## **HOW HEALTHY IS YOUR WATERWAY?**

Assess the following health indicators and add your scores to rate the overall health of the awa.

KŪKŪPANGO What is the riverbed like?		TE TĀHEKE O TE WAI Are there a variety of water flows?	
Lots of stones	3	Yes - pools, runs and riffles	3
Mostly gravel	2	Some - two of three present	2
Muddy and sandy	1	No - one type of water flow	1
TE RONGO O TE WAI What does it smell like?		PŪKOHU WAI Is there much algae?	
No smell	3	A thin film with short strands	3
A bit of a smell	2	A medium film or mat	2
A strong smell	1	A thick film with long strands	1
TOHU O TE TANGATA Are there signs of human impact?		NGĀ RAKAU What is the tree cover like?	
No signs of human impact	3	Lots of tree cover	3
Minor signs of human impact	2	Some tree cover	2
Destructive signs of human impa	act <b>1</b>	No tree cover	1
14 - 18 Fair/Excellent TOTAL:	10 - 14	OK 6 - 10 Very poor/Poor	
	is in	health	ı
name of awa		insert health rating	

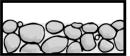
## A HEALTHY WATERWAY WILL HAVE...

Use this information to help complete the assessment over the page.

There are a variety of different signs that a waterway is healthy. These include:

#### A stony stream bed

A stony stream bed provides freshwater fish and aquatic invertebrates with places to live on and in between the stones. Sediment from soil erosion (eg, as a result of deforestation, earthworks or storms) in the catchment can cover the stones and degrade the habitat for fish and aquatic invertebrates.







#### Short strands of algae

Algae grows on stones and is a source of food for aquatic invertebrates. But, when the waterway is out of balance and lacking the positive signs for a healthy waterway in this list, algae can grow longer and thicker and invertebrates can no longer eat it.







#### A variety of pools, runs and riffles

A variety of water flows provide different of habitat for aquatic animals.

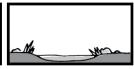
- Pool: slow flowing, deep water, often on the outside bend of a stream.
- Riffle: fast flowing, shallow water.
- Run: a smooth, unbroken flow of water that connects pools and riffles.

#### Shade from trees

Shade from trees reduces temperature extremes, limits light and keeps water cooler to help limit algal growth, and provides falling leaves and insects as a year round supply of food for aquatic animals.

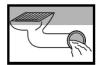






#### No signs of human impact

• The way use use land in and around waterways has a direct effect on the wai and the animals who live there, such as storm water pipes or grazing animals, culverts and weirs and concreted stream beds.











#### No obvious smell

A pungent smell can indicate possible contamination from sediment, rubbish, animal faeces, sewerage or other contaminants.

## KUPU HOU

# Here is a glossary of words in te reo Māori and technical terms that are used in this resource.

#### Te reo Māori

Awa River, stream or creek Reo Voice, language

Wai Water
Taonga Treasure
Tamariki Children
Whakataukī Proverb

Wānanga Discuss, consider

Titiro Observe Whakatau Conclude Ki te hoe Take action Riverhed Kūkūpango Tākere Water flow Rongo Smell Pūkohu Algae Tohu Sign Rakau Tree

#### Technical terms

Aquatic invertebrates Animals without a backbone that live beneath the surface of

the water or its surface. For example: crayfish, clams, snails

and insects.

Habitat The natural home or environment of an animal Culverts A drain or channel crossing under a road or sidewalk

Weirs A small dam in a river or stream

