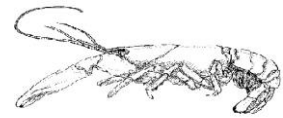




## Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

### Waterwatch Report 22 January 2017

#### Scope

- Aquatic invertebrate sampling at sites 2 and 3.
- Basic chemistry tests at all sites.
- Dissolved Oxygen and Phosphate tests at sites 2 and 3.
- Ammonium tests at all sites.
- Flow measurement and/or observations at all sites.

#### Weather Conditions

During testing: Sunny and warm.

Previous 24 hours: Sunny and warm.

Previous week: Variable, with a 26 mm rain event.

#### Water Quality Results

	<b>YSC010 Site 1A Fiander arm</b>	<b>YSC012 Site 1B Crosby arm</b>	<b>YSC020 Site 2 Regent St</b>	<b>YVA100 Site 3 Valley Creek</b>
Air Temp C	27	27	18	20
Water Temp C	19	20	18	17.5
pH	7.3 G	6.9 E	6.6 E	7.0 E
Oxygen Conc. mg/l			5.4 F	3.5 D
Conductivity E.C.	690 P	260 F	280 F	300 F
Turbidity F.T.U	25 P	11 E	31 D	27 P
Phosphorus, soluble ppm			0.052 P	0.049 F
Ammonium NH <sub>4</sub> <sup>+</sup> ppm	0.05 G	0.00 E	0.07 G	0.00 E
Stream Flow (volume) l/s	4.7	3.9	14.9	0.1

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

## Macro Invertebrates Results

	<b>YSC020 Site 2 Regent St</b>	<b>YVA100 Site 3 Valley Creek</b>
Very Sensitive		
<i>Caddisfly larvae</i>	1	2
Sensitive		
<i>Damselfly larvae</i>	15	35
<i>Dragonfly larvae</i>	0	1
<i>Freshwater mussel</i>	2	0
<i>Freshwater Yabbies/Crayfish</i>	1	0
Tolerant		
<i>True Bugs (Backswimmers, Water Scorpions, Water Boatmen, Lesser Water Striders, Water Striders/Treaders)</i>	2	0
<i>Beetles/Dytiscid beetles, Whirligig beetles</i>	0	2
<i>Leeches</i>	4	3
<i>Snails (freshwater)</i>	25	0
<i>Flatworms</i>	25	0
Very Tolerant		
<i>Midge larvae</i>	1	0
<i>Freshwater segmented worms</i>	5	10
<i>Blood worms</i>	2	20
<b>Abundance Category</b>	<b>2</b>	<b>2</b>
<b>Total Bug Score</b>	<b>40</b>	<b>27</b>
<b>Stream Condition</b>	<b>Good</b>	<b>Poor</b>

### Comments:

- Creek flows were low, despite a 26 mm rain event 2~3 days previously.
  - Two chemistry results reflect the low flow, conductivity rated Poor in the Fiander Arm (typical for this site at low flow), and oxygen rated Degraded in Valley Ck (which was only trickling between pools).
  - Phosphate was rated Poor to Fair, as usual at any time.
- There was much more in-stream vegetation than usual at site 2. The bug sample included an abundance of tadpoles and gambusia, also some very sensitive waterbugs and a 9 cm yabby, and the quality rating was Good (usually it is Poor).
- Valley Ck (site 3) did not yield such a variety of waterbugs and was rated Poor.

- Some Scotchmans Ck Trail users reported a sewage flow and large puddle across the trail in the wetlands. We saw this and reported it via the Melbourne Water number (131 722) which is on the signpost near Scammel Close. This spill was not obvious in the downstream ammonium test. A Yarra Water crew was on site later in the day.

FGB 23/1/17