



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 21 April 2024

Scope

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

Weather Conditions

Previous week: 21 mm rain.

Previous 24 hours: Overcast, no rain.

During testing: Overcast, then 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	14	14	14	14
Water Temp C	14	13	14	13.5
pH	7.4 G	7.1 G	7.1 G	7.0 E
Oxygen Conc. mg/l	9.3 E	7.0 G		
Conductivity E.C.	400 F	370 F	410 F	400 F
Turbidity F.T.U	10 E	11 E	21 P	31 D
Phosphorus, soluble ppm	0.016 G	0.121 D		
Ammonium NH ₄ ⁺ ppm	0.00 E	0.00 E	0.00 E	0.00 E
Stream Flow estimate l/s	14.7	7.9	16.3	0.7

(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	0	2
<i>Dragonfly larvae</i>	6	1	2
Tolerant			
<i>Beetle larvae</i>	4	1	0
<i>Leeches</i>	3	3	5
<i>Snails (freshwater)</i>	3	30	50
<i>Flatworms</i>	3	0	10
Very Tolerant			
<i>Freshwater segmented worms</i>	1	5	20
<i>Blood worms</i>	1	4	20
Total Number Found		44	109
Total Bug Score		18	23
Stream Condition		Poor	Poor

Comments:

- Stream flows were low. Measurements made with floating twigs, tape measure and stopwatch, are approximate.
- Oxygen concentration at Site 1a was Excellent and at Site 1b was Good.
- Conductivity reading was Fair for all sites.
- Turbidity was Excellent for Sites 1a & 1b but Poor to Degraded for Sites 2 & 3.
- Phosphorus results was Good for Site 1a and Degraded for Site 1b.
- Ammonium results were Excellent for all sites.
- The invertebrate survey ratings ('Waterwatch' method) were Poor for both upstream sites.

ML / FGB 21/4/24.