ it requires all of its objectives to be given effect to, not selected ones. Our evaluation recognises and reflects these requirements.

[1084] We consider that WRC’s proposed amendments to Policy 17 in WRC’s Final Proposal are generally appropriate. However, the proposed addition to Policy 17(a)⁵²² - “... and have regard to the importance of allowing some further development of those lands” - does not go far enough. Policy provision must enable a start to be made on developing TWAL during the term of PC1, implemented by a new restricted discretionary activity rule as discussed below. In our view, Policy 17 should be amended to recognise the River Iwi relationships with the River, along similar lines to the precedent set by used in relation to Ngāti Tuwharetoa’s relationship with Lake Taupo in the WRP. However, this may be constrained by a lack of scope.

Objectives

[1085] Objective 4b is to be amended to read “impediments to the flexibility of the use of tangata whenua ancestral lands are minimised” as sought by Waikato and Waipā Iwi and CNI.

Activity status for land use change of Tangata Whenua Ancestral Land

[1086] In our view, non-complying activity status would preclude or unnecessarily and inappropriately delay the achievement of objectives b, c and e of Te Ture

⁵²¹ Memorandum of WRC dated 2 September at [39].

⁵²² Memorandum of WRC dated 2 September at [47].

Whaimana and there is no basis for asserting that these objectives have any less importance than any of the other objectives.

[1087] As noted above, iwi parties seek either restricted discretionary or discretionary activity status. We consider that restricted discretionary activity status is the most appropriate to meet the objectives of PC1 for the following reasons:

- (a) it will enable the relevant objectives and policies to be considered at the time of consent applications and to be declined if the circumstances dictate;
- (b) the rule will have limited application and matters of discretion can be focussed to ensure appropriate matters are considered;
- (c) it provides a more level playing field with other land use activities and reduces inequities;
- (d) it is the least restrictive activity status consistent with achieving the plan's objectives and policies in accordance with the relevant case law.

[1088] We will direct WRC to propose amendments to Policy 17 and propose a new restricted discretionary activity rule for TWAL following consultation with the parties. Scope to apply the restricted activity status is provided by Iwi of Hauraki's appeal. For consistency with other restricted discretionary and discretionary activities, it is to be a hybrid rule that includes both the land use change and associated diffuse discharges of the four primary contaminants.

F29 Other matters relating to objectives, policies and rules, including permitted activities

Objectives

[1089] WRC submitted that no substantive issues remained in dispute between the parties in relation to the key aspects of Objective 1 and Objective 2 and we accept

the amended versions in WRC’s Final Proposal.⁵²³ With regard to whether Objective 3 should “assist” or “enable” communities, we consider the following amendment is appropriate:

~~Waikato and Waipā communities~~ Contribute to their social, economic, spiritual and cultural wellbeing of Waikato and Waipā communities ~~are assisted to provide for~~ through staging the reduction of the discharges of nitrogen, phosphorus, sediment and microbial pathogens necessary to restore and protect the health and wellbeing of the Waikato and Waipā River catchments, and by the encouragement of collective community action for that purpose.

[1090] We addressed Objective 4 relating to TWAL in Part F28. Subject to any amendments determined above, we accept the objectives as the most appropriate way to achieve the purpose of the RMA.

Policies and rules

[1091] In addition to matters raised above, provisions proposed to be amended by WRC and in relation to specific policies and rules referred to below, amendments are required to different parts of WRC’s Final Proposal to reflect our decision and we do not identify those individually. References to the NRS and NLLR are examples. Various policies require amendment to reflect our findings relating to the activity status of dairy farms with moderate and high risks of diffuse discharges of the four primary contaminants. Imprecise language requires review and, where possible, amended so that the provisions are clear on their face, certain, workable and enforceable.

[1092] As discussed in Part B10, Central Government has signalled that it intends to amend s 70 of the RMA. While there is no scope to delete or amend permitted activity rules for the reasons set out in Part B10, our final determination of matters relating to permitted activities rules cannot be made until any changes have been enacted and their final form is known. In the interim, based on the evidence we heard, the proposed rules require a general improvement in farming practice and a

⁵²³For reasons stated elsewhere in this Decision, the Court did not address remaining differences between the parties relating to the attributes and numerical target attribute states in Table 3.11-1.

contribution to a reduction of significant effects on aquatic life within the term of PC1, including through the timely implementation of Farm Environment Plans.

[1093] Section 33 of the Legislation Act: Effect of repeal or amendment on existing rights and proceedings states:

- (1) The repeal or amendment of legislation does not affect—
 - (a) the completion of a matter or thing that relates to an existing right, interest, title, immunity, duty, status, or capacity (a **legal position**); or
 - (b) the commencing of a proceeding that relates to an existing legal position; or
 - (c) the completion of a proceeding commenced or in progress under the legislation.
- (2) Repealed or amended legislation continues to have effect for the purposes stated in subsection (1) as if the legislation had not been repealed or amended.

[our underlining]

[1094] The effect of this legislation on PC1 will depend in part on any transitional provisions included in any amendments to s 70 made to the RMA.

[1095] Policy 1e is to be amended to read:

Manage farming land uses to reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, by:

- e. Ensuring that records are kept to demonstrate that the risk of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water bodies has been or will be reduced to be as low as practicable within an appropriate specified period, which shall generally not exceed 10 years of PM10 becoming operative ~~the is not;~~ and

[1096] Policy 2f is to be amended to “progressively” exclude stock, as required in the Notified Version, as stock are unlikely to be generally excluded within the life of PC1. The amendment continues to give effect to Objective 2.

[1097] Policy 4b.iv is to be amended by adding the underlined words proposed by WRC⁵²⁴ and the words in bold considered appropriate by the Court:

iv. Identify suitable mitigating actions appropriate to the land, its use, the rainfall, topography, soil **and erosion** and clean water irrigation characteristics of the property(s).

[1098] Policy 6 should include reference to continuous improvement in Good Management Practices before “... to enable greater efficiency in the preparation ...”.

[1099] Method of control iv in Rule 3.11.4.4 is to be amended as set out in Part E22.

[1100] Restricted Discretionary Activity Rule 3.11.4.6, Farming in the Whangamarino Wetland Catchment, is to be amended to include the following additional matter of discretion:⁵²⁵

Measures to address the effects of rainfall, topography, or soil and erosion characteristics **or clean water irrigation** on diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens.

F30 Implementation methods

[1101] Implementation Method 3.11.3.6: Contextual information for Farm Environment Plans is to be amended by adding a new f. as follows:⁵²⁶

Any relevant information, including maps, on rainfall, topography and soil and erosion characteristics.

[1102] For Implementation Method 3.11.3.1: Lakes and Whangamarino Wetland the Director General sought:⁵²⁷

⁵²⁴ Memorandum of WRC dated 5 April 2024.

⁵²⁵ Memorandum of WRC dated 5 April 2024.

⁵²⁶ As per Memorandum of WRC dated 5 April 2024 with “and erosion” added by the Court.

⁵²⁷ Director General, opening submissions at [139].

For IM 3.11.3.1, the Director-General seeks reference to Whangamarino Wetland in the IM. It is also imperative that the action plan contained in the Lake Waikare and Whangamarino Wetland Catchment Management Plan is prioritised. A more detailed monitoring programme is required to determine trends in wetland conditions. Including a review of the Lower Waikato Flood Scheme by 2024 to specifically identify opportunities to reduce sediment and nutrients entering the wetland is urgently needed given the recent black water event and impacts this has had on the wetland's ecosystem health.

[1103] We agree with the Director General that because of the significance of the Whangamarino Wetland, it is appropriate to include a specific reference to it in the method. We will direct WRC to propose wording that gives appropriate effect to the above appeal point.

[1104] A new method and schedule are to be added to address how changes to Overseer versions are to be managed.

F31 Schedules

Schedule C stock exclusion minimum standards

[1105] We accept Standard 2d with the words “in accordance with the Resource Management (Stock Exclusion) Regulations 2020” added after “3 metres from the outer edge of the bed for any other waterbodies” to ensure that dispensations are not granted lightly.

[1106] To reflect our findings in Part F15 relating to stock exclusion, Standard 3 is to be amended as follows:

For farming that is permitted under Rules 3.11.4.1, 3.11.4.2 and 3.11.4.3, Clauses 1 and 2 above must be complied with as soon as practicable, ~~and in all cases;~~ generally no later than 5 years, and in all cases no later than 10 years after this chapter becomes operative, with steady progress toward compliance over the time required. Compliance beyond 5 years will only be authorised when it can be demonstrated in the FEP that the extended compliance period will not adversely affect sub-catchment water quality when other mitigation measures are taken into account.

[1107] Standard 4 is to be amended to reflect our findings in Part F20 relating to wetlands.

Schedule D1 - Requirements for Farm Environment Plans

[1108] Part D 2a, which addresses diffuse discharge requirements, is to be amended to require demonstration at five yearly intervals that diffuse discharge risk is reducing over time or is already as low as practicable, as generally agreed by WRC and Federated Farmers and Beef and Lamb.⁵²⁸

[1109] Part C4 is to include a new f. as follows:⁵²⁹

~~Where~~ Areas where there are particular risks related to the rainfall, topography and soil and erosion characteristics of the property(s), including where measures will be implemented to address the effects of those characteristics on diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens.

[1110] Part D 6.b and 6.d of both the Decisions Version and WRC's Final Proposal require:

Existing races, laneways, culvert crossings and bridges which were established before this chapter becomes operative shall be re-located, re-designed or managed to meet standard 6(a) within three years after this chapter becomes operative.

Existing gateways, water troughs, self-feeding areas, wallows and other sources of nitrogen, phosphorus, sediment and microbial pathogen loss are re-located, re-designed or managed to minimise the risks to surface water quality within three years after this chapter becomes operative.

[1111] Federated Farmers sought the deletion of both sub-clauses in its appeal for reasons that included they considered “this requirement for existing infrastructure to be unreasonably onerous and extremely costly for farmers” and “there are more effective uses of money and time of farmers to reduce contaminants”. In our view, a blanket requirement of this nature that applies to possibly 2,800 farms without a better understanding of the implications cannot be considered to be the most appropriate way to meet the objectives.

[1112] We agree with the reasons given by Federated Farmers and will direct WRC to propose an amendment that includes an appropriate degree of flexibility, that

⁵²⁸ Memorandum of WRC dated 5 April 2024.

⁵²⁹ As per Memorandum of WRC dated 5 April 2024 with “and erosion” added by the Court.

reflects the requirement to reduce discharges to be as low as practicable within an appropriate specified period. This should take account of the timeframes referred to in Part F15 and following consultation with other parties, must be submitted to the Court for final determination.

F32 Definitions

[1113] WRC proposed new definitions for the following in Schedule C of its memorandum dated 27 March 2025:

Auditor:
 Certified Farm Environment Planner
 Certified Environment Farm Plan Scheme
 Specified Instrument

[1114] We accept the above proposed definitions and the proposed definition of critical source areas, subject to the amendments set out in Part F22.

[1115] WRC is to consider the additional definitions set out below in consultation with the parties and propose final wording for consideration by the Court.

Practicable

[1116] As a general principle for ensuring drafting clarity, “practicable” may be more appropriate in PC1 as opposed to phrases such as “significant reductions”, “disproportionately large”, “significant or disproportionate”, “proportionately to the magnitude of the risks” and “meaningful with respect to the size of the risk”. While “practicable” does not provide absolute certainty, it is a familiar and commonly used term in RMA practice and would avoid or reduce the need to interpret several other different and less certain terms. Unless there is sound reason for not using “practicable”, WRC in consultation with parties should amend the provisions to provide greater clarity and consistency where appropriate. We acknowledge this may

not always be the case, for example, where a *de minimis* increase in risk is substituted for “material increase” or a definition of “material increase” is provided.⁵³⁰

[1117] “Practicable” would need to be interpreted generally in accordance with accepted RMA usage. While that of itself is not consistent, we note WRC set out a number of different interpretations,⁵³¹ the most recent of which was by the Supreme Court in *Royal Forest and Bird Protection Society of New Zealand Inc v New Zealand Transport Agency*⁵³² which stated that a practicable alternative is one that is “reasonably available”, and that “the best option and the only practicable option will not always, and perhaps only rarely, be the same thing”. Consideration should be given to adopting a similar approach to that outlined below relating to “as low as practicable”.

Reduce diffuse discharges to be as low as practicable within an appropriate specified period

[1118] This requirement, found in Policies 2b, 2c and 3c.i Rules 3.11.4.4 - .6 and Schedule D2 Part B3d of WRC’s Final Proposal, was discussed through the hearing but we were not provided with any clear definition of what it means. WRC, after consultation with the parties, is to propose a definition or guidance for final determination by the Court. Consideration should be given to something along the following lines to reflect relevant evidence and submissions:

For the purposes of determining mitigations required to reduce diffuse discharges to be as low as practicable within an appropriate specified period, the following must be had regard to, among other things:

- (a) relevant matters included in Policies 2 and 3; and
- (b) single operating units which, due to their size, intensity or management systems,⁵³³ are likely to discharge more and have a much larger impact on water bodies than other farms in the sub-catchment, must make greater reductions than those discharging less; and
- (c) where a reduction proportionate to the amount of current discharge is required, the largest discharges must be reduced by the greatest extent, the smallest discharges must be reduced by the least extent or not at

⁵³⁰ Memorandum of WRC dated 14 October 2024 at [53] and [54].

⁵³¹ Memorandum of WRC dated 14 October 2024 from [41].

⁵³² [2024] NZSC 26.

⁵³³ Wording proposed by WRC in its memorandum dated 14 October 2024 at [50].

all and those in between must be reduced in general proportion to where the discharge sits between largest and smallest, taking into account the state of knowledge; and

- (d) where a proportionate water quality improvement is required in the sub-catchment, larger reductions in discharges must be made where the scale of improvement required is largest, smaller reductions in discharges must be made where the scale of improvement required is least, or not at all and in between the discharges must be reduced in general proportion to where the scale of improvement sits between largest and smallest, taking into account the state of knowledge and practicability; and
- (e) the combination of mitigation options appropriate for use in the sub-catchment that will result in the optimum environmental benefit within the first five years of the term of consent; and
- (f) the financial implications when determining the appropriate specified period; and
- (g) an allowance for some tolerance to reflect uncertainties.

Stock unit, winter stocking rate and cattle winter stocking rate

[1119] WRC proposed amendments to the existing definitions to address a concern about their effect on the efficiency and effectiveness of the provisions in achieving Objectives 1 and 2.⁵³⁴

[1120] We understand that Federated Farmers and Beef and Lamb support the amendments⁵³⁵ but Mr Pinnell does not, but we do not fully understand the reasons for the different views.⁵³⁶ WRC is to seek to resolve the differences and submit an agreed definition and/or a statement setting out what differences remain and why. WRC is to confirm that any proposed definition is within scope.

Other definitions that may contribute to increased clarity

[1121] Parties are to consider whether a definition of crop rotation should be included.

⁵³⁴ Memorandum dated 2 September 2024 from [68].

⁵³⁵ Memorandum dated 16 September 2024.

⁵³⁶ Memorandum dated 13 September 2024 from [48].

F33 Duration of consent

Different policy proposals and submissions

[1122] Policy 6 of the operative WRP addresses consent duration as follows:

When determining consent duration, there will be a presumption for the duration applied for unless an analysis of the case indicates that a different duration is more appropriate having regard to case law, good practice guidelines, the potential environmental risks and any uncertainty in granting the consent.

[1123] In the Notified Version of PC1, the term of consent was a matter of control or discretion but no policy guidance was provided on what term was considered appropriate.

[1124] Policy 7 in the Decisions Version provided “[g]enerally not granting resource consents that authorise farming and commercial vegetable production activities for a duration beyond 2035 ...”. The Hearing Panel made this determination based on the assumption that PC1 would be made operative in 2022/3. The determination is consistent with the officers’ recommendation of a 12-year consent for farming activities. The officers also recommended the same expiry date in each sub-catchment.⁵³⁷ WRC’s Final Proposal is that consents be granted for a duration not exceeding 15 years.

[1125] The Hearing Panel considered that a policy on consent duration for farming activities involving diffuse discharges needs to specifically reference the possibility that a new Regional Plan may include new requirements for management of the resource, including an allocation regime. Following that through on the assumption that PC1 becomes operative in early 2026 and the last consents are applied for in 2030, and that processing takes a year and a 15-year consent was granted, it would not expire until 2046.

⁵³⁷ Recommendation Report at [1235] and [1224].

[1126] Federated Farmers and Beef and Lamb suggested a cut-off of 2040, which was “designed to enable a catchment-wide re-assessment to be done in 2040, so as you get nearer 2040 the duration of consents will get shorter”.⁵³⁸

[1127] Waikato and Waipā River Iwi supported the duration in the Decisions Version in its appeal and Fish and Game sought removal of “[g]enerally” from the Policy so that there were no exceptions where consents were granted for longer periods. Fish and Game were also concerned about durations greater than 10 years in sensitive catchments.⁵³⁹ The WRA submitted in closing that, in the context of PC1 (as a short-term plan change), the strong direction of Te Ture Whaimana, and the objectives in PC1 to restore and protect the Rivers, setting an expectation that consents will not generally be granted for longer than 10 years is more appropriate. WPL’s appeal sought the deletion and replacement of Policy 7 with an alternative.

[1128] Mr Sinclair supported amending the wording to “not granting for a duration exceeding 15 years”. In his opinion, this would provide a reasonable balance between the provision of adequate security of investment for consent applicants, while enabling WRC to better align the timing of future replacement consents to enable those applications to be considered under the provisions of future plans.⁵⁴⁰

[1129] Mr Trebilco considered that 15 years’ duration would provide greater flexibility to better enable consents granted under PC1 to be timed so that replacement consents can be considered under the new provisions of the next two plan changes.⁵⁴¹

[1130] Policy 7 in WRC’s Final Proposal was amended to read “[g]enerally not granting resource consents that authorise farming and commercial vegetable production activities for a duration of more than 15 years, with generally shorter terms as a subsequent plan change approaches, ...”.

⁵³⁸ Mr Matheson, record of judicial conference held 17 October 2024 at 60.

⁵³⁹ Record of judicial conference held 17 October 2024 at 58.

⁵⁴⁰ Mr Sinclair EIC at [57].

⁵⁴¹ Mr Trebilco EIC at [210].

Our evaluation and findings

[1131] The Whangamarino Wetland and lake catchments will be among the first to apply for consents. This accords with WRC's staging of applications so that those with the highest risk to water bodies from farming are processed first. WRC submitted that it may be appropriate for farmers in these catchments to have a longer consent duration, because they will need to do more, over a longer period, to reduce risk.⁵⁴²

[1132] They are likely to be the catchments in which restoration work will be the most challenging, yet they could be granted consents with a 15-year duration in accordance with WRC's Final Proposal. At the other end of the scale, activities requiring consents in catchments that are not over-allocated will be last to apply for consents. Even though their potential for adverse effects will be more limited, and limited, if any, restoration will be required, they might only be able to be granted consents with a 10-year duration or less. This appears to accord a benefit to a higher-risk activity which, on its face, would be a perverse outcome.

[1133] For these and other reasons, we consider that Policy 7 of PC1 must remain with some amendments and will take precedence over Policy 6 of the WRP.

[1134] We noted the Hearing Panel's reasons for not granting consents beyond 2035, which would need adjustment to 2038 to reflect the time that has elapsed since. If that date were retained, consents granted in the least sensitive catchments, say five years after PC1 becomes operative would have a maximum eight-year term and possibly less if there were delays in consents being granted. Activities in the most sensitive PC1 sub-catchments could be granted 12-year duration consents. That would not represent sound resource management and would send the wrong signals. It could also present unfair and unnecessary funding challenges for farms consented later.

⁵⁴² Memorandum of WRC dated 14 October at [19].

[1135] Considering the Hearing Panel's reasons further, a new plan change may not be notified until 2030 and if it became operative five years later, new plan provisions could become operative in or around 2035 or several years later depending on the duration of subsequent plan processes. Accordingly, no reliance can be placed on when new plan provisions will become operative and before basing maximum consent terms on any assumed date, other relevant matters require consideration.

[1136] There is scope to consider maximum consent terms of between 10 and 15 years and we consider that to be an appropriate range for the circumstances that apply in the PC1 area. As PC1 is based on the underlying principle of managing risk, lower risk activities would normally be granted longer consent durations and higher risk activities would normally be granted shorter consent durations. We can see no valid reason to do otherwise in the case of PC1.

[1137] On that basis, we determined that:

Notwithstanding Policy 6 of the Waikato Regional Plan:

- (a) land use activities in sub-catchments where the interim target attribute states are exceeded, including those draining to the Whangamarino Wetland or in a sub-catchment draining to lakes named in Table 3.11.3 or in a sub-catchment draining to wetlands listed in Table 3.7.7 of the WRP, will generally not be granted consent for a duration exceeding 10 years and in no case for a duration exceeding 12 years; and
- (b) land use activities in all other sub-catchments may be granted consent for a duration of up to 15 years and ending no later than 31 December 2040;
- (c) The term of consent may be reduced where insufficient mitigations are proposed to be implemented to ensure diffuse discharges are reduced to be as low as practicable within 10 years of the PC1 becoming operative.

[1138] Sub-Paragraph (a) above acknowledges that there may be cases where the level of investment may justify a longer-term consent, for example if mitigations included a feed pad or barn.

[1139] Based on the above consent durations, and again on the assumption that PC1 is operative early in 2026 and all land use activities in sensitive catchments are consented by 2030, most if not all consents in those catchments should expire

between 2037 and 2040. Consent durations for land use activities in less sensitive catchments would end no later than 31 December 2040, but such activities would have been able to continue operating from the time PC1 became operative, a period of approximately 15 years, meaning they would not be disadvantaged by a 2040 end date.

[1140] As new plan provisions would likely become operative sometime between 2035 and 2038, there could be a lag of up to five years before some new consents could be issued to implement the new provisions. Spreading the processing of new consents would avoid WRC having to process possibly more than 2,000 new resource consent applications at one time.

[1141] Section 128(1)(b) provides for a review of conditions of a discharge permit or a land use consent issued by a regional council if a plan contains a rule relating to minimum water quality standards and the regional council considers that it is appropriate to review the conditions of the permit or consent in order to enable the standards set by the rule to be met. Controlled activity rule 3.11.4.4 includes a matter of control relating to lake water quality but there are no standards referred to. Unless any party considers otherwise, we do not consider reviews under s 128(1)(b) could be required without amendments to the rules. As such amendments will be required for other reasons, it could come down to matters of justification and scope.

[1142] We will invite parties to consider these matters and make submissions to the extent necessary. Parties are to identify the scope for any changes sought and their standing to seek them.

F34 Regulatory compliance

[1143] This is a matter that rests in the first instance with WRC and Mr Sinclair outlined WRC's expectations and anticipated approach to compliance.⁵⁴³ He considered that achieving changes in farming practices will require the full spectrum of regulatory compliance mechanisms. This includes being able to identify those

⁵⁴³ Mr Sinclair EIC from [58].

who are early or pre-adopters of regulation or are exemplars in their adoption and ensuring they are recognised and rewarded or incentivised in some meaningful and public way.

[1144] Mr Sinclair considered that comprehensive education and communication packages will be important and a full spectrum approach to regulatory compliance must also have the ability to respond to heightened, or more serious, incidents of non-compliance. He expected that the farming sector industries will take a prominent role in supporting those they represent to comply.

[1145] It is clear to the Court that relationships and working collaboratively will significantly influence the level of success that can be achieved through PC1. The very large numbers of individual land use activities falling within the PC1 provisions makes the task particularly challenging and relationships established between WRC and farming sector industry organisations will also have a significant influence on the level of success achieved. We compliment Mr Sinclair on his approach that focussed first on supporting those who make a positive contribution.

F35 Monitoring progress against interim water quality targets

[1146] By minute dated 7 March 2022, we stated that:

From our preliminary review of the appeals, parties have different expectations as to what PC1 is expected to and/or can achieve. It is important that all expectations reflect what is realistic and reasonable in the particular circumstances that exist in the two river catchments to minimise the potential for PC1 to be perceived as a failure.

[1147] The process used to develop water quality targets is described in the Recommendation Report and involved many complexities.⁵⁴⁴ The Report summarises the four days of expert conferences by 21 experts as “having conspicuously failed to reach a unified consensus on what attributes are recommended for inclusion in Table 3.11-1, ...”, and, understandably, the Hearing Panel relied on the recommendations of the large majority of experts. We mean no

⁵⁴⁴ Recommendation Report from [918].

criticism by referencing this comment but do so to illustrate the need for caution when placing too great a reliance on the interim water quality targets being met.

[1148] The Hearing Panel considered that if the catchment is to stay on track towards achieving the long-term objective by 2096, the interim targets would need to achieve a 20% improvement compared with the 80-year outcomes, rather than 10% required in the Notified Version. They noted that Dr Doole’s economic modelling projected a significant ‘overshoot’ resulting from application of the notified PC1 policy mix, meaning it would achieve a water quality improvement significantly in excess of the 10% of the long-term target required in the Notified Version.

[1149] Dr Olubode-Awosola’s evidence before us provided updated modelling results, which were based on Dr Doole’s original model. As recorded in Part F2, we received evidence that 250 of the 336 interim attribute state targets based on a 20% reduction were met and/or exceeded and 86 (or 25%) were not met. We have previously indicated our concerns about a number of assumptions used in the modelling, but the model results at least suggest that the Panel’s assumption is not supported by subsequent modelling and may not represent what will be achievable.

[1150] Time will be required before the benefits of improved farm management practices will be detectable in the receiving waters, particularly in relation to nitrogen, which is the contaminant on which PC1 focusses most. It is not yet clear that the peak “load to come” has arrived in some sub-catchments and further increases may still result. It may take at least five years and more likely 10 to 15 years or more in some catchments before the effects of reduced discharges on farm will be detected in some receiving waters. Based on Dr Olubode-Awosola’s evidence, factors outside the modelled scenarios could affect achievement of the target attribute states, including the nitrogen “load to come”.⁵⁴⁵

⁵⁴⁵ Dr Olubode-Awosola EIC, Appendix 1 Executive summary.

[1151] Most shallow lakes have catchments dominated by pastoral farming, with an average of around 90% of nitrogen loads coming from pastoral sources.⁵⁴⁶ In some lake catchments, reductions of up to 50% in external and internal nutrient loads would be insufficient to raise the NOF status from D-band⁵⁴⁷ and would only be achieved with very large reductions in farm discharges, which are not required through PC1.

[1152] Dr Ausseil expressed reservations about the modelled water clarity and *E. coli* predictions as these seemed overly optimistic. He emphasised the importance of managing all (or most) types of activities that may impact on in-river TN and TP loads across the entirety of the catchment, and the importance of reducing sediment loads in improving water quality.⁵⁴⁸

[1153] Assessing the likelihood of suspended sediment targets being met is less straight forward. The load in the Waikato River increases from 66,000 t/y at Hamilton to 261,000 t/y at Rangiriri below its confluence with the Waipā River,⁵⁴⁹ an increase of almost three times. Predominant sources of sediment include hillslope erosion, mass movement and streambank erosion, with streambank erosion possibly contributing around 60%.⁵⁵⁰ Dr Ausseil calculated that a several fold improvement is required to achieve visual water clarity targets in some cases. He had not seen a detailed assessment of the corresponding reductions in sediment loads or of their achievability.⁵⁵¹

[1154] We received no evidence on when reductions in point source discharges will occur. Waipā District Council appealed the increased reduction target in the first 10 years, stating:

It is likely to be technologically very difficult for point source discharges such as wastewater treatment plants to achieve the 10% reduction required by PC1 as notified. It is doubtful whether achieving a 20% reduction in current

⁵⁴⁶ Dr Scarsbrook EIC at [93].

⁵⁴⁷ Mr Klee EIC from [9.13].

⁵⁴⁸ Dr Ausseil EIC at [29], [72] and [83].

⁵⁴⁹ Dr Scarsbrook EIC at [80].

⁵⁵⁰ Dr Scarsbrook EIC at [132] and [134].

⁵⁵¹ Dr Ausseil EIC at [87].

contaminant loads in 10 years is technically feasible; if it is, very significant expenditure on wastewater treatment plant upgrades would be required, which would place a significant and unwarranted financial burden on Waipa District ratepayers.

[1155] While we understand the reasons for including interim targets, they raise expectations that may not be met. Based on the evidence, they cannot be anything other than aspirational, their achievability is uncertain at best and reliable monitoring unlikely to be possible in the case of nitrogen at least. They do not form an appropriate metric for measuring the success or failure of PC1 and need to be seen as representing a “best endeavours” target only.

F36 Overall evaluation

[1156] The challenging circumstances in which PC1 has been developed and the many changes that have been proposed over the extended period since PC1 was first notified have resulted in a lack of coherence and some internal inconsistencies in the provisions included in WRC’s Final Proposal. In making that finding, the Court has had the benefit of hindsight and new information that was not available to the Hearing Panel or to WRC, but we must now consider the most appropriate way to ensure the objectives of PC1 are achieved based on the best currently available information.

[1157] PC1 must address social, cultural, environmental and economic effects, not any one of them in isolation. Based on the evidence, dairy farming activities in particular have been enabled through current plan provisions with limited controls on effects on the environment. Reversing the effects will take much longer than the term of PC1 and will not be achieved without significant social and economic consequences for farmers and growers, their families, staff and communities and the regional economy. A balance must be achieved.

[1158] The increased doubts raised by the PCE about the suitability of Overseer for use in regulation presented a particularly serious challenge that required a correspondingly thorough evaluation. This had to consider all aspects of Overseer’s use in PC1 and possible alternatives with fresh eyes and to take into account the

strongly held, conflicting and in one case non-negotiable views expressed by parties through the process. We are satisfied that the process followed was comprehensive, reflected the significance of the issue and was fair to all parties.

[1159] We also consider that our findings accurately reflect the evidence. We are satisfied that adopting the NRS as the drafting gate for low-intensity dairy farming activities and making both moderate and high-intensity dairy farms controlled activities will not compromise the outcomes sought. We consider that it could improve the outcomes by making regulatory processes simpler and less daunting for the majority of farmers and growers who have limited familiarity with such processes and result in an earlier start being made on mitigation works.

[1160] When undertaking our evaluation, we also considered carefully the issues of equity that were raised at different times through the hearing. We are satisfied that all farming sectors and individual activities within each sector are treated equitably as far as that is possible to achieve in such a large and diverse geographical area with so many single operating units and so many variables and uncertainties. Importantly, the provisions as amended by our decision will minimise inequities and all existing activities will be required to ensure their discharges reduce their diffuse discharges to be as low as practicable within 10 years. In our view, this is the best outcome that can be achieved until an activity specific contaminant reduction mechanism is put in place.

[1161] As required by s 32 of the RMA, our evaluation contains a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated to occur as a result of PC1. It has shown that there was insufficient consideration of scope and a lack of documented evidence and appropriately robust s 32AA evaluations to support some of the proposed changes, a number of which could have significant consequences. Imprecise language is used in places, which could be interpreted differently by different parties involved in the regulatory process, with a corresponding potential for disputes.

[1162] Our interim decision identifies matters where further work is required but it is not the role of the Court to descend into the planning arena and attempt to take over the role of WRC. We have identified possible ways of addressing our concerns based on the evidence but it is for WRC to propose amendments for consideration by the Court following consultation with parties.

[1163] The primary benefit anticipated from PC1 by the parties is a 20% improvement towards the long-term water quality target states within 10 years. We have identified that this should not be relied upon as a yardstick for judging the success of PC1. Nevertheless, the following evidence shows that in combination with mitigations already in place, PC1 will result in significant benefits in due course:

- (a) ... The Upper Waikato FMU was used as a case study for the effectiveness of farm plans from 2012-2015. 700 dairy farms in the FMU were supported through development and implementation of Sustainable Milk Plans. Results indicated an average 8% (range 0-49%) reduction in N and 16% (range 0-63%) reduction in P. Actions around wintering strategies and improved feed management had large impacts on reducing nitrogen losses on some farms (>30% farm N reduction). The largest reductions in P (>50%) were associated with riparian management plus improved management of critical source areas, stock exclusion and dairy effluent-nutrient application.
- (b) There was a significant reduction in pugging (8% of stream bank length) for the five-year period between 2012 and 2017, which indicates that riparian fencing efforts are resulting in measurable reductions in soil disturbance.
- (c) The majority of dairy farms will comply with the Stock Exclusion Regulations by or soon after PC1 becomes operative, as discussed in Part G.
- (d) Reductions in NLLR values (or nitrogen risk scores) for dairy farms can be expected to be indicative of reductions in farm discharges of nitrogen.

[footnotes omitted]

[1164] There is an understandable desire by some parties to do more sooner and we have considered carefully what can realistically be achieved in all the circumstances that exist in the PC1 area, including the uncertain regulatory environment that is likely to continue for some time. A large momentum shift will be required from the “business-as-usual” practices that have been enabled for much of the last 20 years and we have sought to avoid setting unrealistic timeframes for that to occur.

[1165] Setting unrealistically short timeframes will almost certainly mean they will not be met to varying degrees, resulting in increased stress for land users, extra work for WRC and increased tension and negative feelings towards PC1. It is important that such a situation is avoided as far as possible. Further, setting realistic timeframes would generally not delay progress by more than two or three years initially, if that, out of the 70 years remaining to achieve Te Ture Whaimana and this could readily be caught up in the remaining 60 years.

[1166] We are satisfied that the provisions now provide the appropriate balance between the two competing world views referred to by Mr Pinnell to ensure optimum progress is made.

[1167] However, the need for WRC to exercise its discretion cannot be avoided because the information currently available is insufficient to provide the certainty of outcomes with the wide array of issues that will have to be considered when certifying FEPs and issuing resource consents.

[1168] We set out the findings of our s 32AA evaluations in Part G.

PART G Section 32AA evaluation

[1169] We have undertaken s 32AA evaluations of the following key changes directed in this decision:

- (a) use of Nitrogen Risk Scorecard as a drafting gate for dairy farming activities with a low-risk of diffuse discharges in Part E18;
- (b) the use of Overseer and the NRS as drafting gates for dairy farming activities with moderate and high intensities and associated increased risks of diffuse discharges and the most appropriate resource consent activity status in Part E23;
- (c) set-back distances and riparian planting for streams and lakes (F11 to F17);
- (d) the area of wetlands for which fencing and riparian planting is to be provided (Part F20); and
- (e) the development of Tangata Whenua Ancestral Land (Part F28).

[1170] The available information does not allow other s 32AA evaluations that would be meaningful.

[1171] In relation to PC1 as a whole, we have identified reasonably practicable options and evaluated them in some detail in many cases. We have assessed the efficiency and effectiveness of the provisions both individually and holistically and are satisfied that they are the most appropriate way to achieve the objectives. The provisions reflect the importance of practicability and the need to allow elements of discretion for WRC when applying them when starting a journey as challenging and uncertain as that required to deliver Te Ture Whaimana. We find that the risk of not acting in accordance with the provisions as amended by our decision would be significantly greater than the risk of acting.

[1172] Implementation, collective commitment, relationships and the availability of appropriate resources will be critical to success. They will be what determines the progress that will be made over the term of PC1.

PART H Scope and need for a s 293 process

H1 Scope

[1173] We addressed scope under each part of our decision to the extent relevant. By way of an overview of the proposals to amend the Decisions Version in WRC's Final Proposal, there is no scope for the following proposed amendments:

- (a) remove the requirement for CVP activities to monitor nitrogen loss;
- (b) amend Rule 3.11.4.9 to include diffuse discharges from the changed use;
- (c) remove the option of using an alternative model or method of assessing nitrogen loss from Schedule B; or
- (d) change the slopes of land on which fencing is required from 15° to 10°.

[1174] As both moderate and high intensity/risk dairy farms are controlled activities, as notified, and Overseer is retained for comparing nitrogen losses over time, the issue of an alternative drafting gate to Overseer for these alternatives no longer arises.

Section 293

[1175] We have determined that there is no requirement for a s 293 change to amend PC1 to require the use of NRS instead of NLLR as the drafting gate and method of monitoring nitrogen reductions for dairy farming activities with a low risk of diffuse discharges, which will be subject to any changes made to s 70 of the RMA.⁵⁵²

⁵⁵² Part E24 of this decision.

[1176] We have determined that a s 293 process will be required in relation to the removal of Overseer and enabling an alternative method for monitoring of CVP activities. Our reasons were set out in Part F9.

[1177] Section 293(1) states:

- (1) After hearing an appeal against, or an inquiry into, the provisions of any proposed policy statement or plan that is before the Environment Court, the court may direct the local authority to—
 - (a) prepare changes to the proposed policy statement or plan to address any matters identified by the court;
 - (b) consult the parties and other persons that the court directs about the changes;
 - (c) submit the changes to the court for confirmation.
- (2) The court—
 - (a) must state its reasons for giving a direction under subsection (1); and
 - (b) may give directions under subsection (1) relating to a matter that it directs to be addressed.

[1178] We will direct WRC to provide a draft plan change and associated information, including a s 32AA report, notification and consultation proposal and timeframe and any other matter considered appropriate by WRC. We anticipate that all parties to the appeals and original submitters will be notified and that public notices will need to be provided, but WRC is to consult with the parties and make a recommendation to the Court.

PART I Possible time frame to issue of our final decision

[1179] As stated in Part A3, further work is required to address the matters raised in this decision and to ensure the provisions are clearer on their face and more certain, workable, practicable, enforceable and equitable. This will unavoidably add to the time before all provisions can be operative.

[1180] Our best assessment of what a possible time frame might be is as follows:

27 June	Preliminary submissions on aspects of interim decision by parties
25 July	WRC submission proposing amendments to PC1 in response to interim decision, taking into account feedback from parties
June/July	Anticipated amendments to s 70 of the RMA take effect
September	Place holder for reconvened hearing to consider proposed amendments, changes to s 70 and any matters relating to a s 293 process
October	Initiate s 293 process
December target	Issue final decision, except where required to address amendments to s 70 and subject to any need for a s 293 process
First quarter 2026	Hearing of s 293 matters

PART J Directions

[1181] In view of the complex circumstances in which PC1 developed, we invite final submissions from parties on whether they consider there are any matters of fact, expert opinion or law of direct relevance to the issues that have been omitted or not been referenced appropriately. This must not be taken as an opportunity to restate parties' positions and any submissions that attempt to do so will unnecessarily increase the time for consideration by the Court and will be given no weight.

[1182] We invite all parties to consider whether there are any significant matters remaining in dispute that are not addressed in this interim decision. Submissions are to be made within 20 working days of the date of issue of this interim decision.

[1183] For the parties' convenience we restate key directions made in earlier parts of our interim decision as set out below. Less significant directions and consequential and other amendments to the provisions, too numerous to be listed, will also be required to respond to this decision. They are to be implemented by WRC following consultation with parties to the extent appropriate and responses proposed for final determination by the Court.

[1184] WRC is directed to:

- 1 Advise how it intends to provide farming and CVP land users with the best available information on the indicative long-term reductions in loads of the four contaminants that could be required in each sub-catchment and other catchment context information prior to FEP preparation and/or consent applications being made (Part A5).
- 2 Advise if it currently has sufficient monitoring data to determine which sub-catchments will need to comply with the provisions of ss 107(2A) and 70 (Part B10).

- 3 Propose new wording to ensure clarity that farming and CVP activities are to be managed as single operating units, generally as defined by Mr Trebilco⁵⁵³ but subject to final determination by the Court in response to a final proposal by WRC after consultation with parties.
- 4 Propose appropriate wording to make it clear in Schedule C that both definitions of intermittent and ephemeral waterbodies apply for the purpose of Clause 4, not the WRP definition (Part C7 and F11).
- 5 Consider if a reference file method is to be included to address changes in Overseer versions in consultation with the parties and make a recommendation on an appropriate method, if required, for final determination by the Court (Part E16).
- 6 Review the NRS values for permitted activity limits in Table 1 of Schedule B to ensure they represent the best available information (Part E18).
- 7 Amend matter of control iv in Controlled Activity Rule 3.11.4.4 to read “Measures, including measures to address the effects of rainfall, topography, soil and erosion characteristics and/or clean water irrigation, to ~~address the effects, including cumulative effects~~, ensure that the risks of diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens will be reduced to be as low as practicable over an appropriate specified period, which generally shall not exceed 10 years⁵⁵⁴ of PC1 becoming operative, as determined in accordance with Policy 2” (Part E21).
- 8 Amend Policy 1(e) to read “Ensuring that records are kept to demonstrate that the risk of diffuse discharges of nitrogen,

⁵⁵³ Mr Trebilco EIR, Additions to Glossary of Terms

⁵⁵⁴ Part E22 of this decision.

phosphorus, sediment and microbial pathogens to water bodies is reduced to be as low as practicable within an appropriate specified period, which shall generally not exceed 10 years PM₁₀ becoming operative” (Part E22).

- 9 Propose a final version of Policy 2(B) (Part E22).
- 10 Propose definitions for GMPs and circumstances where they may not be adopted in accordance with new Policy 2(B) (Part E22).
- 11 Consider whether provision should be made to include the NRS in any form of non-regulatory role as a possible way to test its suitability for use in a future regulatory role or plan change, for example for annual review purposes (Part E 22).
- 12 Amend Permitted Activity Rule 3.11.4.3 to include a condition that diffuse discharge risk must reduce to be as low as practicable within an appropriate specified period not exceeding 10 years or is already as low as practicable (Part F8).⁵⁵⁵
- 13 A consistent method of demonstrating a reduction in contaminant losses from permitted drystock farms should be included in PC1 to avoid unreasonable levels of discretion having to be exercised by individual regulatory staff (Part F8).⁵⁵⁶ WRC is to confirm that Overseer will be used to monitor nitrogen losses from consented drystock farming activities.
- 14 Consider if Schedule D2 should be amended to require that farm scale erosion risks (type of erosion occurring/areas of the property at

⁵⁵⁵ Memorandum of WRC dated 5 April 2024: WRC and Federated Farmers agreed to amend Schedule D1, Part D(2)(a), which applies to permitted activities to require demonstration that diffuse discharge risk is reducing over time or is already as low as practicable.

⁵⁵⁶ To satisfy new s 107(2A) of the RMA.

risk/specific location of major erosion sites) are mapped, similar to the requirement in Part D4a. of Schedule D1(Part F8).

- 15 Amend Part Bb of Schedule D1 in WRC's Final Proposal by adding at the end "except where such discharges are already as low as practicable", and to require five yearly reporting to demonstrate that progress has been made. (Part F8).
- 16 Amend Part D2a of Schedule D1 in WRC's Final Proposal to include a requirement to demonstrate a reduction in contaminants loads and to require five yearly reporting to demonstrate that progress has been made (Part F8);
- 17 Recommend if a definition of crop rotation should be included in PC1 (Part F9).
- 18 Propose a method to be included in PC1 that sets out how WRC will ensure that the risk of nitrogen losses from CVP activities are to be determined, monitored and/or enforced (Parts F9 and H2).
- 19 Consider if it would be clearer to clarify that Schedule C: Minimum farming standards applies to pastoral farming only, as stating in Schedule C that clauses 6, 7 and 9 do not apply to CVP as currently proposed lacks clarity, as it could mean that either greater or lesser limits could or should apply (Part F9).
- 20 Amend the stock exclusion provisions of Schedule C so that for permitted activities, all stock must be excluded from all water bodies on land with slopes of up to 10° as soon as practicable and in all cases within five years of PC1 becoming operative, as proposed in WRC's Final proposal (subject to limited exceptions as discussed in Part F31). For consented activities, all stock must be excluded from all water bodies on land with slopes of up to 10° as soon as practicable and in all cases within an appropriate specified period set out as a

condition of consent. Within five years of PC1 becoming operative, all FEPs must identify all unfenced streams on land with slopes between 10° and 15° and set out a programme to complete all fencing within a further five years or, alternatively, such other timeframe considered to be a more appropriate specified period or set in the next plan change. (Part F15).

- 21 Amend Schedule C of WRC's Final Proposal to:
 - replace the 10° slope with the 15° slope included in the Decisions Version; and
 - delete 4c of Schedule C and replace it with “any natural wetland that supports a population of threatened species as described in the compulsory value for threatened species in the NPSFM 2020”.⁵⁵⁷ (Part F20).
- 22 Address the matters relating to Farm Environment Plans in Part 21.
- 23 Address the matters relating to critical source areas and provide a visual guide to be included by reference in PC1 as a guide to plan users from the time PC1 becomes operative (Part F22).
- 24 Respond to matters raised in relation to intensive winter grazing in Part F23.
- 25 Recognise that the definitions of “property”, “enterprise” and “single operating unit” are confusing and consider whether it should be replaced by a definition of “single operating unit” that includes leased land and provides greater overall clarity (Part F24).⁵⁵⁸

⁵⁵⁷ To be consistent with Regulations 16 and 17 of the Stock Exclusion Regulations as amended by the Freshwater Amendment Act.

⁵⁵⁸ In response to opening submissions of the Joint Farming Parties at [1.24].i] and[6.44].

- 26 Reinstates the 10-year moratorium in Rule 3.11.4.9 and clarify that the rule does not apply to TWAL (Part F2);
- 27 Reinstates clause A3(a) of Schedule B to allow alternatives to Overseer to be used to demonstrate a reduction in contaminant loads, not as a gateway; to remove the requirement for modelling results to be comparable to those of Overseer, to consider the matters raised in the appeals by WRC and Ballance and to provide an alternative method of monitoring nitrogen losses from CVP activities. (Part F25).
- 28 Amend Policies 5 and 12b relating to offsetting and compensation as discussed in Part F26 and recommends if a consequential amendment to Policy 13e. is required where it refers to offsetting/compensation proposed in accordance with Policy 12.
- 29 Consider if both Policies 5 and 3b.iii are necessary in relation to CVP activities (Part F26).
- 30 Propose policy amendments to address the issues raised in Part F27.
- 31 Inserts the words “relating to the load of nitrogen, phosphorus, sediment or microbial pathogens” following the words “For the purpose of establishing if a discharge will have a residual adverse effect ...” in Policy 12c. (Part F27).
- 32 In relation to the development of Tangata Whenua Ancestral Land (Part F28):
 - amend Objective 4b to read “impediments to the flexibility of the use of tangata whenua ancestral lands are minimised” as sought by CNI;
 - amend Policy 17(a) to enable a start to be made on developing TWAL during the term of PC1, to be implemented through a

new restricted discretionary activity rule. In addition, Policy 17 is to be amended to recognise the River Iwi relationships with the River;

- propose a new restricted discretionary activity rule for developing TWAL modelled on Rule 3.11.4.6: Restricted Discretionary Activity Rule – Farming in Whangamarino Wetland catchment and include land use change and the use of land for farming, including any associated diffuse discharge of the four primary contaminants; and
- considers the following as alternative definition of Tangata Whenua Ancestral Land:

Tangata whenua ancestral lands means land, within the catchment, that has been returned to, or acquired by tangata whenua through Treaty settlement process or mechanism (such as rights of first refusal or deferred selection process) and is Māori freehold land or General land held by Māori who are tangata whenua⁵⁵⁹ within the definition of Te Ture Whenua Māori Act 1993.

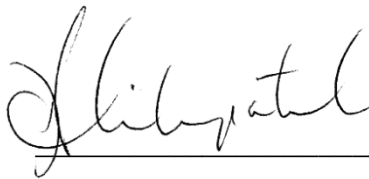
- 33 Make amendments as set out in Parts F29 to F32.
- 34 Amend Policy 7: Duration of consents as set out in Part F33.
- 35 Review all PC1 provisions to remove unclear terminology as far as possible and considers more consistent use of “practicable” (Part F32).

[1185] WRC is to respond within 40 working days of the date of issue of this interim decision.

⁵⁵⁹ The reference to tangata whenua is deliberate. Tangata whenua refers to those who have mana in the rohe, and does not include hapū or iwi who are not mana whenua and purchase land within the rohe.

[1186] While we make no direction in relation to the Whangamarino Wetland, we repeat our findings in Part F19 that it is difficult to avoid the conclusion that without what are likely to be very significant changes to present management approaches to restore the wetland by addressing both causes of contaminant and hydrological effects, further deterioration of the wetland will be inevitable. As the significance of the site has been recognised by RAMSAR, it appears to us that WRC needs to give serious consideration to whether restoration of the wetland is likely to be achieved more effectively and efficiently if the Wetland has its own FMU or not.

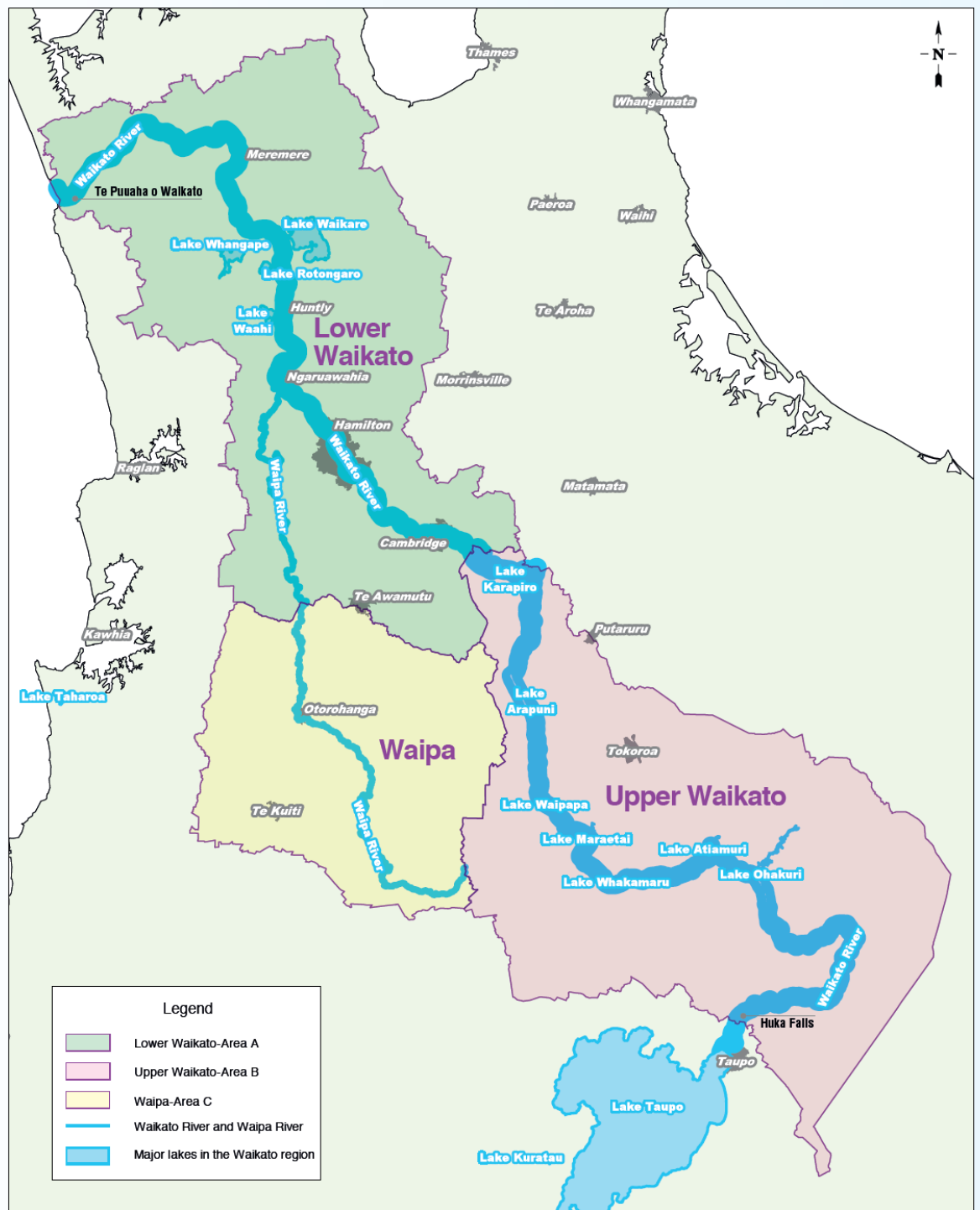
For the Court:



D A Kirkpatrick

Chief Environment Court Judge | Kaiwhakawā Matua





Attachment 2

Vision and Strategy

1 Vision

(1) Tooku awa koiora me oona pikonga he kura tangihia o te maataamuri. The river of life, each curve more beautiful than the last.

(2) Our vision is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come.

(3) In order to realise the vision, the following objectives will be pursued:

- (a) The restoration and protection of the health and wellbeing of the Waikato River.
- (b) The restoration and protection of the relationship of Waikato-Tainui with the Waikato River, including their economic, social, cultural and spiritual relationships.
- (c) The restoration and protection of the relationship of Waikato River iwi according to their tikanga and kawa with the Waikato River, including their economic, social, cultural and spiritual relationships.
- (d) The restoration and protection of relationships of the Waikato Region's communities with the Waikato River, including their economic, social, cultural and spiritual relationships.
- (e) The integrated, holistic and co-ordinated approach to management of the natural, physical, cultural and historic resources of the Waikato River.
- (f) The adoption of a precautionary approach towards decisions that may result in significant adverse effects on the Waikato River and in particular those effects that threaten serious or irreversible damage to the Waikato River.

- (g) The recognition and avoidance of adverse cumulative effects, and potential cumulative effects, of activities undertaken both on the Waikato River and within its catchments on the health and wellbeing of the Waikato River.
- (h) The recognition that the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities.
- (i) The protection and enhancement of significant sites, fisheries, flora and fauna.
- (j) The recognition that the strategic importance of the Waikato River to New Zealand's social, cultural, environmental and economic wellbeing requires the restoration and protection of health and wellbeing of the Waikato River.
- (k) The restoration of the water quality within the Waikato River so that it is safe for people to swim in and take food from over its entire length.
- (l) The promotion of improved access to the Waikato River to better enable sporting, recreational and cultural opportunities.
- (m) The application to the above of both maatauranga Maaori and latest available scientific methods.

2 Strategy

To achieve the vision, the following strategies will be followed:

- (a) Ensure that the highest level of recognition is given to the restoration and protection of the Waikato River.
- (b) Establish what the current health status of the Waikato River is by utilising maatauranga Maaori and latest available scientific methods.
- (c) Develop targets for improving the health and wellbeing of the Waikato River by utilising maatauranga Maaori and latest available scientific methods.
- (d) Develop and implement a programme of action to achieve the targets for improving the health and wellbeing of the Waikato River.

- (e) Develop and share local, national and international expertise, including indigenous expertise, on rivers and activities within their catchments that may be applied to the restoration and protection of the health and wellbeing of the Waikato River.
- (f) Recognise and protect waahi tapu and sites of significance to Waikato-Tainui and other river iwi (where they so decide) to promote their cultural, spiritual and historic relationship with the Waikato River.
- (g) Recognise and protect appropriate sites associated with the Waikato River that are of significance to the Waikato regional community.
- (h) Actively promote and foster public knowledge of the health and wellbeing of the Waikato River among all sectors of the Waikato regional community.
- (i) Encourage and foster a whole-of-river approach to the restoration and protection of the Waikato River, including the development, recognition and promotion of best practice methods for restoring and protecting the health and wellbeing of the Waikato River.
- (j) Establish new, and enhance existing, relationships between Waikato-Tainui, other Waikato River iwi (where they so decide) and stakeholders with an interest in advancing, restoring and protecting the health and wellbeing of the Waikato River.
- (k) Ensure that cumulative adverse effects on the Waikato River of activities are appropriately managed in statutory planning documents at the time of their review.
- (l) Ensure appropriate public access to the Waikato River while protecting and enhancing the health and wellbeing of the Waikato River.

Attachment 3

Abbreviations used in the Decision

APSIM	Agricultural P roductions S ystems s IM ulator
CSG	Collaborative Stakeholder Group
CVP	Commercial Vegetable Production
Decisions Version	Proposed Waikato Regional Plan Change 1 – Waikato and Waipā Catchments, Decisions version, Volume 2 of 2 dated March 2020
EIC	Evidence-in-chief
EIR	Evidence-in-reply
Expert conferencing	Expert witness conferencing
FEP	Farm Environment Plan
FFP	Freshwater Farm Plan
Farm Plan Regulations	Resource Management (Freshwater Farm Plans) Regulations 2023
Final proposal	Final Version of PC1 proposed by the Waikato Regional Council on 1 December 2023.
Fish and Game	Auckland/Waikato and Eastern Fish and Game Councils
FMU	Freshwater Management Unit
Forest and Bird	Royal Forest and Bird Protection Society of New Zealand Incorporated
GMP	Good Management Practices – term to be defined
Hearing Panel	The five-member panel delegated the responsibility by WRC to hear and make recommendations on the plan change pursuant to section 34A of the RMA
Joint Farming Parties	Federated Farmers and Beef and Lamb
JWS	Joint Witness Statement
LUC	Land Use Classification

NESFW	Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (amended 2022)
NOF	National Objectives Framework
Notified Version	Partial withdrawal of Proposed Waikato Regional Plan Change 1 – Waikato and Waipā Catchments dated 3 December 2016
NRP	Nitrogen Reference Point
NLLR	Nitrogen Leaching Loss Rate
NPSFM	National Policy Statement Freshwater Management 2020
NPSHPL	National Policy Statement for Highly Productive Land 2022
NRS	Nitrogen Risk Scorecard
Primary contaminants	Total nitrogen, total phosphorus, sediment and microbial pathogens
Recommendation Report	Proposed Regional Plan Change 1: Waikato and Waipā River Catchments; the Hearing Panel's Recommendation Report Volume 1
Stock Exclusion Regulations	Resource Management (Stock Exclusion) Regulations 2020
Te Ture Whaimana	Te Ture Whaimana o Te Awa o Waikato
TN	Total Nitrogen
TSS	Total Suspended Solids
TWAL	Tangata Whenua Ancestral Land
t/y	tonnes per year
WRCP	Waikato Regional Coastal Plan
WRC	Waikato Regional Council
WRP	Waikato Regional Plan
WRPS	Waikato Regional Policy Statement