

Fish Passage

In the Wellington Region

BACKGROUND

New Zealand is home to more than 50 native freshwater fish species. Of these, around 70% are at risk of, or threatened by, extinction.

In the Wellington region, our waterways are home to around 20 species of native freshwater fish, and most of these species need to be able to move freely between the sea and freshwater in order to complete their lifecycle. Tuna (eels) and whitebait are well-known examples of native fish that need an unimpeded 'fish passage' to survive.

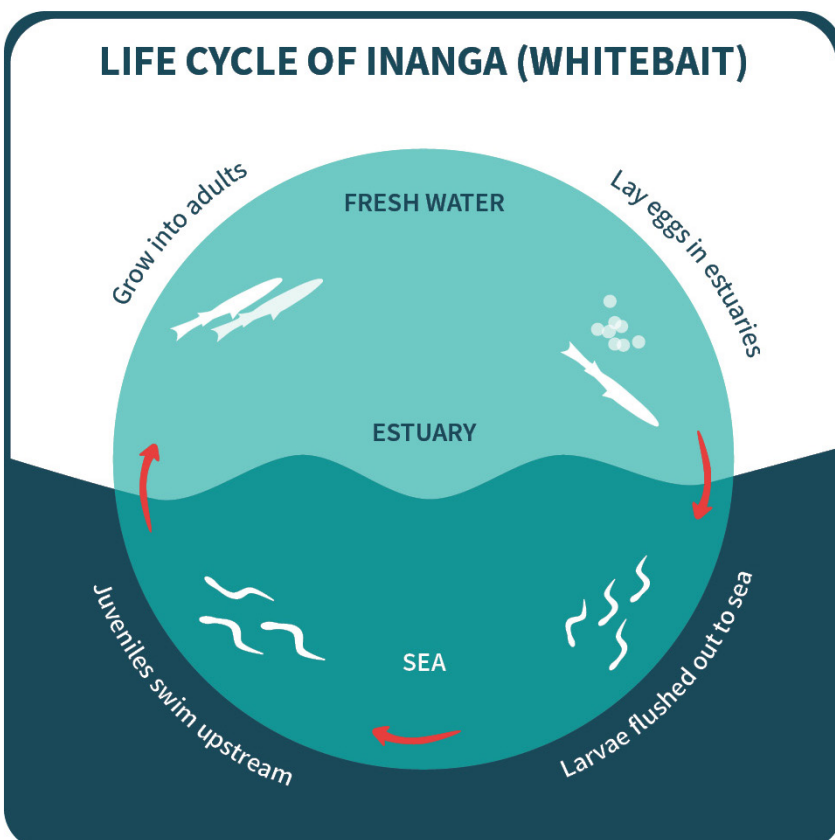
Some man-made structures (e.g. culverts, weirs, fords and dams) pose a risk to these fish by creating a barrier and preventing their movement between, and within waterbodies. This can affect their population numbers, and ability to complete their lifecycle.

Life cycle of migratory fish

Many of our fish migrate between rivers and the sea to complete their life cycle. This is a long way to go, even if the journey is barrier free!

The diagram below shows the lifecycle of inanga, the most common of the five whitebait species.

Adult inanga migrate down to estuaries to lay their eggs. Once the eggs hatch, larvae are flushed out to sea where they spend several months growing into juvenile 'whitebait'. Finally, the whitebait swim upstream via river mouths, where they grow into adults.



Fish Passage requirements

Greater Wellington's Proposed Natural Resources Plan (PNRP), the National Policy Statement Freshwater Management and the National Environmental Standards for Freshwater contain specific requirements for Greater Wellington to improve fish passage management in our region's waterways.

The Department of Conservation also has a role to play in this through the implementation of the fish passage requirements in the Freshwater Fisheries Regulations. For more information please visit the Department of Conservation website and search for 'fish passage management regulations and requirements'.

Barriers to fish passage

Any structure that restricts the movement, up or down stream, of freshwater species presents a barrier to fish passage. Identifying these barriers is the first step to fix the issue, because there are changes we can make to a structure to make sure our fish can still find their way past.

Barriers include structures that physically block movement of fish, affect the depth or velocity of the water, have a vertical drop that fish can't jump or move over, or contain sharp edges/corners. Below are some examples of barriers.



Fords



Culverts



Dams



Weirs



Tide gates

Note: These types of structures aren't always barriers, but may need assessment.

Remediation tactics

How a fish passage barrier is fixed will depend on the species present, and what ability they have to move through the waterway. It will also need to be site-specific to ensure the solution will work in specific locations.



Removing existing barriers



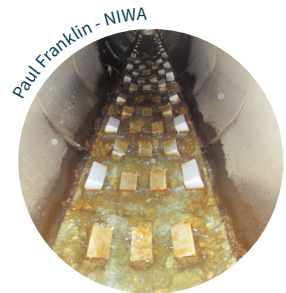
Hydraulic and stream simulation design culverts



Mussel spat



Fish ramps



Baffles

How you can help

If you know of any structures on your property or in a public space that might be a barrier to migrating fish, let one of our team know via email. We can also provide help and advice on remediation that will ensure our fish can find their way.

Greater Wellington staff may seek permission to assess waterways on private land in certain areas. This is important work that can help us to gain understanding of the issues in our region, and prioritise our remediation work. Your help in this is valuable if you live in one of these areas.



Shortjaw Kōkopu

For more information:

visit: www.gw.govt.nz/providing-fish-passage

Email: Fishpassage@gw.govt.nz