Friends of Scotchmans Creek and Valley Reserve Inc

Inc No A0037872K

Waterwatch Report 27 April 2025

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: 16 mm rain.
Previous 24 hours: Overcast, 2 mm 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	15	15	15	15
Water Temp C	15.5	15.5	15.5	15.5
pH	7.1 G	6.8 E	6.6 E	6.8 E
Oxygen Conc. mg/l	8.1 E	8.2 E		
Conductivity E.C.	280 F	120 G	160 G	140 G
Turbidity F.T.U	19 F	23 P	20 P	36 D
Phosphorus, soluble ppm	0.020 G	0.026 F		
Ammonium NH4+ ppm	0.00 E	0.01 E	0.04 E	0.00 E
Stream Flow estimate l/s	1.2	15.7	33.3	6.3

(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**
Very Sensitive			
Caddisfly larvae	7	20	2
Sensitive			
Damselfly larvae	6	15	25
Dragonfly larvae	6	0	4
Tolerant			
Leeches	3	20	5
Snails (freshwater)	3	50	20
Flatworms	3	20	20
Very Tolerant			
Mosquito larvae	2	2	1
Midge larvae	2	1	2
Fly larvae	2	5	0
Freshwater segmented worms	1	15	0
Blood worms	1	15	6
Total Number Found		**163**	**85**
Total Bug Score		**30**	**33**
Stream Condition		**Poor**	**Poor**

Comments:

- The water quality measurements are mostly Fair to Excellent, except for Poor or Degraded turbidity at 3 of the 4 sites. The cause of poor turbidity at site 1b (upstream site) is not obvious. Turbidity at site 2 (downstream) is probably from works on the adjacent retarding dam. The turbidity at site 3 (Valley Creek) is probably from recent dredging work in Valley Reserve.
- The invertebrate sample ratings at the upstream sites were both Poor. The loose sand in the creek beds has moved recently. At site 1a (Scotchmans Creek, upstream) there are new holes to beware of, and more aquatic vegetation which improves the areas that can be swept with the net. We found many caddisfly larvae (hydrotilidae, micro caddis), which are found in all water bodies but are hard to spot because of their tiny size and translucent silk cases (photo below).

micro caddis at site 1a - in the ice-cube tray (photo ML, cropped)

FGB/ML 3/5/25