

# Whitebait Connection Stream Health Assessment



[www.whitebaitconnection.co.nz](http://www.whitebaitconnection.co.nz)

1. **Name of your group:** Whangarei Boys High School Year 9 Science
2. **Name of the waterway:** Waiarohia Stream
3. **Date of stream study:** 7/11/12
4. **Location of stream study:** Whangarei Boys High School field

## 6. Clarity

Average = 94cm

*A clarity of more than 70cm is okay. A clarity of more than 100cm is good.*

## 7. Water Temperature

Record the water temperature using the thermometer and immersing in water for 1-2 mins.

Water Temperature reading = 16 degrees celcius

## 8. Water Flow

Distance travelled/average time = 0.3 metres/sec

*A velocity (flow rate) of 0.3-0.7 m/s is best for most stream life.*

## 9. Water Sample

The water sample result showed an E.Coli count of 279 per 100 mL (green) safe to swim in. If the results showed a 280 count it would have been amber (alert) mode.

## 10. Invertebrate Life

Species:	Presence:	Sensitivity Score:
Woody cased caddisfly	Rare	5
Shrimps	Common	5
Free-living caddisfly	Abundant	5
Midges	Common	2
Damselfly	Rare	5
Snails	Abundant	3
Mayflys	Rare	8
Water Boatman	Rare	5
Dobsonfly	Rare	7

### 11. Fish and Eels

Species	Tally	Size
Common Bully	3	5-10cm
Longfin Eel	1	45 cm
Inanga	6	6-8cm

### 12. Putting it all together

Add all of your sensitivity scores together and divide that number by the number of different species you found. This will give you a health rating. Write your calculation below...

$5+5+5+2+5+3+8+5+7=45$ $45/9=5$
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Taking your health score for the stream and everything else you saw and experienced at the stream, how healthy do you think the study site is? Write your decision as a rating out of ten in the space below...

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Ideas you have on how the quality of the habitat and water in the stream could be improved...

Removal of Egeria (Oxygen Weed)
Planting of riparian margin to provide shade and habitat
Cleaning of stormwater before it enters the stream (rain gardens)
Stream clean up (lots of rubbish around)