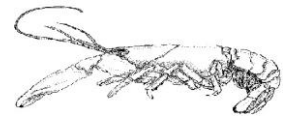




Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 22 May 2022

Scope

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

Weather Conditions

Previous week: 5 mm rain, cold nights.

Previous 24 hours: Sunny day, no rain.

During testing: Overcast.

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	10.5	10.5	10	10
Water Temp C	11	11	10.5	10.5
pH	7.3 G	6.9 E	7.1 G	7.1 G
Oxygen Conc. mg/l			8.8 E	8.3 E
Conductivity E.C.	600 P	280 F	460 F	300 F
Turbidity F.T.U	7 E	6 E	12 E	23 P
Phosphorus, soluble ppm			0.036 F	0.029 F
Ammonium NH ₄ ⁺ ppm	0.04 E	0.00 E	0.07 G	0.00 E
Stream Flow estimate l/s	6.5	20.5	32.7	0.1

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

Macro Invertebrates Results

		YSC020 Site 2 Regent St	YVA100 Site 3 Valley Creek
Waterwatch method	Bug score	Number found	Number found
Sensitive			
<i>Damselfly larvae</i>	6	2	1
<i>Dragonfly larvae</i>	6	4	0
<i>Freshwater mussel</i>	5	0	20
<i>Freshwater Slaters</i>	5	0	2
Tolerant			
<i>Beetle larvae</i>	4	2	0
<i>True Bugs (Backswimmers, Water Scorpions, Water Boatmen, Lesser Water Striders, Water Striders/Treaders)</i>	4	0	1
<i>Leeches</i>	3	5	1
<i>Snails (freshwater)</i>	3	0	50
<i>Flatworms</i>	3	23	30
Very Tolerant			
<i>Fly larvae</i>	2	50	1
<i>Freshwater segmented worms</i>	1	10	20
<i>Blood worms</i>	1	10	5
Total Number Found		106	131
Total Bug Score		26	33
Stream Condition		Poor	Poor

Comments:

- The chemical indicators were Fair to Excellent at all the sites except for high conductivity in the upstream branch of Scotchmans Ck, and turbidity in Valley Ck (which was flowing very slowly).
- The invertebrates ratings were Poor at both the downstream sites. A marked difference between the sites was that the Scotchmans Ck sample had very large numbers of the pest *Gambusia*, and the Valley Ck sample taken 50 metres away had none.