

## Community Monitoring Field Sheet Version 1.1 November 2014

If you have a tablet or smartphone and wireless connectivity available in the field you can enter this information at [www.riverhealth.org.au/report\\_card/community/](http://www.riverhealth.org.au/report_card/community/). Otherwise use the sheets to record your data in the field and then enter the results on the website back at the computer.

Recorder	
Site Name	
Date	
Time	
pH (1-12)	
Salt (us/cm)	
Turbidity (10 to 240)	
Water Bugs (select one)	Bugs Found:
	Very sensitive bugs present with lots of diversity (3+ types)
	Very sensitive bugs present
	Only sensitive to tolerant bugs present
	Only tolerant to very tolerant bugs present
	Only very tolerant bugs present
Fish (select one)	Fish Found:
	4 or more native species
	3 native species
	2 native species
	1 native species
	0 native species
Riparian Vegetation (select one)	Plants Found:
	5 strata's present
	4 strata's present
	3 strata's present
	2 strata's present
	1 or no strata's present
Weeds (select one)	Weeds Found:
	0% weed invasion
	1 to 25% weed invasion
	25 to 50% weed invasion
	50 to 75% weed invasion
	75 to 100% weed invasion

## Sampling Instructions

### Fish

Bait and set the fish traps in three spots (with different habitats if possible) and leave undisturbed for at least 15 minutes. It is best to set the traps first and then complete the other sampling before returning to the traps after all other activities are completed. If the water is clear, sit and quietly observe water for five minutes to identify fish not trapped. Place fish caught in the traps in a bucket of water while identifying them using a fish id guide (*A Wild Australia Guide: Freshwater Fishes is an inexpensive and suitable resource for freshwaters in Australia*) and release them as soon as possible to minimise harm. List fish found and results on field sheet or at [www.riverhealth.org.au/report\\_card/community/](http://www.riverhealth.org.au/report_card/community/)

### Water Quality

Collect water sample and use EC tester for salt, test strips for pH and the tube for turbidity. Enter results on field sheet or on the website

### Riparian Vegetation

Inspect the riparian zone for up to five different strata of vegetation (Strata types: Canopy Trees, Woody Shrubs, Herbs/Forbes, Sedges and Waterplants). Identify plants using an appropriate field guide if time allows. List vegetation found and results on field sheet or on the website. This activity can be done along with the weeds assessment to save time.

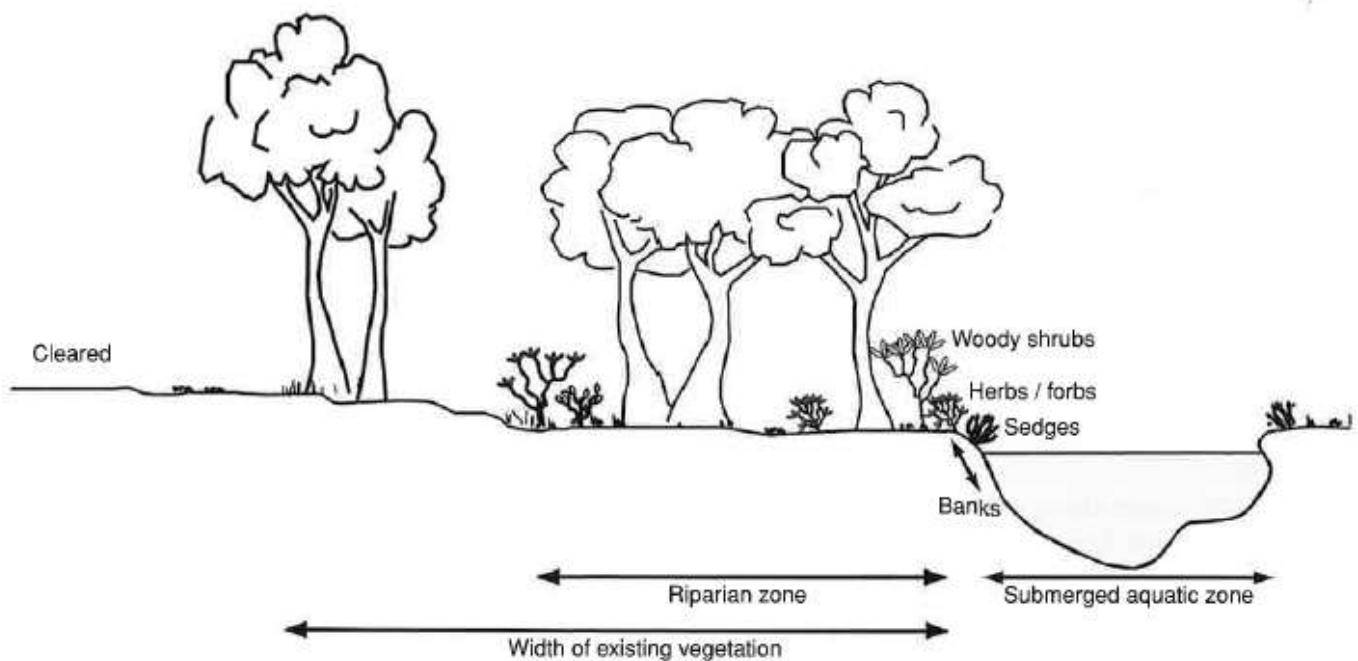


Figure 7-18 Location of riparian vegetation on the stream bank

### Weeds

Inspect the riparian zone and use an appropriate weed identification guides to classify weeds (*Grow Me Instead* and *Priority Weeds of the Capricorn Region* are useful guides for Central Queensland). Remove weeds and dispose to the garbage when possible and time allows. List weeds found and results on field sheet or on the website. This activity can be done along with the riparian assessment to save time.

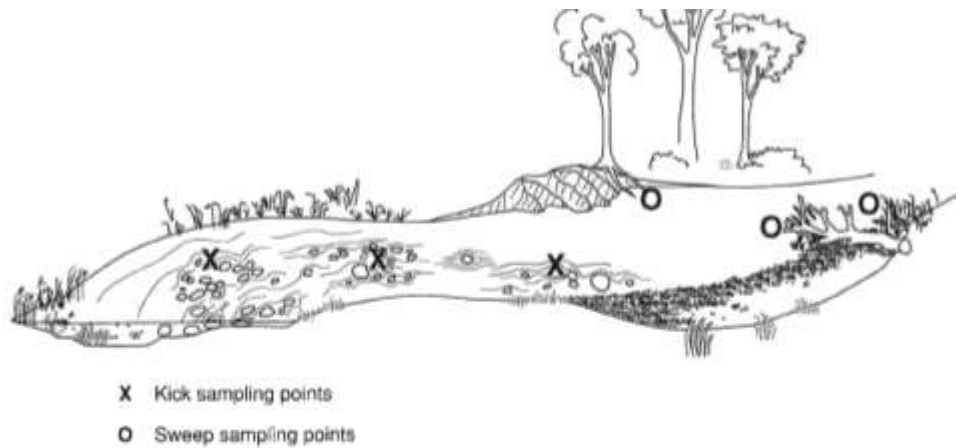


Figure 6-4 Example of where kick sampling and sweep sampling should occur at a site

## Waterbugs

Use the net to catch waterbugs using sweep and kick sampling techniques (Extract from Queensland Community Sampling Manual provided). Pour samples into white trays and separate bugs into ice cube trays if necessary using a pipette or spoon. Identify bugs with appropriate identification charts and magnifying glasses. List water bugs found and results on field sheet or website

### Sweep sampling

This method is best suited to stream edge, pool and backwater habitats with vegetation overhanging from the stream bank, aquatic plant (macrophyte) beds, undercut banks, root mats, leaf packs, woody debris, and other stream features that provide suitable living places for macro-invertebrates.

The following steps are recommended in order to gain the truest representation of a site's macro-invertebrate community when conducting sweep sampling:

1. Insert the net among the key features of the habitat (such as overhanging vegetation) and use a short, upward-sweeping movement at right angles to the bank. Stir up the bottom while doing so, ensuring that bottom-dwelling animals are suspended and then caught when sweeping through the cloud of suspended material. Continue this procedure along 10 m of the habitat to sample the full range of stream features.
2. Stop regularly to rinse mud and fine silt out of your net. The sample should be free of sediment prior to sorting. An easy way to rinse your net without losing your sample is to wash water into the side of your net while you are holding it with the mouth of the net pointing upwards above the water.

3. Once finished, scoop the net out of the water in a forward motion to prevent fauna from escaping. Flush the net with water to remove any remaining sediment prior to sorting.
4. Empty the contents of the net gently into about 2 cm of clear stream water in a white sorting tray. Rinse down the sides of your net into the tray to ensure that you transfer the full sample into the tray. Pick off any stray macro-invertebrates still clinging to the net using a pair of tweezers.

### Kick sampling

This method is designed for sampling stream bed habitats and can be used to sample a range of depths and flows. It is performed most effectively in riffles—fast-flowing, rocky sections of the stream bed—where the highest diversity of macro-invertebrates is generally found. However, kick sampling is also an effective method for sampling silty or sandy beds and rocky or gravel beds in slightly slower-flowing sections of the stream. All types of bed habitat present at a site should be sampled using the kick method.

The following steps are recommended in order to gain the truest representation of a site's macro-invertebrate community when conducting kick sampling:

1. Approach the sampling area from downstream to prevent disturbing fauna prior to collecting.
2. Holding the net downstream with its mouth facing the sampling area upstream, disturb the stream bed by digging your foot underneath the stones and turning them over. Macro-invertebrates will become suspended in water and will be pushed into the net by the flow of the stream. If there is little or no flow, you will have to use a short sweeping action with the net while stirring up the bed.
3. If you encounter large rocks, place them in the net by hand and rub off fauna any into the net before placing the rock back on the stream bed.
4. Stop regularly to rinse mud and fine silt out of the net.
5. Repeat these procedures over a distance of 10 m, aiming to sample the full range of flow velocities and key features of the bed habitat.
6. Once finished, scoop the net out of the water in a forward motion to prevent fauna from escaping. Flush the net with water to remove any remaining sediment prior to sorting.
7. Empty contents of the net into 2 cm of clean water in the white sorting tray.
8. Before taking another sample, rinse the net so that all fauna and debris are removed.