



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 24 March 2024

Scope

- Aquatic invertebrate sampling at site 2 (downstream sites).
- Basic chemistry and ammonium tests at all sites.
- Dissolved Oxygen tests at sites 2 and 3 (downstream sites).
- Flow measurement and/or observations at all sites.

Weather Conditions

Previous week: 5 mm rain.

Previous 24 hours: Sunny, no rain.

During testing: Overcast, 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	13.5	15	13.5	14
Water Temp C	14.5	14.5	14	13
pH	7.0 E	6.8 E	6.5 E	6.7 E
Oxygen Conc. mg/l			5.9 F	2.9 D
Conductivity E.C.	270 F	350 F	400 F	660 P
Turbidity F.T.U	11 E	14 E	35 D	43 D
Phosphorus, soluble ppm			0.039 F	0.010 G
Ammonium NH ₄ ⁺ ppm	0.00 E	0.01 E	0.07 G	0.00 E
Stream Flow estimate l/s	28.8	3.7	10.6	n/a

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

Macro Invertebrates Results

		YSC020 Site 2 Regent St
	Bug score	Number found
Sensitive		
<i>Damselfly larvae</i>	6	2
<i>Freshwater shrimps/prawns</i>	5	1
<i>Water Mites</i>	5	1
Tolerant		
<i>Beetle larvae</i>	4	1
<i>True Bugs (Backswimmers, Water Scorpions, Water Boatmen, Lesser Water Striders, Water Striders/Treaders)</i>	4	5
<i>Leeches</i>	3	10
<i>Snails (freshwater)</i>	3	1
<i>Flatworms</i>	3	50
Very Tolerant		
<i>Fly larvae</i>	2	50
<i>Freshwater segmented worms</i>	1	20
<i>Blood worms</i>	1	20
Total Number Found		161
Total Bug Score		37
Stream Condition		Good

Comments:

- Oxygen concentration at Site 2 was Fair and Degraded for Site 3.
- Conductivity reading was Fair for Sites 1a, 1b & 2; Poor for Site 3.
- Turbidity was Excellent for Sites 1a & 1b, but Degraded for Sites 2 & 3
- Phosphorus results were Fair for Site 2 and Good for Site 3.
- Ammonium results were Excellent for all sites.
- The water level was too low at Site 3 for invertebrates sampling.
- The invertebrate survey ratings ('Waterwatch' method) was Good for Site 2 despite having Fair oxygen concentration.