



## Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

### Waterwatch Report 18 February 2024

#### Scope

- Aquatic invertebrate sampling at sites 1a and 1b (upstream sites).
- Basic chemistry and ammonium tests at all sites.
- Dissolved Oxygen tests at sites 1a and 1b (upstream sites).
- Flow measurement and/or observations at all sites.

#### Weather Conditions

Previous week: 10 mm rain.

Previous 24 hours: Sunny, no rain.

During testing: Overcast, then sunny.

#### 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	18.5	18.5	18.5	18.5
Water Temp C	16.5	17	17	17
pH	7.0 E	6.7 E	6.7 E	7.0 E
Oxygen Conc. mg/l	7.1 G	5.0 F		
Conductivity E.C.	510 P	420 F	590 P	740 P
Turbidity F.T.U	6 E	13 E	28 P	39 D
Phosphorus, soluble ppm	0.013 G	0.166 D		
Ammonium NH <sub>4</sub> <sup>+</sup> ppm	0.00 E	0.00 E	0.01 E	0.00 E
Stream Flow estimate l/s	5.7	2.1	4.7	0.4

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

## Macro Invertebrates Results

		YSC010 Site 1A Fiander arm	YSC012 Site 1B Crosby arm
	Bug score	Number found	Number found
Sensitive			
<i>Damselfly larvae</i>	6	0	1
<i>Dragonfly larvae</i>	6	1	0
<i>Freshwater mussel</i>	5	0	5
Tolerant			
<i>Beetle larvae</i>	4	1	0
<i>Leeches</i>	3	0	2
<i>Snails (freshwater)</i>	3	50	30
<i>Flatworms</i>	3	20	10
Very Tolerant			
<i>Freshwater segmented worms</i>	1	10	5
<i>Blood worms</i>	1	30	5
<b>Total Number Found</b>		<b>112</b>	<b>58</b>
<b>Total Bug Score</b>		<b>18</b>	<b>22</b>
<b>Stream Condition</b>		<b>Poor</b>	<b>Poor</b>

### Comments:

- Stream flows were low. Measurements made with floating twigs, tape measure and stopwatch, are approximate.
- Oxygen concentration at Site 1a was Good and at Site 1b was Fair.
- Conductivity reading was Fair to Poor for all sites.
- Turbidity was Excellent for Sites 1a & 1b but Poor to Degraded for Sites 2 & 3.
- Phosphorus results was Good for Site 1a and Degraded for Site 1b.
- Ammonium results were Excellent for all sites.
- The invertebrate survey ratings ('Waterwatch' method) were Poor for both downstream sites.

ML / FGB 18/2/24.