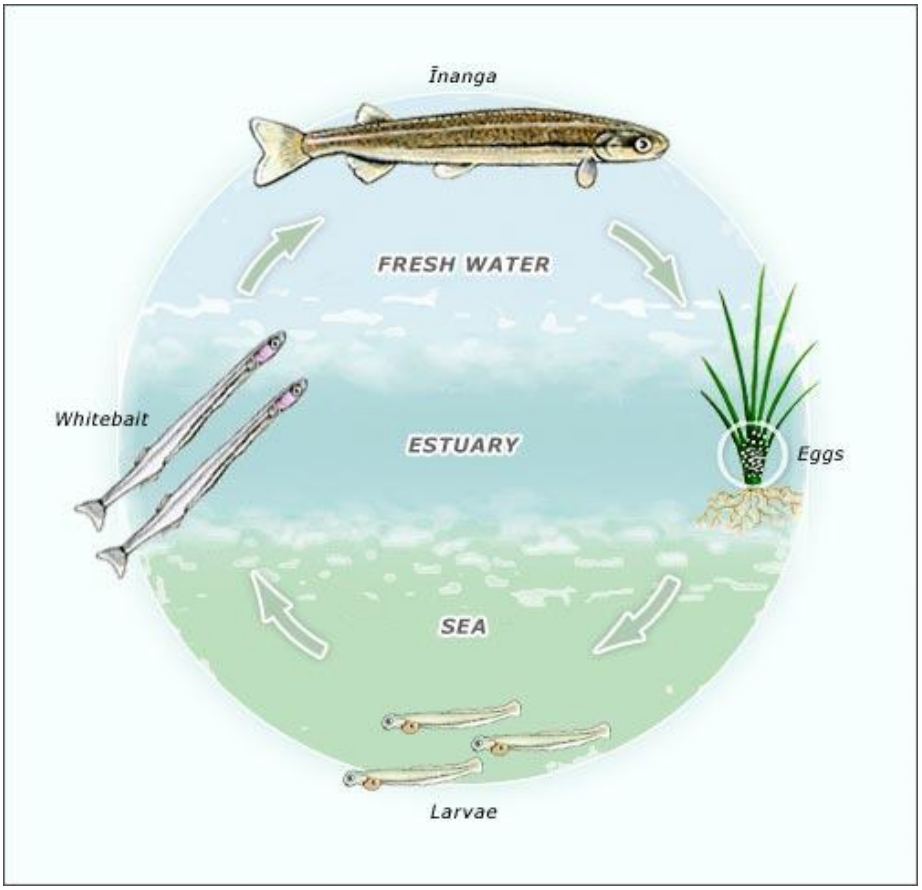
The Whitebait Run!! Teacher Notes.

whitebait Connection
Xstream about freshwater life
www.whitebaitconnection.co.nz

Purpose: To help participants understand the lifecycle of the NZ Whitebait and how threats in our catchments affect them. To be played after explaining the lifecycle of the NZ whitebait and the threats that they face in catchment today.



You will need:

- Cones
- Instructions
- Vests or sashes to identify the threats
- Whistle
- Kokopu Costume (optional)

Explain to students that they are going to be either whitebait or threats to the whitebait in a game that takes place in a catchment.

Home base is the river bank (marked out by cones). The river bank is low down in the catchment in brackish water where there are lots of rushes and good places for whitebait to lay their eggs. Explain that when the whitebait start at base they are lined up waiting to be tagged by a returning adult whitebait that will turn them into an egg. Only 10 whitebaits can be an egg on the riverbank at one time. Once they become an **egg**, they can move into the **juvenile whitebait ground** (this is the marine environment where they live for the first 6 months of their life) and wait for the

'WHITEBAIT RUN' call – full moon and tides. When this call is heard all juvenile whitebait must run as fast as they can, to get to the **top of the catchment** to great habitat (lots of overhanging vegetation and macro invertebrates to eat) where they can grow big and strong and be an important part of the ecosystem. Here they wait until they hear again "WHITEBAIT RUN" (full moon and tides) where they run back to home base to turn tagged players back into eggs (by tagging them) so that they can start their life cycle again. Once home, they can try to swim back upstream again.

There will be **threats** facing them along the way though that will get worse and worse as time goes on. If the juvenile whitebait gets tagged they must return to the riverbank and wait to get tagged by a returning adult whitebait. Remember, only 10 eggs will fit on the riverbank at a time so line up and wait to get tagged. There is a catch – as the game goes on the riverbank will slowly get destroyed so there will be less and less eggs allowed on the bank at one time.

Name the threats: Get the participants to name the threats. They must wear a vest or sash – start with natural threats (e.g. birds and eels) and lead into un-natural (e.g. cows, pollution)

Birds	Loggers	Pest Fish
Eels	Cows	Barriers e.g. Dams,
Whitebaiter	Pollution	culverts

Instruct the threats that they only enter the catchment when instructed.

Get 3 children (and Waiora Whitebait/kokopu costume if you have it) to demonstrate.

Let the game begin.
Slowly add in threats as runs continue and kids get how the game runs.

Extension questions:

- How easy was it for the whitebait to complete their lifecycle?
- What happened as time went on and the catchment got more and more threats and the game went on?
- What does this mean for whitebait in New Zealand?
- Do we want to make sure that whitebait are around for the future?
- What can we do to make sure that whitebait can sustain themselves? How could we change the game to make sure the whitebait run would stay healthy?
- How does this relate to freshwater biodiversity?
- How does this relate to the water cycle? Floods
- How does this relate to other types of freshwater environments?