## **Proposed Otago Regional Policy Statement Hearing**

## - Summary of Evidence of Dr Hendrik Schultz for the Director-General of Conservation Tumuaki Ahurei - Coastal Environment Chapter

- 1. The Otago coastal environment harbours a wealth of indigenous biodiversity values. Known examples include biogenic habitats (i.e. formed by living organisms) such as tubeworm fields ('wire weed') off Oamaru and the bryozoan thickets off the Otago Peninsula as well as a range of threatened indigenous fauna (e.g. penguins, sealions, albatrosses). However, gaps remain in our knowledge with respect to verifying the location and extent of these values.
- The proposed Otago Regional Policy Statement (pORPS) will need to give effect to the New Zealand Coastal Policy Statement (NZCPS) Policy 11 (indigenous biological diversity). Therefore, my evidence is largely structured around this policy. Objective 1 of the NZCPS requires safeguarding the integrity, form, functioning and resilience of the coastal environment, and sustaining its ecosystems, including marine and intertidal areas, estuaries, dunes and land. Furthermore, Policy 11 directs the avoidance of adverse effects of activities on the most valuable and vulnerable components of New Zealand's indigenous biodiversity, and the avoidance of significant adverse effects on other values.
- 3. The tables in my evidence in chief give examples where Policy 11 values likely exist and are not intended to cover all indigenous biodiversity, ecosystems and habitats in the Otago coastal environment. This in part is because we do not have comprehensive knowledge of the Otago coastal environment.
- 4. In my opinion, the pORPS will need to give effect to Policy 11 by including provisions that require:
  - (a) identification of areas where indigenous biodiversity values relevant to policy 11 exist.
  - (b) Avoiding adverse effects of activities on these values in accordance with Policy 11(a) (applies high protection to threatened, significant values) and avoidance of significant adverse effects on other values in accordance with Policy 11(b).
  - (c) Specifying the criteria that will be used to assess the significance of ecological areas or habitats (noting first we need to identify what is there) this will then help to set the appropriate level of protection in district/regional plans.
- 5. With respect to (a) the requirement to identify indigenous biodiversity values relevant to NZCPS Policy 11, there is some existing knowledge, but significant gaps remain in terms of

the location and extent of indigenous biodiversity values in the Coastal Environment of Otago. Examples of knowledge gaps include the characterisation of biogenic habitats (e.g. chaetopterid tubeworms) and offshore rocky reefs.

- 6. With respect to (b) the requirement to avoid adverse effects of activities on biodiversity values, I specifically address the adverse effects of fishing and aquaculture in my evidence. Bottom contact fishing methods such as trawling and dredging can have adverse effects on biodiversity values. Similarly, aquaculture can have localised effects on marine habitats. Therefore, the pORPS 2021 needs to ensure it has provisions to manage adverse effects of all activities to maintain indigenous biodiversity values.
- 7. I support an integrated approach to criteria for identifying areas of significant indigenous biodiversity in Otago. In my opinion this is necessary to account for the coastal and marine environment crossing boundaries with terrestrial and freshwater systems. A good example is hoiho/yellow-eyed penguin who forage out at sea but must come to land to breed. I support the use of the significance criteria listed in the exposure draft NPSIB as they are applicable across marine, freshwater, and terrestrial environments.

Dr Hendrik Schultz

2 March 2023