

Friends of Scotchmans Creek and Valley Reserve Inc



Waterwatch Report 24 April 2022

Inc No A0037872K

Scope

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

Weather Conditions

Previous week: 34 mm rain early in the week, then fine, cool. Previous 24 hours: Sunny. 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	12	12	12	12
Water Temp C	13	12.5	13.5	12.5
pH	7.1 G	7.0 E	7.0 E	6.9 E
Oxygen Conc. mg/l	8.4 E	7.0 G		
Conductivity E.C.	440 F	270 F	420 F	330 F
Turbidity F.T.U	9 E	5 E	27 P	25 P
Phosphorus, soluble ppm	0.016 G	0.075 P		
Ammonium NH4+ ppm	0.00 E	0.01 E	0.07 G	0.00 E
Stream Flow estimate l/s	7.5	16.8	11.1	0.4

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

Macro Invertebrates Results

"Waterwatch" method		YSC010 Site 1A Fiander arm	YSC012 Site 1B Crosby arm
	Bug score	Number found	Number found
Very Sensitive			
Caddisfly larvae	7	3	1
Sensitive			
Damselfly larvae	6	2	30
Dragonfly larvae	6	2	15
Water Mites	5	1	1
Tolerant			
Leeches	3	2	7
Snails (freshwater)	3	20	20
Flatworms	3	20	30
Very Tolerant			
Fly larvae	2	1	0
Freshwater segmented worms	1	50	5
Blood worms	1	50	30
Total Number Found		151	139
Total Bug Score		37	35
Stream Condition		Good	Poor

Comments:

- The water quality test results were mostly Fair to Excellent, but Poor for the turbidity tests at both downstream sites 2 and 3 (Scotchmans Ck and Valley Ck) and Poor for the phosphorus test at site 1b (Glen Waverley Drain).
- There were 3 (or more) water mains emergencies in the Scotchmans Ck catchment in the previous week, upstream of our sites. These caused momentary high flows, very muddy, and the residue was still visible on the creek bed rocks at our test time.
- The invertebrate survey ratings ('Waterwatch' method) were Poor for the upstream Scotchmans Creek site (1a) and just into the Good rating for the Glen Waverley Drain (site 1b).

FGB 27/4/'22