

## WHY IS IT SO HARD TO MOVE FRESHWATER SPECIES?

Rethinking freshwater translocation processes and policy in Aotearoa New Zealand

Freshwater ecosystems are under threat from habitat modification, declining water quality, invasive species and climate change. Moving or 'translocating' valued species, when done carefully, is one way to enhance biodiversity and strengthen people's connections to place.

### BACKGROUND

Over 76% of native freshwater fish species, and 177 freshwater invertebrate species, are threatened with or at risk of extinction<sup>1,2</sup>. Freshwater ecosystem conservation often focuses on water quality and habitat<sup>3</sup> in the hope that by improving habitat, the rest will eventually follow. But habitat rehabilitation alone will not be enough for many of the populations and species that people care about.

Translocations have a long history in Aotearoa-NZ, including in Māori processes and practices, through hunting and sports fisheries, and as part of conservation programs, especially for birds. There is good evidence that well-planned translocations can support a wide range of desired social and ecological outcomes<sup>4</sup>. Yet our conservation policy for freshwater translocations is primarily centred around risk, which has foreclosed opportunities to innovate evidence-based 'best' practices and contributed to difficulties in practice.

### WHY SO DIFFICULT?

Like terrestrial translocations, there are many factors to consider, such as habitat suitability, spatial connectivity, species interactions, climate change, monitoring and disease risk<sup>5</sup>. Unlike terrestrial translocations, which are mostly managed under the Wildlife Act, freshwater translocations are jointly managed by DOC and MPI per the Conservation Act and Freshwater Fisheries Regulations.

This legislation, initially intended to minimise the spread of unwanted aquatic life, was not designed to effectively support translocations for valued species<sup>6</sup>. Current processes based on this legislation give limited attention to the potential benefits of translocations, cultural permissions or social values. Compared to translocations under the Wildlife Act, translocations of native freshwater fish and invertebrates also lack readily accessible guidance; have unclear requirements or guidelines for monitoring and reporting; and applications to DOC come with a \$2k+ fee which is waived under the Wildlife Act.



Translocation - Hokonui Rūnanga Kaupapa Taiao team

### AT A GLANCE

Translocating valued species is one way to enhance biodiversity, but moving freshwater fish in Aotearoa New Zealand is not easy. Legislative, social and ecological contexts surrounding translocations are complex and often difficult to navigate.

We need better freshwater translocation processes that effectively support biodiversity and community-led approaches.



Inspecting the electric fishing catch



We urgently need more effective and better-connected processes for freshwater translocations. This is an opportunity for Aotearoa-NZ to lead the way in community-based action for freshwater ecosystems.

To address this urgent need we have drawn together experts across research, conservation and customary practice to review our freshwater translocation history and identify how current policies and processes might be improved. We aim to open up a national conversation about freshwater translocations that:

- Recognises and is responsive to the multiple purposes of translocations
- Supports mana whenua rights, responsibilities and processes
- Recognises and is responsive to the need for consistent and transparent translocation record-keeping across agencies
- Considers opportunities for increased coherence across relevant legislation and agencies
- Draws upon international best practices while being responsive to local contexts and values

Adult kankana trapping for transfer (Hokunui Rūnanga)

## WHAT NEXT?

We are working on a research paper that identifies immediate, medium-term and long-term pathways for strengthening freshwater translocation processes in Aotearoa-NZ. We anticipate these pathways will inform conservation policy, translocation practice and future research that more effectively supports biodiversity and community-led approaches. Stay tuned!

### References:

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## FIND OUT MORE

Contact Aisling Rayne ([aisling.rayne@cawthron.org.nz](mailto:aisling.rayne@cawthron.org.nz)) or Joanne Clapcott ([joanne.clapcott@cawthron.org.nz](mailto:joanne.clapcott@cawthron.org.nz))



This work is part of [Pathways to Ecosystem Regeneration](#) and [Freshwater for Our Taonga](#)