

BEFORE THE OTAGO REGIONAL COUNCIL

IN THE MATTER of the Resource Management Act  
1991

AND

IN THE MATTER of hearing of submissions to the  
proposed Freshwater Planning  
Instrument parts of the Otago  
Regional Policy Statement

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STATEMENT OF EVIDENCE

LYNETTE BAISH for OTAGO FORESTRY COMPANIES

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1. My name is Lynette Baish and I am providing planning evidence on behalf of the Otago Forestry Companies. I am an Environmental Planner employed by Ernslaw One Ltd. I have prepared submissions and planning evidence on behalf of Ernslaw One to the pORPS. I have prepared submissions on behalf of the Otago Forestry Companies on the Freshwater Planning Instrument Parts of the pORPS.
2. I have a Master's in Resource and Environmental Planning from Massey University and I am a member of the New Zealand Planning Institute. I have worked in the field of consenting and resource management planning for about 15 years, mostly for territorial and regional authorities. I have experience in consenting, policy evaluation and plan development.
3. I confirm that I have read and am familiar with the Code of Conduct for Expert Witnesses in the Environment Court Consolidated Practice Note (2006). I agree to comply with the Code of Conduct and I am satisfied the matters I address in my evidence are within my expertise.
4. My evidence takes into account the section 42A report recommendations (and submissions and further submissions) generally in regard to pFPIORPS, and in particular, responds to the Significant Resource Management Issues for the Region (SRMR), Land and Freshwater, and the Land and Soils provisions, as they relate to the concerns of the Otago Forestry Companies.

## PRIMARY ISSUES FOR OTAGO FORESTRY COMPANIES

5. The Otago Forestry Companies generally support the intent of the pFPIORPS, and its drafting, but seek some amendments to provide further clarity, and/or specificity.
6. The Otago Forestry Companies wish to ensure that a robust approach is taken with regard to application of the precautionary principle in setting policy direction at RPS and FPI level.
7. Freshwater objectives and policies should be supported with a robust and contextually relevant evidence base. With respect to the management of effects associated with over-allocated water bodies, more stringent provisions than the default NES-F or NES-PF may be necessary, subject to evidenced, and where possible, science-based section 32 analysis, for maintaining and enhancing those particular water bodies.
8. The Otago Forestry Companies submitted that, notwithstanding the application of a precautionary approach to freshwater policy direction, the tests of section 32 must be met, and at the very least, provide some certainty that any policy intervention would have a projected benefit, in particular, to achieve an anticipated environmental outcome. The Forestry Companies assert this is particularly important where a more stringent approach is taken over and above default regulatory settings.
9. The application of the precautionary approach has been the subject of other submissions including from Fish and Game, who sought to include a definition of "precautionary approach" on the basis that, without one, the effective use of the concept will be hindered.<sup>1</sup>
10. The reporting planner clarified that while the precautionary approach features in elements of the non-FPI part of the pORPS, (including natural hazards, coastal environment and climate change), there is no mention of precautionary approach in the FPI.
11. No explicit definition of a precautionary concept is provided in the RMA itself, though implicitly, elements of the RMA can be read as applying a precautionary approach such as assessment of likelihood and magnitude of effects, and more latterly, the addition of a section 32 requirement to assess the risk of acting or not acting. Both case law and consent decisions issued under the RMA have given expression to the precautionary approach, for instance, through adaptive management conditions.
12. While the FPI does not contain any specific references to a precautionary approach, pORPS Policy IM-P6 *Acting on best available information*, in my view provides a sound policy directive where it comes to managing uncertainty, firstly ensuring decision making processes use complete and scientifically robust data and Mātauraka Māori. In the absence of complete or scientifically robust data, clause 1 outlines that sources of information that are relied on at least provide the greatest level of certainty, *and*, that all practicable steps are taken to reduce uncertainty. Further, clause 2 directs that a precautionary approach is adopted where activities whose effects are uncertain, unknown or little understood, but are potentially significantly adverse.

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<sup>1</sup> pFPIORPS Section 42A Report. Paragraphs 465-469.

13. In my evidence to the pORPS, I had commented on the discussion of water yield in relation to catchment hydrology, pointing out that the S42A author had made a generalised statement of the issue, from a citation in a singular journal article<sup>2</sup>. It is implied that afforestation must be constrained as the presence of tall vegetation will reduce water yield.
14. That said, one of the authors of the cited article, Dr Barry Fahey of Landcare Research, is the lead hydrologist in a well-recognised and respected paired catchment study providing long term data and a precise and discrete estimate of water yield response to planting and harvesting of conifers in a previously grazed tussock catchment at Glendhu in upland east Otago<sup>3</sup>. (Co-written with Dr Tim Davie, now director of science at Environment Canterbury, the Glendhu study may be of further interest to the panel in exploring issues relating to water yield and hydrology).
15. The point I wish to make is that the impacts of tall woody vegetation, be it established by afforestation or natural or actively encouraged regeneration in native tree species, on water yield will vary depending on the regional rainfall regime and hence between catchments necessitating consideration of a range of factors from climate (evaporation and rainfall, including rain intensity), surface and groundwater interactions, soil characteristics and geology. All of these factors combine in different ways at different sites leading to the conclusion that it is not possible to generalise the rainfall-runoff relationship for different vegetation covers between sites.<sup>4</sup>
16. A breadth of research and data sets exist which could inform policy settings for water allocation, or for restricting land uses which may rely on water abstraction, or for restricting tall vegetation which absorbs (intercepts and transpires) rainfall. But it must be acknowledged that there are also many gaps in our knowledge – not every catchment has the benefit of mature data-sets and funded studies, and variability is a challenge.
17. I would like to draw on Dr Tim Davie's 2012 evidence to the then proposed Canterbury Natural Resources Regional Plan in respect to the impacts on flows and reliability of supply for existing water abstractors arising from changes in vegetation cover, from short to tall vegetation. Dr Davie argued that the proposed policy placed undue emphasis on the role of tall vegetation as a water user and would therefore penalise the forestry industry in Canterbury.<sup>5</sup> Dr Davie's evidence concluded that, rather than a blanket restriction across the region, more stringent regulation of tall vegetation cover should more appropriately be limited to low flow producing areas (commonly upland riparian areas), and only when a proposed change in land cover would result in over 20% of the catchment having tall vegetation on it.

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<sup>2</sup> Davie and Fahey. (2005) - *"In experimental studies around New Zealand reductions in annual water yield of between 30-80% have been measured following afforestation of pasture."*

<sup>3</sup> Fahey and Payne. The Glendhu experimental catchment study, upland east Otago, New Zealand: 34 years of hydrological observations on the afforestation of tussock grasslands. *Hydrological Processes*. 2017;31:2921–2934 - cited the actual reduction of water yield in the Glendhu catchment study as 33%.

<sup>4</sup> Evidence of Dr Tim Davie. Chapter 5: Water Quantity, proposed Canterbury Natural Resources Regional Plan, paragraph 55.

<sup>5</sup> *Ibid.* paragraph 9.

18. The water yield issue usefully illustrates how a precautionary approach to policy setting correlates with meeting section 32 tests for effectiveness and efficiency and ensuring a robust intervention logic. You could say a precautionary approach works two ways – in situations where there is uncertainty, and in situations that clearly warrant a higher level of rigour, where practicable, to ensure policy is scientifically defensible, and not an unnecessary constraint on activities or land use, particularly where there would be no adverse environmental effect. The latter is provided by the caveat in clause 1, that all practicable steps are taken to reduce uncertainty, for instance consideration of alternatives, requiring a degree of information, ongoing monitoring, conditions around adaptive management, or in the example provided, of creating a nuanced, location specific policy to address the issue.

19. I therefore consider there is sufficient policy direction for a precautionary approach to planning and decision-making, which could achieve the tests under section 32 for assessing environmental, social, cultural and economic costs, benefits and impacts.

#### SIGNIFICANT RESOURCE MANAGEMENT ISSUES FOR THE REGION (SRMR)

20. The section 42A report helpfully acknowledges the purpose of the SRMR part of the RPS which is to *“provide a statement of each issue to the extent necessary for the issue to be understood and responded to by the objectives, policies and methods in the various chapters of the pORPS”*, additionally clarifying that the issue statements are pitched at a high level and *“are not intended to provide extensive detail or reference specific industries.”*<sup>6</sup>

21. I agree it is the issues that are the primary focus in the part of the planning instrument, as long as the issue statements are accurate and do not mislead where specific industries have been referenced.

22. The Otago Forestry Companies do not disagree with the breadth of issues identified as significant, but have raised as a submission point, an issue and suggested relief, with respect to SRMR-16 – *Declining water quality has adverse effects on the environment, our communities, and the economy*. The relief sought was to replace the reference to “agricultural intensification” with “agricultural land use”, as it is more accurate to say that the issue is attributable to agricultural land uses per se, in the context of SRMR-16. The s42A reporting planner has recommended the submission point and proposed the relief is accepted. For the reason stated in paragraph 21 above, I concur with this recommendation.

23. I accept also, the explanation provided by the s42A reporting planner for deferring any detail of the statutory requirements of NPS-FM, NES-F and NES-PF to Part 3 of the statutory instrument, in particular the Land and Freshwater Domain, for the reasons outlined in paragraph 21 above. I agree the purpose of the SRMR component of the RPS is to give context to the issues, rather than outline statute and regulation.

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<sup>6</sup> pFPIORPS Section 42A Report. Paragraphs 488 and 489.

## LAND AND FRESHWATER CHAPTER (LF)

24. As described by the S42A reporting planner, the Freshwater section of the LF – Land and Freshwater Domain, sets out the more specific outcomes sought for all fresh water in Otago to implement Te Mana o te Wai and assist with achieving the long-term freshwater visions. The objectives respond to specific direction in the NPSFM, relevant matters from section 6 of the RMA and the significant resource management issues for the region and to iwi authorities. The policies are intended to be implemented by regional and district plans primarily, as well as through the use of action plans as provided for by the NPSFM and freshwater farm plans prepared under Part 9A of the RMA.<sup>7</sup>
25. The Otago Forestry Companies submitted with respect to LF-FW-P9 – *Protecting natural wetlands*, in particular to ensure that regulatory frameworks within both the NES-F and the NES-PF were referenced as pertinent to the management of activities in and around natural wetlands.
26. I agree with the S42A reporting planner who has recommended the submission point and proposed relief be accepted, and I additionally agree with the rationale provided by the reporting planner with respect to the management and protection of natural wetlands in the coastal environment which, given that the New Zealand Coastal Policy Statement (NZCPS) is more directive than the NPSFM, is recommended to be managed in accordance with the NZCPS rather than the NPS-FM.
27. Both Rayonier Matariki and the Otago Forestry Companies submitted with regard to Method LF-LS-M11 *Regional Plans*. The method sets out that the Otago Regional Council must maintain a regional plan to “*manage land uses that may affect the ability of environmental outcomes for water quality to be achieved,*” including by requiring “*(a) the development and implementation of certified freshwater farm plans as required by the RMA and any regulations.*”
28. The Otago Forest Companies and Rayonier Matariki propose the insertion of a new clause “*(b) the development and implementation of harvest and forest earthwork management plans as set out in the NES-PF.*”
29. The rationale provided by the reporting planner for rejecting the forestry companies submission points is that methods are the means by which policies are to be implemented in the regional plan: “*I disagree with the additional clause sought by the Otago Forestry Companies and Rayonier, as the management plans required by the NES-PF are required to be prepared by the person undertaking the forestry activity, rather than included in a regional plan.*”<sup>8</sup>
30. It is possible that the reporting planner has missed the wording in Clause 1 “*manage land uses ... by requiring: (a) the development and implementation of ...”.*

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<sup>7</sup> pFPIORPS Section 42A Report. Paragraph 1231.

<sup>8</sup> pFPIORPS Section 42A Report. Paragraph 1792.

31. I consider it is a reasonable inclusion for the management plans required under NES-PF to be listed alongside freshwater farm plans, also required under regulations, as well as alongside policy direction for the Regional Plan to *manage land uses by requiring* the adoption of practices that reduce the risk of sediment and nutrient loss to water, and to *manage land uses by requiring* earthworks activities to implement effective sediment and erosion control practices and setbacks from waterbodies.