



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 21 Feb 2016

Scope

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

Weather Conditions

During testing: Sunny

Previous 24 hours: Becoming sunny

Previous week: Mild, 7 mm rain.

Water Quality Results

	YSC010 Site 1A Fiander arm	YSC012 Site 1B Crosby arm	YSC020 Site 2 Regent St	YVA100 Site 3 Valley Creek
Air Temp C	15	16	17	17
Water Temp C	14.5	15.5	17	16
pH	7.0 E	6.7 E	6.7 E	7.1 G
Oxygen Conc. mg/l	4.9 P	5.3 F		
Conductivity E.C.	500 P	200 G	320 F	220 G
Turbidity F.T.U	15 G	12 E	14 E	53 D
Phosphorus, soluble ppm	0.049 F	0.088 P		
Ammonium NH ₄ ⁺ ppm	0.05 G	0.03 E	0.25 P	0.00 E
Stream Flow (volume) l/s	7.3	8.5	15.7	0.1

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

Macro Invertebrates Results

	YSC010 Site 1A Fiander arm	YSC012 Site 1B Crosby arm	C
Sensitive			C
<i>Damselfly larvae</i>	6	9	C
<i>Dragonfly larvae</i>	2	1	C
Tolerant			C
<i>Beetle larvae</i>	0	1	C
<i>True Bugs (Backswimmers, Water Scorpions, Water Boatmen, Lesser Water Striders, Water Striders/Treaders)</i>	3	0	C
<i>Leeches</i>	1	2	C
<i>Snails (freshwater)</i>	4	15	C
<i>Flatworms</i>	20	3	C
Very Tolerant			C
<i>Midge larvae</i>	1	2	C
<i>Freshwater segmented worms</i>	15	1	C
<i>Blood worms</i>	25	20	C
			C
Abundance Category	2	2	C
Total Bug Score	31	29	C
Stream Condition	Poor	Poor	C

Comments:

- The water at all sites was unusually clear, however there was a lot of litter at all sites except Valley Creek.
- There was very little vegetation to sample for invertebrates at site 1a (Fiander arm), and the sample was very muddy. The vegetation at site 1b (Crosby arm) was much better, and the sample cleaner. Surprisingly, we managed to find more invertebrates in the muddy sample from site 1a. Both sites rate Poor overall.
- The chemical results have some unusual degradations which are a repeat of our January results, ie Poor conductivity rating (high conductivity) from the Fiander arm (1a), and Poor ammonium rating at Regent St (site 2, below the wetlands).
- The Poor and Fair oxygen and phosphorus ratings are typical of these creeks in summer.

FGB
26/2/16