FISH DISTRIBUTION SURVEY

New Zealand is incredibly special in its native fish fauna – we have a quarter of the worlds freshwater eel species permanently residing in our waterways as well as numerous species of non-migratory endemic galaxiids. One of these endemic galaxiids is the Clutha flathead. It's classified as 'Nationally Critical' and inhabits streams here in the Upper Clutha.

Introduced salmonids, brown trout, rainbow trout, and salmon are also present throughout the Upper Clutha area and provide a nationally significant sports fishery. Unfortunately, they are the biggest threat to our native species.

The species below are ones we know inhabit the Wānaka basin *(from historical data).*

Clutha flathead © Rod Morris DOC

- LONG FINNED EEL
  Anguilla dieffenbachii
- CLUTHA FLATHEAD
  Galaxias species D
- KŌARO
  Galaxias brevipinnis
- COMMON BULL
  Gobiomorphus cotidianus
- UPLAND BULLY
  Gobiomorphus breviceps
- RAINBOW TROUT*
  Oncorhynchus mykiss
- BROWN TROUT*
  Salmo trutta
- CHINOOK SALMON*
  Oncorhynchus tshawytscha

**Introduced/non-native species.*

eDNA – WHAT IS IT AND WHAT DOES IT TELL US?

eDNA stands for environmental DNA. Put simply: DNA fragments or remnants left behind by organisms in the waterway *(think scales, skin, and slime).*

eDNA is a quick and easy way of understanding the different species present in a body of water. A sample is drawn up into a filter via a syringe and sent off to the lab for DNA analysis. This sample detects all species in contact with the waterway from up to a kilometre upstream - including fish, insects, and terrestrial animals that have been down to drink or passing through, such as rabbits, pigs, stock and birds.

Used in conjunction with other testing, it gives a comprehensive indication of waterway health. Based on results, management decisions can be made to protect native species.

WHAT HAPPENS THEN?

You will receive results from any testing carried out on your property. WAI can put you in touch with the relevant experts that can interpret results and assist with biodiversity management decisions.

Along with historical data, WAI will be able to create an understanding of fish distribution across the whole of the Upper Clutha catchment. This can help inform management of both native and introduced species.

WAI WĀNAKA | WATER ACTION INITIATIVE