



## Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

### Waterwatch Report 21 July 2019

#### Scope

- Basic chemistry and ammonium tests at our upstream and downstream sites.
- Flow measurement and basic observations at our upstream and downstream sites.
- Dissolved oxygen and phosphate tests at our downstream sites.
- Habitat assessment at our downstream sites.

#### Weather Conditions

During testing: Overcast, no rain.

Previous 24 hours: Sunny, no rain.

Previous week: Cold, 13 mm rain.

#### 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	10.5	10.5	10.5	10.5
Water Temp C	10	10	9.5	9.5
pH	7.5 G	7.0 E	7.0 E	7.0 E
Oxygen Conc. mg/l			8.2 E	9.1 E
Conductivity E.C.	600 P	170 G	310 F	290 F
Turbidity F.T.U	13 E	10 E	19 F	22 P
Phosphorus, soluble ppm			0.036 F	0.026 F
Ammonium NH <sub>4</sub> <sup>+</sup> ppm	0.04 E	0.05 G	0.02 E	0.01 E
Stream Flow (volume) l/s	12.6	45.4	30.9	2.9

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

## Comments on Water Quality Results

- All indicators are Fair to Excellent, except for
  - High conductivity in Scotchmans Creek, upstream at site 1a (YSC010).
  - High turbidity in Valley Creek at site 3 (YVA100). There was also an unusually large amount of litter trapped in the snags and in the bank vegetation – most of it appeared to have been in creek water for some time.

## Habitat Assessment

Photographs illustrating the habitat typical of sites 2 (Scotchmans Creek) and 3 (Valley Creek) are shown below.



Site 2 upstream P1030854



Site 2 across P1030856



Site 2 downstream P1030855



Site 3 upstream P1030851



Site 3 across P1030853



Site 3 downstream P1030852

## Comments on Habitat Assessments

- Site 2 (Scotchmans Creek downstream, YSC020). Native plantings on the east verge are growing well (after removal of the willows). New native plantings have just been done on the west bank, and older plantings are growing well. We upgraded the habitat rating from Fair to Good.
- Site 3 (Valley Creek, YVA100). Increased active erosion along the south bank may be associated with weed removal along the bank. Verge vegetation is growing well. We left the habitat rating at Fair.