



Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 24 August 2014

Scope

- Full chemistry at upstream sites 1a, 1b.
- Basic chemistry tests, ammonium tests and observations at all sites.
- Annual habitat assessments at upstream sites 1a, 1b, 4.

Weather Conditions

During testing: Cold, overcast

Previous 24 hours: Sunny day, 2 mm overnight rain.

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	14	14	15	14	14	14
Water Temp C	12	12	12	12	12	13
pH	7.1 G	6.8 E	6.7 E	6.9 E	7.0 E	6.8 E
Oxygen Conc. mg/l	9.0 E	9.2 E				
Conductivity E.C.	170 G	140 G	300 F	760 D	270 F	230 G
Turbidity F.T.U	47 D	20 P	47 D	28 P	83 D	93 D
Phosphorus, soluble ppm	0.072 P	0.075 P				
Ammonium NH ₄ ⁺ ppm	0.15 F	0.50 D	0.50 D	0.07 G	0.50 D	0.01 E
Stream Flow (volume) l/s	21.0	11.4	44.8	7.6	No flow into the wetlands	No flow out of the wetlands

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

Habitat Survey

	YSC010 Site 1A Fiander arm	YSC012 Site 1B Crosby arm	YSC099 Site 4 Wetland upper
Bank Vegetation (max 10)	6	6	4
Verge Vegetation (max 10)	6	8	4
In-stream Cover (max 10)	6	6	6
Erosion & Stability (max 5)	4	3	4
Pools / Riffles / Bends (max 5)	4	4	3
Total	26	27	21
New Rating 2014	Fair	Fair	Fair
Rating in 2013	24, Fair	26, Fair	21, Fair

Comments:

All the streams were flowing faster than usual, after 2 mm rainfall overnight. Flow into the wetlands ponds had occurred overnight but had stopped at the time of our visit. A large number of the water chemistry results were rated Poor or Degraded.

- pH (all sites) and oxygen levels (tested only at sites 1a, 1b) were mostly excellent.
- Conductivity rated Fair or Good at most sites but rated Degraded in Valley Creek.
- All sites except Valley Creek (site 3) and Glen Waverley Drain (site 1b) appeared particularly cloudy. All the turbidity measurements rated Poor or Degraded.
- Phosphate (tested only at sites 1a, 1b) rated Poor.
- Ammonium levels rated Degraded in the Glen Waverley Drain (site 1b) and at sites 4 and 2 downstream from there. Good to Excellent levels were found in the Fiander Arm (site 1a), Valley Creek (site 3) and the last wetlands pond (site 5).

Our habitat assessments for the creek sites (1a, 1b) were slightly better than in 2013, and the same as 2013 for the wetlands (site 4). The most noticeable change is the in-stream vegetation in the Fiander arm, which has taken hold in the loose sandy material that washes down the creek bed.