



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 20 Feb 2022

Scope

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

Weather Conditions

Previous week: Mild, sometimes humid, no rain

Previous 24 hours: Sunny, 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	17	17	17	17
Water Temp C	17	16.5	19	19
pH	7.1 G	6.8 E	7.0 E	7.0 E
Oxygen Conc. mg/l	8.3 E	4.4 P		
Conductivity E.C.	220 G	360 F	350 F	5200 D
Turbidity F.T.U	10 E	14 E	22 P	10 E
Phosphorus, soluble ppm	0.023 G	0.218 D		
Ammonium NH ₄ ⁺ ppm	0.00 E	0.07 G	0.02 E	0.10 F
Stream Flow estimate l/s	10.5	1.2	7.0	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
Sensitive			
<i>Damselfly larvae</i>	6	3	5
<i>Dragonfly larvae</i>	6	1	6
Tolerant			
<i>Beetle larvae</i>	4	4	0
<i>True Bugs (Backswimmers, Water Scorpions, Water Boatmen, Lesser Water Striders, Water Striders/Treaders)</i>	4	1	1
<i>Beetles/Dytiscid beetles, Whirligig beetles</i>	3	0	30
<i>Leeches</i>	3	6	5
<i>Snails (freshwater)</i>	3	30	30
<i>Flatworms</i>	3	30	5
Very Tolerant			
<i>Mosquito larvae</i>	2	1	0
<i>Fly larvae</i>	2	0	1
<i>Freshwater segmented worms</i>	1	5	1
<i>Blood worms</i>	1	50	50
Total Number Found		131	134
Total Bug Score		33	32
Stream Condition		Poor	Poor

Comments:

Scotchmans Creek was covered in streaks of foam in the pool at Regent street (site ME_YSC020, site 2), and there was some foam caught on the surface upstream between Turner Court and Crosby Drive (site ME_YSC010, site 1a, Fiander Arm). The flow at the upstream site was stronger than 2 days prior, despite no rain. Half the flow was slightly cloudy water coming from a large pipe which drains the area close to Glen Waverley Station, via Bogong Reserve. This catchment includes part of the Kingsway precinct. Despite this appearance, these sites' chemical indicators were Fair to Excellent except for Poor turbidity at Regent St.

The Glen Waverley Drain (site 1b, Crosby Arm) looked good but had low oxygen and high phosphorus in the chemistry.

Valley Creek was not flowing but had Fair to Good chemistry except for extraordinarily high conductivity, measurable only after diluting the sample.

The waterbug samples, from the upstream sites, were not as good as we had hoped (given the warm weather) and both were rated Poor.

FGB 20 Feb '22