



## Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

### Waterwatch Report 16 February 2025

#### Scope

- Aquatic invertebrate sampling at sites 1a and 1b (upstream sites).
- Basic chemistry and ammonium tests at all sites.
- Dissolved Oxygen and Phosphate tests at the upstream sites.
- Flow measurements were estimates and observations at all sites.

#### Weather Conditions

Previous week: Hot then a cold snap, 13 mm rain.

Previous 24 hours: 11 mm rain overnight.

During testing: Light showers on and off.

#### 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	15	15	15	13
Water Temp C	15	14	14	14
pH	7.1 G	6.9 E	6.6 E	6.8 E
Oxygen Conc. mg/l	9.1 E	7.9 G		
Conductivity E.C.	160 G	130 G	240 G	200 G
Turbidity F.T.U	16 G	17 G	20 P	29 P
Phosphorus, soluble ppm	0.029 F	0.020 G		
Ammonium NH4+ ppm	0.00 E	0.00 E	0.00 E	0.00 E
Stream Flow estimate l/s	36.3	19.6	157.7	6.4

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

## Macro Invertebrates Results

		<b>YSC010 Site 1A Fiander arm</b>	<b>YSC012 Site 1B Crosby arm</b>
	<b>Bug score</b>	<b>Number found</b>	<b>Number found</b>
Very Sensitive			
<i>Caddisfly larvae</i>	7	20	10
Sensitive			
<i>Damselfly larvae</i>	6	20	12
<i>Dragonfly larvae</i>	6	0	7
<i>Freshwater Slaters</i>	5	2	1
Tolerant			
<i>Leeches</i>	3	1	1
<i>Snails (freshwater)</i>	3	20	50
<i>Flatworms</i>	3	5	2
Very Tolerant			
<i>Mosquito larvae</i>	2	5	1
<i>Midge larvae</i>	2	1	2
<i>Fly larvae</i>	2	10	0
<i>Freshwater segmented worms</i>	1	1	1
<i>Blood worms</i>	1	50	50
<b>Total Number Found</b>		<b>135</b>	<b>137</b>
<b>Total Bug Score</b>		<b>35</b>	<b>39</b>
<b>Stream Condition</b>		<b>Poor</b>	<b>Good</b>

### Comments:

- The pH level was Good to Excellent for all sites.
- The oxygen level was Excellent for site 1a and Good for site 1b – typical of fast flow.
- The conductivity level was Good for all sites – typical of fast flow.
- The turbidity level for upstream sites were Good, and Poor for downstream sites.
- The phosphorus level for site 1a was Fair and for site 1b it was Good.
- The ammonium test results were Excellent (they were all zero) for all sites.
- The invertebrate survey ratings ('Waterwatch' method) were Poor for Site 1a and Good for Site 1b. It was a pleasant surprise to find a healthy quantity of caddis fly larvae, damselfly larvae and dragonfly larvae in both upstream sites.