Friends of Scotchmans Creek and Valley Reserve Inc

Inc No A0037872K

Waterwatch Report 20 Sept 2015

Scope

- Aquatic invertebrate sampling at the upstream sites
- Basic chemistry and ammonium tests at all on-stream sites.
- Dissolved Oxygen and Phosphate tests at the upstream sites
- Flow measurement and/or observations at all on-stream sites.

Weather Conditions

During testing: Fine, mainly sunny
Previous 24 hours: Fine, mainly sunny
Previous week: 18 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	18	18	18	18
Water Temp C	12.5	13	16	14
pH	7.3 G	6.8 E	6.8 E	7.0 E
Oxygen Conc. mg/l	9.0 E	7.8 G		
Conductivity E.C.	1070 D	340 F	630 P	660 P
Turbidity F.T.U	36 D	9 E	9 E	15 G
Phosphorus, soluble ppm	0.026 F	0.150 D		
Ammonium NH4+ ppm	0.04 E	0.02 E	0.10 F	0.02 E
Stream Flow (volume) l/s	11.9	12.6	31.5	0.3

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

Macro Invertebrates Results

	YSC010 Site 1A Fiander arm	**YSC012 Site 1B Crosby arm**
Sensitive		
Damselfly larvae	0	1
Freshwater mussel	0	2
Tolerant		
Snails (freshwater)	15	20
Very Tolerant		
Freshwater segmented worms	2	8
Blood worms	15	6
Abundance Category	**2**	**2**
Total Bug Score	**5**	**16**
Stream Condition	**Poor**	**Poor**

Comments:

- There is almost no in-stream vegetation left at site 1a (Scotchmans Ck, upstream) after recent sand dredging, consequently the invertebrates result was very poor.
- On the other hand site 1b (Glen Waverley Drain) has recovered remarkably well after recent pollution by cooking fat. The water was clear with no obvious fat or oil, the vegetation is healthy green, and a frog was calling.
- Physical indicators were good except for
    - Cloudiness and high conductivity at site 1a (Scotchmans Ck, upstream) and, as expected, high conductivity also downstream (site 2).
    - High phosphate at site 1b (Glen Waverely Drain), despite the clean appearance of this branch.
    - High conductivity in Valley Ck (site3), but note this branch was scarcely flowing.

FGB
25th Sept 2015