



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 21 Sept 2014

Scope

- Aquatic invertebrate sampling at site 5 (Wetlands)
- Basic chemistry and ammonium tests at all sites.
- Dissolved Oxygen and Phosphate tests at sites 4 and 5 (Wetlands)
- Flow measurement and/or observations at all sites.

Weather Conditions

During testing: Overcast

Previous 24 hours: Overcast

Previous week: Overcast, 4.5 mm rain

- A 39 mm / 1 hour rainstorm 12 days previously has reshaped the pond at site 4 and flooded the wetlands / retarding basin to within 2 metres of the crest of flood retarding dam.

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	15	15	15	15	13.5	13.5
Water Temp C	13	14	12.5	12	14	13
pH	7.5 G	7.2 G	7.1 G	7.1 G	6.7 E	6.6 E
Oxygen Conc. mg/l					6.0 G	4.8 P
Conductivity E.C.	890 D	390 F	530 P	510 P	280 F	280 F
Turbidity F.T.U	24 P	6 E	24 P	16 G	44 D	38 D
Phosphorus, soluble ppm					0.013 G	0.124 D
Ammonium NH ₄ ⁺ ppm	0.04 E	0.07 G	0.07 G	0.00 E	0.10 F	0.07 G
Stream Flow (volume) l/s	4.7	3.4	10.4	0.2		

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

Macro Invertebrates Results

	YSC100 Site 5 Wetland lower
Sensitive	
<i>Damselfly larvae</i>	15
Tolerant	
<i>Snails (freshwater)</i>	14
<i>Flatworms</i>	2
Very Tolerant	
<i>Blood worms</i>	11
Abundance Category	2
Total Bug Score	13
Stream Condition	Poor

Comments:

- A 39 mm / 1 hour rainstorm 12 days previously has reshaped the pond at site 4 and flooded the wetlands / retarding basin to within 2 metres of the crest of flood retarding dam.
- At the time of this site visit, creek flows were low and wetlands flows had stopped.
- pH and ammonium results were good at all sites.
- The other chemical indicators were poor at about half the sites. Unusually, the phosphorus result from the wetlands top pond (site 4) was good.
- The invertebrate results from site 5 (the bottom wetlands pond) were poor, partly because access difficulties limit the sample area.

FGB 25/9/2014