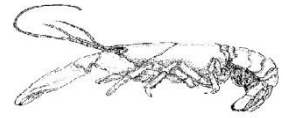




Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 23 April 2023

Scope

- Aquatic invertebrate sampling at sites 1a and 1b (upstream sites).
- Basic chemistry and ammonium tests at all sites. No pH was tested due to indicator unavailable.
- Dissolved Oxygen and Phosphate tests at sites 1a & 1b (upstream sites).
- Ammonium tests at all sites.
- Flow measurement and/or observations at all sites.

Weather Conditions

Previous week: cool, mild temperature. Eight days prior we had 45mm of rain, then midweek 4mm rain.

Previous 24 hours: Cloudy, dry overnight.

During testing: Overcast, gradually sunny.

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	16	16	17	17
Water Temp C	15	15	15.5	15
pH	n/a	n/a	n/a	n/a
Oxygen Conc. mg/l	8.1 E	9.5 E		
Conductivity E.C.	680 P	110 G	260 F	410 F
Turbidity F.T.U	10 E	6 E	9 E	29 P
Phosphorus, soluble ppm	0.059 P	0.013 G		
Ammonium NH ₄ ⁺ ppm	0.00 E	0.00 E	0.00 E	0.00 E
Stream Flow estimate l/s	6.8	26.0	23.8	<5

(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
Very Sensitive			
<i>Caddisfly larvae</i>	7	1	0
Sensitive			
<i>Damselfly larvae</i>	6	0	20
<i>Dragonfly larvae</i>	6	1	25
<i>Freshwater mussel</i>	5	1	0
Tolerant			
<i>Leeches</i>	3	0	4
<i>Snails (freshwater)</i>	3	20	20
<i>Flatworms</i>	3	1	10
Very Tolerant			
<i>Fly larvae</i>	2	0	1
<i>Freshwater segmented worms</i>	1	8	6
<i>Blood worms</i>	1	10	4
Total Number Found		42	90
Total Bug Score		26	25
Stream Condition		Poor	Poor

Comments:

- No pH measurement was taken as there was no pH indicator available.
- Oxygen level was Excellent for Sites 1a and 1b.
- Ammonium level for all sites was Excellent (zero).
- High conductivity reading for Site 1a.
- The invertebrate survey ratings ('Waterwatch' method) were Poor for both the upstream sites.
- Valley Creek flow was too low to measure (estimate taken).

ML / FGB 23/04/23.