



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch 19th October 2014

Scope

- Aquatic invertebrate sampling and full chemistry at Site 2 (Regent St) and Site 3 (Valley Creek)
- Basic tests and observations at all sites.

Weather Conditions

During testing: Mild, becoming overcast

Previous 24 hours: Fine, sunny

Previous week: Winter spell clearing to fine and mild, 19 mm rainfall.

Water Quality Results

	YSC010 Site 1A Fiander arm	YSC012 Site 1B Crosby arm	YSC020 Site 2 Regent St	YVA100 Site 3 Valley Creek	YSC099 Site 4 Wetland upper	YSC100 Site 5 Wetland lower
Air Temp C	25	25	22	21	25	23
Water Temp C	18	17	15	15	19	21
pH	7.3 G	7.1 G	6.4 E	6.8 E	6.8 E	6.8 E
Oxygen Conc. mg/l			5.2 F	5.5 F		
Conductivity E.C.	700 P	320 F	400 F	470 F	180 G	190 G
Turbidity F.T.U	15 G	39 D	17 G	24 P	20 P	43 D
Phosphorus, soluble ppm			0.091 P	0.049 F		
Ammonium NH ₄ ⁺ ppm	0.00 E	0.00 E	0.40 D	0.00 E	0.00 E	0.00 E
Stream Flow (volume) l/s	2.1	2.5	8.6	0.0		

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

Macro Invertebrates Results

	YSC020 Site 2 Regent St	YVA100 Site 3 Valley Creek
Very Sensitive		
<i>Caddisfly larvae</i>	0	8
Sensitive		
<i>Damselfly larvae</i>	4	1
<i>Dragonfly larvae</i>	0	3
<i>Water Mites</i>	0	1
Tolerant		
<i>True Bugs (Backswimmers, Water Scorpions, Water Boatmen, Lesser Water Striders, Water Striders/Treaders)</i>	0	2
<i>Leeches</i>	0	1
<i>Snails (freshwater)</i>	20	30
<i>Flatworms</i>	10	4
Very Tolerant		
<i>Freshwater segmented worms</i>	20	9
<i>Blood worms</i>	10	21
Abundance Category	2	2
Total Bug Score	18	39
Stream Condition	Poor	Good

Comments:

- Scotchmans and Glen Waverley creek flows were normal, Valley Creek was just a trickle, and there was no flow through the wetlands ponds.
- Chemical results to note were
 - Poor conductivity result at site 2 (Fiander arm),
 - Poor phosphate result and Degraded ammonium result at site 2 (Regent St),
 - Poor or Degraded turbidity results at sites 1b, 3, 4, 5 (Crosby arm, Valley Creek, both wetlands sites).
- The invertebrate result from Valley creek was better than the restricted sampling conditions (small shallow pools) led us to expect. The sample contained 8 caddisfly larvae, which are classed as Very Sensitive to water quality and which we do not often find at any of our sites. There was sufficient variety of invertebrates for the site to be rated Good.