



## Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

### Waterwatch Report 20 October 2024

#### Scope

- Basic chemistry and ammonium tests at all sites.
- Dissolved Oxygen and Phosphate tests at sites 2 and 3 (downstream sites)
- Flow measurement and/or observations at all sites.
- Aquatic invertebrate sampling at sites 2 and 3 (downstream sites).

#### Weather Conditions

Previous week: 43 mm rainfall.

Previous 24 hours: Overcast then sunny.

During testing: Overcast with sunny breaks.

#### 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	15.5	15.5	15.5	15.5
Water Temp C	15	15	15	14.5
pH	7.6 G	7.4 G	7.0 E	7.1 G
Oxygen Conc. mg/l			8.4 E	7.5 G
Conductivity E.C.	620 P	300 F	380 F	510 P
Turbidity F.T.U	29 P	11 E	28 P	32 D
Phosphorus, soluble ppm			0.049 F	0.059 P
Ammonium NH <sub>4</sub> <sup>+</sup> ppm	0.00 E	0.00 E	0.07 G	0.00 E
Stream Flow estimate l/s	25.2	39.2	49.6	2.6

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

## Macro Invertebrates Results

		<b>YSC020 Site 2 Regent St</b>	<b>YVA100 Site 3 Valley Creek</b>
	<b>Bug score</b>	<b>Number found</b>	<b>Number found</b>
Very Sensitive			
<i>Stonefly larvae</i>	8	0	0
<i>Mayfly nymphs</i>	7	0	0
<i>Caddisfly larvae</i>	7	6	8
Tolerant			
<i>Snails (freshwater)</i>	3	30	30
Very Tolerant			
<i>Midge larvae</i>	2	0	1
<i>Freshwater segmented worms</i>	1	20	20
<i>Blood worms</i>	1	15	10
<b>Total Number Found</b>		<b>71</b>	<b>69</b>
<b>Total Bug Score</b>		<b>12</b>	<b>14</b>
<b>Stream Condition</b>		<b>Poor</b>	<b>Poor</b>

### Comments:

At the downstream sites (ME\_YSC020, ME\_YVA100)

- Scotchmans Ck (YSC020) rated poor to excellent except for fair phosphate level, and was flowing normally.
- Valley Ck (YVA100) rated degraded to excellent except for poor phosphate level, and was flowing slowly.
- Caddisfly larvae was observed at both downstream sites for the first time in 12 months.
- There were noticeable creek bank undercutting in the Regent St arm.

At the upstream sites (ME\_YSC010, ME\_YSC012)

- Scotchmans Ck (YSC010) was muddy, conductivity was high, and had lots of litter.
- Glen Waverley Drain (YSC012) was clear and was flowing normally.