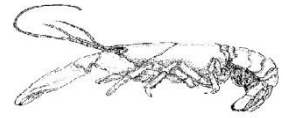




Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 24 September 2023

Scope

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

Weather Conditions

Previous week: Overcast / sunny, 2mm rain.

Previous 24 hours: Sunny, no rain.

During testing: 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	17	20	18	16.5
Water Temp C	13	14	16.5	16
pH	7.3 G	7.1 G	6.9 E	6.9 E
Oxygen Conc. mg/l	6.6 G	8.0 E		
Conductivity E.C.	750 D	330 F	590 P	850 D
Turbidity F.T.U	10 E	8 E	24 P	15 G
Phosphorus, soluble ppm	0.026 F	0.114 D		
Ammonium NH ₄ ⁺ ppm	0.07 G	0.05 G	0.10 F	0.04 E
Stream Flow estimate l/s	4.4	2.0	13.4	0.0

(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	1
Sensitive			
<i>Damselfly larvae</i>	6	1	0
<i>Water Mites</i>	5	0	20
Tolerant			
<i>Beetle larvae</i>	4	0	1
<i>Snails (freshwater)</i>	3	30	50
<i>Flatworms</i>	3	15	6
Very Tolerant			
<i>Fly larvae</i>	2	0	4
<i>Freshwater segmented worms</i>	1	15	0
<i>Blood worms</i>	1	10	15
Total Number Found		72	97
Total Bug Score		21	25
Stream Condition		Poor	Poor

Comments:

- All new chemical reagents received from QA/QC session on 9/9/23.
- Oxygen level was Good for Site 1a and Excellent for Site 1b.
- Conductivity was Fair to Degraded.
- Ammonium level for Sites 1a & 1b was Good, Fair/Excellent for Sites 2 & 3.
- All stream flows decreased due to no/little rainfall. Valley Creek was not flowing.
- The invertebrate survey ratings ('Waterwatch' method) were Poor for both the upstream sites.
- There was very little in-stream vegetation at Site 1a.

ML / FGB 24/9/23.