

Waterbug Report: Merri Creek upstream of St. Georges Rd Bridge, Nth Fitzroy



Site Code: ME_YMR112

DATE: 6/2/2022

TIME: 2.00pm

Surveyors: Trevor Hausler, Irene Baker, Nicole Lowe, Melissa Liang, Kate Jost and 3 other community members

Watchwatch Portal: https://www.vic.waterwatch.org.au/site_visit/2330808

Site Description

The sampling site on the Merri Creek consists of an area 50 metres north of the St. Georges Rd bridge and stretching back under the bridge to about 30m south of it. North of the bridge the creek bottom consists many of large basalt boulders and the sampling is along the edge vegetation although, at times of low stream flow much of this is about the water level. Immediately under the bridge and south of it is an area of riffles consisting of a mixture of large and small basalt rocks along with mixed rubble of human origin. Further south the stream contains a mixture of in stream and edge vegetation and some woody debris. Samples are taken from all of these macro habitats.

The weather was sunny and there had been rain in the preceding week. The creek appeared stained brown and the level low, with continuous flow in the channel and instream habitats connected.















Name	Common Name	Quantity	SIGNAL 2 Score	Photos
Phylum Mollusca				
Family Lymidae	Snails	1	1	

Image: Dr. L. Peters

Family Corbiculidae	Pea shells	12	5	 Image: wikipedia.org
Family Physidae (<i>Physa acuta</i>)	European Pond Snail	15	2	
Family Hydrobilidae <i>Potamopyrgus antipodarum</i>	New Zealand Mud Snail	4	3	 Image: M. Mañas
Phylum Arthropoda Class Crustacea				
Family Atyidae	Glass Shrimp	25	3	
Family Hymenosomatidae	False Spider Crabs	15	3	 Image: K. Perrie
Class Insecta				
Order Diptera				
Family Simuliidae	Blackfly Larvae	3	5	 Image: macroinvertebrates.org
Family Chironomidae	Bloodworms	1		
Family Chironomidae	Chironomids other than Bloodworms	10	4	
Order Hemiptera				
Family Veliidae	Water Treaders	4	1	 Image: A. Piesse
Family Corixidae Genus <i>Micronecta</i>	Little Brindle Boatmen	1	3	
Order Odonata				

Family Coenagrionidae	Damselfly Nymphs	1	1	
Corduliid / libellulid like dragonfly Nymphs	Spider Mudeyes	1	4	
Order Tricoptera				
Family Hydropsychidae	Net-spinning Caddis	30	6	
Family Leptoceridae Genus <i>Triplecides</i>	Stick Caddis	3	3	
Family Leptoceridae Genus <i>Notalina</i>	Headbanger Caddis	30	6	
	Totals	156		
		Weighted ALT SIGNAL Score	3.81	
		Meaning	Severe Pollution- mainly caused by stormwater inflows.	

***Explanatory notes on SIGNAL Score (from the [Waterwatch Victoria](#) website)**

Each aquatic macro invertebrate is given an ALT (Agreed Level Taxonomy) SIGNAL2 score depending on their sensitivity to pollutants. SIGNAL stands for Stream Invertebrate Grade Number - Average Level. In 1994, a new version of this method, known as SIGNAL2, was developed and is available on the [Federal Government website](#). By knowing the SIGNAL2 grade for every family, the SIGNAL2 score of a site, and therefore its health, can be assessed. For example a site that has abundant diversity and many sensitive aquatic invertebrates will have a high ALT SIGNAL2 score.

To manually calculate an ALT SIGNAL2 score for a site:

Step 1. Collect, sort and identify the creatures found at the site

Step 2. Calculate the sum of the individual ALT SIGNAL2 grades

Step 3. Divide the sum of the individual ALT SIGNAL2 grades by the number of different invertebrates collected to calculate the ALT SIGNAL2 score.

The Weighted SIGNAL Score shown above has been calculated in the Waterwatch Portal and takes into account a number of factors

A guide for interpreting water health according to the SIGNAL score of a site is given in this table

SIGNAL score ratings

Higher than 6	Healthy habitat
Between 5 and 6	Mild pollution
Between 4 and 5	Moderate pollution
Less than 4	Severe pollution

These ratings were originally developed for very "normal" freshwater streams and rivers, and do not work as well for wetlands or lakes.

This report has been added to the [Waterwatch database](#).

Trevor Hausler
Waterwatch Officer (MCMC)