



## Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

### Waterwatch Report 24<sup>th</sup> April 2016

#### Scope

- Aquatic invertebrate sampling at sites 1a, 1b.
- Basic chemistry and ammonium tests at all sites.
- Dissolved Oxygen and Phosphate tests at sites 1a, 1b.
- Flow measurement and/or observations at all sites.

#### Weather Conditions

During testing: Sunny, cool.

Previous 24 hours: Overcast, cool.

Previous week: Initially dry and sunny, later cool with 25 mm rain.

#### Water Quality Results

	<b>YSC010 Site 1A Fiander arm</b>	<b>YSC012 Site 1B Crosby arm</b>	<b>YSC020 Site 2 Regent St</b>	<b>YVA100 Site 3 Valley Creek</b>
Air Temp C	14	14	15	15
Water Temp C	13	14	15	15
pH	7.1 G	6.9 E	6.8 E	6.8 E
Oxygen Conc. mg/l	6.8 G	7.1 G		
Conductivity E.C.	320 F	220 G	210 G	260 F
Turbidity F.T.U	14 E	13 E	23 P	27 P
Phosphorus, soluble ppm	0.023 G	0.033 F		
Ammonium NH <sub>4</sub> <sup>+</sup> ppm	0.02 E	0.00 E	0.02 E	0.00 E
Stream Flow (volume) l/s	8.8	30.1	32.8	0.0

(E = Excellent, G = Good, F = Fair, P = Poor, D = Degraded)

## Macro Invertebrates Results

	YSC010 Site 1A Fiander arm	YSC012 Site 1B Crosby arm
Very Sensitive		
<i>Caddisfly larvae</i>		4
Sensitive		
<i>Damselfly larvae</i>	14	100
<i>Dragonfly larvae</i>		7
<i>Freshwater mussel</i>	1	1
<i>Freshwater Yabbies/Crayfish</i>		2
Tolerant		
<i>True Bugs (Backswimmers, Water Scorpions, Water Boatmen, Lesser Water Striders, Water Striders/Treaders)</i>	1	
<i>Leeches</i>	6	5
<i>Snails (freshwater)</i>	4	9
<i>Flatworms</i>	30	5
Very Tolerant		
<i>Mosquito larvae</i>	1	
<i>Midge larvae</i>		1
<i>Freshwater segmented worms</i>	30	5
<i>Blood worms</i>	30	1
<b>Abundance Category</b>	<b>3</b>	<b>3</b>
<b>Total Bug Score</b>	<b>28</b>	<b>42</b>
<b>Stream Condition</b>	<b>Poor</b>	<b>Good</b>

### Comments:

This month we obtained unusually good results.

- The phys/chem indicators at the upstream sites (1a, 1b) were all in the Fair to Excellent range. Even the phosphate results were better than usual at these sites.
- The downstream basic phys/chem indicators (at sites 2, 3) were in the same range except for Poor turbidity (we did not measure oxygen and phosphate at these sites). Valley Ck (site 3) was flowing at a trickle, despite 25 mm rain a few days previously, suggesting that ground conditions are still dry.
- There was good in-stream vegetation at site 1b (Glen Waverley Drain), and the waterbugs we collected there were unusually good for variety and for the abundance of damselfly larvae, resulting in a Good rating.



Some of the bugs sorted from the sample at site 1b (a leech, damselfly larvae, snails, dragonfly larvae and caddisfly larvae).

FGB  
27/4/16