



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 19 January 2025

Scope

- Aquatic invertebrate sampling at sites 2 and 3 (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: 20 mm rain.

Previous 24 hours: Sunny, no rain.

During testing: Warm, 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	24	24	24	24
Water Temp C	20	22	20	20
pH	7.6 G	6.9 E	6.8 E	6.9 E
Oxygen Conc. mg/l			7.0 G	3.5 D
Conductivity E.C.	1010 D	120 G	290 F	410 F
Turbidity F.T.U	17 G	5 E	8 E	31 D
Phosphorus, soluble ppm			0.026 F	0.065 P
Ammonium NH ₄ ⁺ ppm	0.00 E	0.04 E	0.07 G	1.50 D
Stream Flow estimate l/s	0.7	2.1	15.4	0.02

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

Macro Invertebrates Results

		YSC020 Site 2 Regent St	YVA100 Site 3 Valley Creek
	Bug score	Number found	Number found
Very Sensitive			
<i>Caddisfly larvae</i>	7	1	0
Sensitive			
<i>Damselfly larvae</i>	6	10	0
<i>Dragonfly larvae</i>	6	0	1
Tolerant			
<i>Beetle larvae</i>	4	1	0
<i>Leeches</i>	3	3	0
<i>Snails (freshwater)</i>	3	30	30
<i>Flatworms</i>	3	50	30
Very Tolerant			
<i>Mosquito larvae</i>	2	0	1
<i>Fly larvae</i>	2	2	0
<i>Freshwater segmented worms</i>	1	20	20
<i>Blood worms</i>	1	20	30
Total Number Found		137	112
Total Bug Score		30	16
Stream Condition		Poor	Poor

Comments:

- Oxygen concentration at Site 2 was Good, Degraded for Site 3.
- Conductivity reading was Degraded for Site 1a, Good for Site 1b and Fair for Sites 2 & 3.
- Turbidity was Good for Site 1a, Excellent for Sites 1b & 2 and Degraded for Site 3.
- Phosphorus results were Fair for Site 2 and Poor for Site 3.
- Ammonium results were Excellent for upstream sites (1a & 1b), Good for site 2 and Degraded for Site 3.
- The invertebrate survey ratings ('Waterwatch' method) were Poor for both downstream sites.
- There were tadpoles at both downstream sites; galaxis fish were present at site 2.
- Site 2 in-stream vegetation was alive in patches.