

Memo to: Wilma Falconer, Chief Executive Environment Southland

From: Rob Phillips, Chair, Contaminant Reduction Oversight Group

Date: 14 March 2023

Report Back from the Contaminant Reduction Oversight Group

1. Background

Environment Southland is undertaking a review of the science used to assess the contaminant reduction required to achieve the Murihiku/ Southland draft freshwater objectives that have been developed by Environment Southland and Te Ao Mārama. To do this an independent panel (the Review Panel) was established by Environment Southland to review the robustness and credibility of the modelling science and the appropriateness of the methodology for informing policy development.

An independent oversight group (Oversight Group) was established to ensure the outputs of the Review Panel meet the brief and to socialise the outcomes of the Review Panel across the regional sector and with other stakeholders as appropriate. The Oversight Group is to report to the Chief Executive of Environment Southland.

The Oversight Group was chaired by Rob Phillips, the previous Chief Executive of Environment Southland, together with the chief executives of the Waikato Regional Council and Horizons Regional Council. The group liaised with Ken Taylor, the chair of the Review Panel.

The Terms of Reference for the Oversight Group are attached.

2. The Process

The Oversight Group received the relevant background document relating to the peer review process. These included: The ' Review Panel Terms of Reference ' ; 'Environment Southland Science Review – key interim conclusions and national implications' and a copy of the final Science Review Panel Memo to Environment Southland.

Also provided were links to a number of reports used by the Review Panel.:

- Manaaki Whenua Landcare Research (2021): **Modelling baseline suspended sediment loads and load reductions required to achieve Draft Freshwater Objectives for Southland**
- LWP (2021): **Assessment of Nutrient Load Reductions to Achieve Freshwater Objectives in the Rivers, Lakes and Estuaries of Southland Including Uncertainties**
- NIWA (2020): **Models for evaluating impacts of nutrient and sediment loads to Southland Estuaries**

Other information made available to the Oversight Group included stakeholder feedback and response documents.

- DairyNZ initial feedback (letter dated 4th December 2020)
- DairyNZ further feedback (letter dated 14th February 2021 and attached memo)
- ES technical response (LWP memo dated 26th February 2021)
- ES recommendations on actions from feedback (ES memo dated 26th February 2021)

- Fish and Game feedback (James Cook University memo dated 21st December 2021)

Located under 'Feedback Process' at: <https://waterandland.es.govt.nz/science-and-economics/science-modelling/contaminants-and-numbers>

In addition, further material was available that helped provide context:

- Information on the values and objectives (or freshwater outcomes) can be found here: <https://waterandland.es.govt.nz/about/values-and-objectives>

The Oversight Group meet via zoom on two occasions.

The first on 24 August 2022 where Ken Tylor provided an update on the peer review process and the Review Panels initial views

The second meeting was held on 9 Nov 2022. The final report from the Review Panel was circulated prior to the meeting- "Review of Environmental Models" together with a powerpoint presentation – a Background to the Contaminant Reduction Modelling.

Ken Taylor briefly outlined the process that had been followed and the work undertaken to finalise the review.

3. The Oversight Group's Findings

Membership of the Review Panel

The view of the Oversight Group is the membership of the Review Panel was an appropriate mix of appropriately qualified and experienced scientists to undertake a review of this nature. It was also of the view that because of the relevance of this work to other regional and unitary authorities, there was real value in the involvement of the Chief Scientist for Te Uru Kahika (regional and unitary councils) Chris Daughney, as a 'friend of the process'. This meant that while he was not directly a member of the Review Panel, he had visibility of the work through receiving all the reports and he provided some feedback.

Meeting the Terms of Reference

The Oversight Group considers that the review has been completed as required by the terms of reference, specifically the modelling science was robust and credible and the methodology appropriate to assess the contaminant reduction required in Murihiku/Southland.

The Oversight Group considers the process was thorough, robust and appropriate for this type of review. Giving stakeholders an opportunity to contribute to the review was also seen as positive and given the different views held particularly by Dairy NZ and that this alternate view has been comprehensively assessed by the Review Panel

The Oversight Group considers there are also two important findings of this review. These include:

- the implications of the data gaps identified by the review, particularly in estuaries. This reinforces the need for central government support and a more strategic national approach to the acquisition of the information needed to underpin limit setting (further detailed in the Review Panel's report)
- The review shows that the science undertaken by ES is fit-for-purpose, which was a regional scale assessment of the gap between current state and draft community objectives for

water quality. However, there is less certainty when considering the magnitude of the problem at finer scales and any policy approach that included contaminant loads at a sub catchment or farm scale would require substantial additional work.

Both of these findings can be usefully socialised with the Ministry for the Environment, central government more broadly and the regional sector and other stakeholders.

Recommendations on other matters to socialise

The Oversight Group considers there are two matters that can be usefully socialised with the Regional Sector, with central government and other stakeholders:

1. The need to manage expectations as to what can be delivered by way of water quality improvements in the 2024 round of regional plans is critical. This is particularly relevant in catchments where there is currently substantial overallocation and land use change is likely to be required to meet national bottom lines, or community objectives where these are more stringent. It is at least arguable that the kind of quantitative tools needed to provide the evidence base for such land use change policies at a sub catchment and farm scale are not currently available.
2. The implications of data gaps and the need for Government to support investment into Regional Sector's monitoring programmes.

The Oversight Group also considered that this independent oversight process could be used in similar regional processes to give decision makers, the wider community and other stakeholders confidence in the science and the review process.