

Freshwater Fish

Endangered Species

Aotearoa is home to a variety of native freshwater fish species, many of which are endangered and found nowhere else on earth. Sadly, the majority of these face extinction due to water quality issues.

NZ's Water in Crisis

Freshwater here in Aotearoa is in a critical state. We have widespread pollution and declining water quality. This has devastating consequences:

- Less than 2% of waterways are pristine
- 45% of rivers are unsafe for swimming
- 45% of our lakes are in poor health[1].

Wetlands are also suffering, with recent mass bird deaths highlighting the severity of the problem. New government regulations are expected to exacerbate the issue, making it easier to damage or drain wetlands.

Internationally

Biodiversity is declining twice as quickly in freshwater as in oceans and forests and nearly a third of all freshwater fish species are now at risk of extinction[2].

[1] <https://environment.govt.nz/publications/our-freshwater-2020/issue-1-our-native-freshwater-species-and-ecosystems-are-under-threat/>

[2] https://www.panda.org/discover/our_focus/freshwater_practice/the_world_s_forgotten_fishes/



Photo: Jason Burton

At Risk of Extinction

In 2017, 76 percent of our native freshwater fish were either threatened with or at risk of extinction. Most of the endangered freshwater fish species (32 of 39) are members of the galaxiidae family, which includes:

- all five species of mudfish
- four whitebait species
 - shortjaw kōkopu
 - giant kōkopu
 - kōaro
 - īnanga
- kanakana/piharau (lamprey)
- tuna (longfin eel)
- Stokell's smelt.



Photos: DOC

Threats to Survival:

Each year thousands of litres of stormwater flows down the pipe network and out into our rivers, streams and the sea. Whatever goes down our drains, flows untreated into our lakes and rivers via a complex system of underground 'streams' and effects all wildlife and the health of biodiversity.



Photo: DOC

Habitat Loss and Degradation:

Agricultural and urban development, deforestation, river channelisation, and wetland drainage contribute to habitat loss.

Water Pollution

- Runoff from agricultural activities introduces pollutants such as sediments, nutrients, and pesticides.
- Urban pollution, including industrial discharges and stormwater runoff, poses a threat to water quality.

Invasive Species

- Introduced species, such as trout and koi carp compete with native fish for resources and habitat.
- Invasive aquatic plants and animals can disrupt ecosystems and outcompete native species.

Climate Change

- Changes in water temperature and flow patterns impact the distribution and behaviour of freshwater fish.
- Altered rain patterns and extreme weather events can result in habitat loss and affect water quality.

Dams and Hydroelectric Development

Dams can modify river flows and disrupt natural fish migration routes.

Over-Extraction of Water

Excessive water extraction for agriculture, industry, and domestic use can reduce stream flows, affecting fish habitat and migration.

Disease

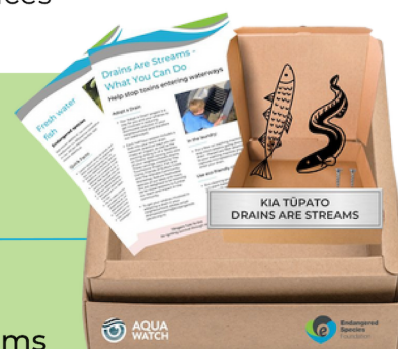
Fish diseases, both natural and introduced, can spread in compromised ecosystems, especially when fish populations are stressed due to other factors.

Lack of Vegetation

The removal of plants along waterways increases sediment, temperature fluctuations, and reduces habitat quality.

How Can You Help?

- Join our project **Drains are Streams and Adopt a Stream**
- Use only eco-friendly cleaning products. Wash your car in a proper car-cleaning facility
- Report pollution - If you see something going down the drain that doesn't look or smell good, you can report it on the Pollution Hotline on **0800 800 033**
- Join a planting project near you
- Support the increase of permeable surfaces to improve water absorption and reduce the urban heat island effect.



[www.endangeredspecies.org.nz/
adopt-a-stream](http://www.endangeredspecies.org.nz/adopt-a-stream)