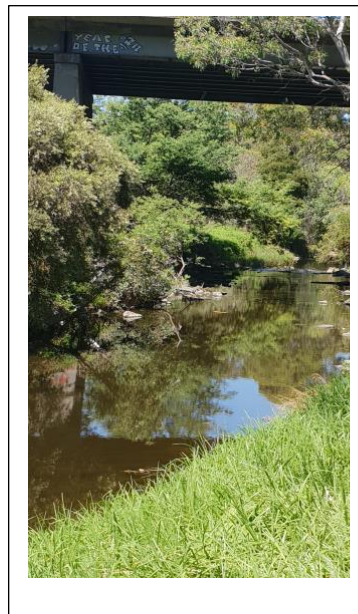


Waterbug Report: Merri Creek upstream of St. Georges Rd Bridge, Nth Fitzroy



Site Code: ME_YMR112

DATE: 1/03/2020

TIME: 2.00pm

Surveyors: Trevor Hausler and 2 Community members










Watchwatch Portal:




https://www.vic.waterwatch.org.au/water_data_portal.php?action=view_site_visit&site_visit_id=2326186

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 of large basalt boulders and the sampling is along the edge vegetation although, at times of low stream flow, much of this is above 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 the about habitats. The weather was sunny although there had been rain in the preceding 3 days. The creek appeared clear and of medium height and steady.

Name	Common Name	Quantity	SIGNAL 2 Score	Photos
Miscellaneous Phyla				
Phylum Annelida Class Hirudinea	Leeches	3	1	
Phylum Turbellaria	Flatworms	1	1	
				Image: A. Piesse
Phylum Mollusca				

Family Corbiculidae	Pea shells	7	5	 Image: wikipedia.org
Family Planorbidae	Planorbids	1	1	 Image: A. R. Walker
Family Physidae (<i>Physa acuta</i>)	European Pond Snail	10	2	 Image: A. Piesse
Phylum Arthropoda Class Insecta				
Order Diptera				
Family Simuliidae	Blackfly Larvae	5	5	 Image: macroinvertebrates.org
Family Chironomidae	Chironomids	100	4	
Order Hemiptera				
Family Veliidae	Water Treaders	8	1	 Image: A. Piesse
Family Notonectidae Genus <i>Enithares</i>	Robust Backswimmers	7	3	
Family Corixidae Genus <i>Micronecta</i>	Little Brindle Boatmen	20	3	
Order Odonata				
Family Coenagrionidae	Damselfly Nymphs	20	1	

Order Tricoptera				
Family Hydropsychidae	Net-spinning Caddis	20	6	
Family Leptoceridae Genus <i>Triplecides</i>	Stick caddis	1	3	
Family Leptoceridae Genus <i>Notalina</i>	Headbanger Caddis	20	6	
	Totals	223		
		Weighted ALT SIGNAL Score	3.35	
		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)