

Before the Independent Hearing Panel

Under the Resource Management Act 1991

In the matter of the Proposed Otago Regional Policy Statement 2021

Summary of Evidence of Jayde Couper on behalf of Otago and Central South Island Fish and Game Councils (#0321) on Topics: Significant Resource Management Issues for the Region (SRMR), Integrated Management (IM) Urban Form and Development (UFD), Energy Transport and Infrastructure (EIT), Ecosystems and Biodiversity (ECO)

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Summary

- 1 Within the Otago Region, Fish and Game manage the recreational fishing for six species of valued introduced fish and hunting of two upland game species and six species of waterfowl, four of which are native.
- 2 The popularity of fishing for these species is evident in Otago, where the sale of fishing licences has surpassed 24,000 licences in all categories, out of which more than 12,500 are whole season licences. Licence holders devote a considerable amount of time to fishing, with surveys indicating up to 218,000 angler days in the Otago region alone.
- 3 Although less popular than freshwater fishing, gamebird hunting is still a significant recreational activity, with up to 82,000 hours spent hunting waterfowl and 8,800 hours hunting upland game in the Otago Region.
- 4 These pastimes don't just provide recreation, they also contribute an important food resource to the community.
- 5 Several factors can influence the enjoyment of this recreational resource, but the most crucial one is the preservation of aquatic ecosystems across the region.
- 6 The state of Otago's aquatic ecosystem can be broken down in to four key components that make up the foundation of waterway health and can provide an indication of anthropogenic deterioration, these are:
 - (a) Water quality.
 - (b) Water quantity.
 - (c) Species present and their interactions.
 - (d) Physical alteration of water bodies.
- 7 These components cannot be looked at individually as their effects can compound together.
- 8 Diminished water quality can make waterways less appealing for recreational activities, hazardous for consumption, and can lead to a decline or exclusion of fish and invertebrate populations.
- 9 In general, there is robust evidence of degradation in multiple waterways around the region.
- 10 Water quality in the region falls below at least one NPS-FM bottom lines at 63% of all sites.

- 11 The pattern of water quality degradation is not uniform across the region. Typically, high or mountainous waterways under native forest cover tend to have higher water quality, while low elevation waterways that drain pastoral or urban areas tend to have lower quality.
- 12 Concerningly, across the region the 20-year trends were predominantly degrading for all water quality variables apart from ammoniacal nitrogen.
- 13 Issues with water quality is not limited to surface water and there is also strong evidence of declines in groundwater.
- 14 Water abstraction, particularly during low flows, can have adverse impacts on the health of waterways. It can result in reduced invertebrate production, increased water temperature, the disruption of migration pathways and the concentration of fish species, leading to higher predation.
- 15 There is evidence that relative to the amount of water available, there is a large amount consented to be abstracted.
- 16 Physical manipulation of waterbodies is common in the Otago Region, of particular concern is the proliferation of fish migration barriers and the ongoing drainage of wetlands leading to a loss of ecological values and downstream negative effects on water quality and quantity.
- 17 Fish and Game's efforts to safeguard and improve aquatic ecosystems and access to them are not only advantageous for sports fish, game birds, and license holders, but they also contribute to the overall health of ecosystems that support various other types of recreation and promote healthy populations of native species.
- 18 The ecological values sought by Fish and Game are also essential for the needs of indigenous species. In particular, salmonids require high water quality and flow, and meeting these values can also promote healthy native fish populations in most cases.
- 19 Fish and Game protection and enhancement of wetlands not only benefits downstream water quality but also ensures the preservation of many native bird species.

Jayde Couper
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