



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 19 Feb 2017

Scope

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

Weather Conditions

During testing: Overcast, showers.

Previous 24 hours: Mainly sunny.

Previous week: Mainly sunny, 5 mm rain.

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	14	13	13
Water Temp C	14	14.5	15	13
pH	7.3 G	6.9 E	7.0 E	6.9 E
Oxygen Conc. mg/l	7.2 G	9.4 E		
Conductivity E.C.	940 D	260 F	480 F	460 F
Turbidity F.T.U	15 G	7 E	14 E	58 D
Phosphorus, soluble ppm	0.042 F	0.209 D		
Ammonium NH ₄ ⁺ ppm	0.03 E	0.00 E	0.05 G	0.00 E
Stream Flow (volume) l/s	1.6	5.6	10.4	0.1

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

Macro Invertebrates Results

	YSC010 Site 1A Fiander arm	YSC012 Site 1B Crosby arm
Sensitive		
<i>Damselfly larvae</i>	5	8
<i>Dragonfly larvae</i>	1	4
Tolerant		
<i>Beetle larvae</i>	1	3
<i>Leeches</i>	2	1
<i>Snails (freshwater)</i>	8	20
<i>Flatworms</i>	10	4
Very Tolerant		
<i>Freshwater segmented worms</i>	5	3
<i>Blood worms</i>	20	10
Abundance Category	2	2
Total Bug Score	27	27
Stream Condition	Poor	Poor

Comments:

- Dredging and rockwork repairs have commenced in the wetlands, but this has not effected our measurements (at site 2) because the flow is bypassing the work areas.
- The willows have been mostly removed from the Regent St area (sites 2, 3) but this work has not effected our measurements.
- Streamflows were minimal, with typical summertime water quality results.
 - All but Valley Ck appeared very clear, with Fair to Excellent water quality results except for Degraded conductivity at site 1a and Degraded phosphorus at site 1b.
 - Flow in Valley Ck (site 3) was a trickle, with a faint brown stain and a Degraded turbidity result, but otherwise Fair to Excellent ratings.
- The waterbug samples (from the upstream sites) showed a good variety of creatures (ranging from sensitive to tolerant of water quality) but were rated Poor because the quantities were small.