



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 21 May 2017

Scope

- Aquatic invertebrate sampling at sites 2 and 3.
- Basic chemistry tests at all sites.
- Dissolved Oxygen and Phosphate tests at sites 2 and 3.
- Ammonium tests at all sites.
- Flow measurement and/or observations at all sites.

Weather Conditions

During testing: Sunny

Previous 24 hours: Sunny

Previous week: Cool, 1 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	17	17	17	17
Water Temp C	14	14.5	12	12
pH	7.4 G	7.1 G	6.9 E	7.1 G
Oxygen Conc. mg/l			7.7 G	6.9 G
Conductivity E.C.	670 P	290 F	440 F	500 P
Turbidity F.T.U	13 E	3 E	14 E	14 E
Phosphorus, soluble ppm			0.039 F	0.020 G
Ammonium NH ₄ ⁺ ppm	0.09 G	0.00 E	0.07 G	0.05 G
Stream Flow (volume) l/s	2.9	4.9	11.4	0.1

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

Macro Invertebrates Results

	YSC020 Site 2 Regent St	YVA100 Site 3 Valley Creek
Sensitive		
<i>Damselfly larvae</i>	0	6
<i>Dragonfly larvae</i>	6	7
<i>Freshwater Yabbies/Crayfish</i>	0	4
Tolerant		
<i>Beetles/Dytiscid beetles, Whirligig beetles</i>	0	1
<i>Leeches</i>	3	0
<i>Snails (freshwater)</i>	20	15
<i>Flatworms</i>	20	10
Very Tolerant		
<i>Freshwater segmented worms</i>	3	1
<i>Blood worms</i>	3	5
Abundance Category	2	2
Total Bug Score	17	28
Stream Condition	Poor	Poor

Comments:

- The litter trap construction fence at sites 1a and 1b (upstream) has been removed and we can resume testing at those sites.
- Scotchmans Ck at site 2 had been very muddy for the previous 2 days, but at the time of our testing it was visually clear and the turbidity meter readings were rated Excellent. The in-stream vegetation at this site has a lot of sediment clinging to it, which results in very muddy invertebrates samples.
- Conductivity was high (rated Poor) at sites 1a (Scotchmans Ck, upstream) and 3 (Valley Ck), but they were flowing very slowly and high readings are typical at such times.
- All other water physical/chemistry results were Fair to Excellent.
- The waterbug samples were small, as expected in late autumn, but we found some interesting bugs, including several dragonfly larvae at each site, and a relatively large yabby (7.5 cm) in Valley Ck.

FGB 22/May/17