



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 18 Nov 2018

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: Fine and sunny.

Previous 24 hours: Fine and sunny.

Previous week: Mostly sunny, 6 mm rainfall.

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	18	18	16.5	17
Water Temp C	15.5	15.5	16.5	15
pH	7.6 G	7.0 E	7.0 E	6.9 E
Oxygen Conc. mg/l	8.7 E	8.5 E		
Conductivity E.C.	670 P	240 G	380 F	340 F
Turbidity F.T.U	14 E	11 E	20 P	43 D
Phosphorus, soluble ppm	0.068 P	0.189 D		
Ammonium NH ₄ ⁺ ppm	0.02 E	0.08 G	0.20 P	0.00 E
Stream Flow (volume) l/s	0.8	4.6	9.8	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
	Bug score	Number found	Number found
Sensitive			
<i>Damselfly larvae</i>	6	1	3
Tolerant			
<i>Snails (freshwater)</i>	3	10	20
Very Tolerant			
<i>Fly larvae</i>	2	5	0
<i>Freshwater segmented worms</i>	1	10	0
<i>Blood worms</i>	1	1	6
Total Number Found		27	29
Total Bug Score		13	10
Stream Condition		Poor	Poor

Comments:

- A 60 mm rain event 12 days before this site visit has deposited a lot of unsightly litter on the creek banks and verges.
- Streamflows were low at the time of this visit.
- The Fiander arm (1a) looked clear, and had excellent oxygen level, but had high conductivity and phosphorus (rated Poor).
- The Crosby arm measured Degraded phosphorus level.
- Scotchmans Ck downstream (site 2) measured worse ammonium (rated Poor) than upstream.
- Valley Ck (site 3) was flowing very slowly, however it's chemistry was Fair to Good except for Degraded turbidity.
- The waterbug samples (taken at the upstream sites 1a and 1b) were very small, especially from the Fiander arm which had very little in-stream vegetation for waterbug habitat. Both sites rate Poor.