

## Joint Witness Statement – Ecology and Cultural Values

**Topic:** Proposed Southland Water and Land Plan Rule 78


**Date of conference:** 15 May 2023

**Time:** 3:15pm – 5pm (afternoon breakout session)

**Venue:** Remote AVL

**Facilitator:** Expert self-facilitated

### Attendees

Name	Employed or engaged by	Signature
Greg Burrell	SRC (ecology)	
Kate McArthur	Royal Forest and Bird Protection Society of NZ / Southland Fish and Game Council (ecology)	
Ailsa Cain	Ngā Rūnanga (culture and policy)	
Jane Kitson	Ngā Rūnanga (environmental science/mātauranga Māori)	

### Environment Court Practice Note

- 1 All participants confirm that they have read the Environment Court Practice Note 2023 and in particular Section 9 (Code of Conduct, Duty to the Court and Evidence of an expert witness) and agree to abide by it.
- 2 Kate McArthur and Dr Greg Burrell acknowledge that as members of the New Zealand Freshwater Sciences Society, a constituent organisation of the Royal Society of New Zealand - Te Apārangi, they are also bound by the Royal Society of New Zealand Code of Professional Standards and Ethics in Science, Technology, and the Humanities.

- 3 Dr Jane Kitson acknowledges that she is a member of Te Runanga o Oraka-Aparima and Te Runanga o Awarua and has whakapapa to Waihopai Runaka. She notes that her expertise is partially derived from those cultural associations. She recognises that whilst she is of Ngāi Tahu descent, she is required to be impartial and unbiased in her professional opinions expressed. Jane is also a member of the New Zealand Freshwater Society so is also bound by the Royal Society of New Zealand Code of Professional Standards and Ethics in Science, Technology, and the Humanities.
- 4 Ailsa Cain acknowledges her whānau have long associations with Murihiku and that her whakapapa is Waitaha, Kāti Mamoe and Ngāi Tahu. Her expertise is partially derived from those cultural associations. She recognises that whilst she is of Ngāi Tahu descent, she is required to be impartial and unbiased in her professional opinions expressed.

### **Experts' qualifications and experience**

- 5 The qualifications of the experts are set out in their respective statements of evidence.

### **Key information sources relied on**

- 6 The participants relied upon:
- Joint Witness Statement Ecology, 1 December 2021 (JWS Ecology – appendix 1). Note although this statement is named JWS Ecology it was a conference of the Cultural and Ecology experts.
  - The Memorandum of Counsel for Ngā Rūnanga regarding Cultural Indicators of Health, 29 November 2019.

### **Introduction**

- 7 Ecological and cultural experts have undertaken their own JWS given the divergence in expertise of the wider group. It was felt by all experts that this approach would best assist the Court. This JWS has been supplied to the planning experts to assist them in the development of their recommendations and JWS.
- 8 As a way of understanding the extent of weed and sediment control in Southland, Mr McCallum -Clark provided a very indicative and preliminary assessment that there is

around 1270km of waterway managed by Environment Southland for drainage capacity, which may include mechanical clearance from time to time. There is around 3800km of waterways with similar characteristics on private land (from assessing maps) that are also likely to be managed for drainage capacity.

### Questions for consideration

- 9 **Are there any drafting improvements that could be made to Rule 78 to strengthen the protection of ecological and cultural values identified?**
- 10 No. That is because the most effective way to better protect ecological and cultural values is by reducing the scale and frequency of disturbance caused by removal of aquatic weeds and sediment. We explored alternative drafting as an option but could not see an ecologically/culturally meaningful or implementable change within the current rule framework. For example, limiting waterway clearance to a certain distance each year is likely impractical, as some waterways will need clearing more frequently than others, under the current management practice, where most modified watercourses are poorly shaded. We also explored the option of imposing a requirement to progressively plant watercourses with shade trees, to reduce the need for regular weed removal, but we understand this option is thwarted by the constraints imposed by other rules in the Plan such as Rule 76a(ia) and the Southland Flood Control and Drainage Management Bylaw.
- 11 Policy 30 (sixth interim decision version) includes a requirement that drainage maintenance activities are managed in a way that ‘recognises the need to reduce the extent and frequency of disturbance, including through changes to land management so that sediment does not enter these watercourses, by improving practices and providing guidance, and improvement of riparian areas and habitat.’ Whilst improved land management practices relating to sediment are captured elsewhere within the Plan, there is no explicit requirement to increase shading to prevent weed growth. Reducing nutrient concentrations will not be sufficient on their own to prevent nuisance aquatic weed growth, so more shade from plants is needed. We do not see how to achieve this through the current Plan architecture.
- 12 Ms Cain and Dr Kitson provided a mahinga kai perspective. The clearance activities can physically change the place and its characteristics and removes the mahinga kai materials (these materials extend beyond fish and can include stones, muds, waters,

clays, plants and other animals) from being in situ. The current practice of removal of weeds and sediment has been identified as a key issue with respect to cultural health, and needs to change in order to progress towards hauora.<sup>1</sup>

- 13 The experts in this JWS agreed that Rule 78 as drafted in the 6th interim decision para [255] is not consistent with the prioritisation under Te Mana o te Wai.

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<sup>1</sup> Paragraphs 52 and 53 of Memorandum of Counsel for Ngā Rūnanga regarding cultural indicators of health, 29 November 2019.