Friends of Scotchmans Creek and Valley Reserve Inc

Inc No A0037872K

Waterwatch Report 22 April 2018

Scope

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

Weather Conditions

During testing: Cloudy.
Previous 24 hours: Foggy morning, sunny day
Previous week: The previous weekend saw a cold snap with 14 mm rainfall, followed by milder autumn weather.

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	16	16
Water Temp C	14	14	15	14.5
pH	6.8 E	6.5 E	6.6 E	6.8 E
Oxygen Conc. mg/l	7.1 G	8.3 E		
Conductivity E.C.	410 F	110 G	240 G	270 F
Turbidity F.T.U	15 G	6 E	17 G	32 D
Phosphorus, soluble ppm	0.088 P	0.072 P		
Ammonium NH4+ ppm	0.06 G	0.02 E	0.03 E	0.00 E
Stream Flow (volume) l/s	3.9	8.8	9.3	0.2

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

Macro Invertebrates Results

	YSC010 Site 1A Fiander arm	**YSC012 Site 1B Crosby arm**
Very Sensitive		
Caddisfly larvae	2 Hydropsychidae	20
Sensitive		
Damselfly larvae	1	40
Dragonfly larvae	1	20
Tolerant		
Leeches	2	0
Snails (freshwater)	1	7
Flatworms	12	10
Very Tolerant		
Mosquito larvae	1	0
Midge larvae	20 Simuliidae	5
Fly larvae	1 Tipulidae	0
Freshwater segmented worms	20	20
Blood worms	20	12
Abundance Category	**2**	**3**
Total Bug Score	**36**	**29**
Stream Condition	**Good**	**Poor**

Comments:

- The invertebrates samples from both upstream sites contained some caddisfly larvae, which are rated Very Sensitive, obtained as a result of a change of our sampling method to include kick sampling of the stones in the shallow parts of the creeks. The overall site ratings were Good at the Fiander arm, Poor at the Crosby arm.
- The physical and chemical results were typical of these sites, with oxygen improved after the low levels measured in the dry summer months.

FGB 23/April/2018.