

# Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

# Waterwatch Report 22 January 2023

## Scope

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

#### **Weather Conditions**

Previous week: 11 mm rain.

Previous 24 hours: Cloudy, dry overnight. During testing: Overcast with periods of sun.

# **Water Quality Results**

	YSC010 Site 1A Fiander arm	YSC012 Site 1B Crosby arm	YSC020 Site 2 Regent St	YVA100 Site 3 Valley Creek
Air Temp C	21	21	19.5	21
Water Temp C	19.5	19	18.5	17
рН	7.1 G	6.8 E	7.0 E	6.7 E
Oxygen Conc. mg/l Conductivity	220 G	100 G	6.6 G	2.0 D
E.C.	220 G	100 G	260 F	530 P
Turbidity F.T.U	31 D	7 E	16 G	32 D
Phosphorus, soluble ppm			0.036 F	0.075 P
Ammonium NH4+ ppm	0.00 E	0.00 E	0.15 F	0.15 F
Stream Flow (volume) 1/s	40.5	15.1	26.8	

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

#### **Macro Invertebrates Results**

		YSC020 Site 2 Regent St	YVA100 Site 3 Valley Creek
	Bug score	Number found	Number found
Very Sensitive			
Caddisfly larvae	7	1	0
Sensitive			
Damselfly larvae	6	100	3
Tolerant			
Beetle larvae	4	3	20
True Bugs (Backswimmers,			
Water Scorpions,			
Water Boatmen,			
Lesser Water Striders,	4	_	1
Water Striders/Treaders)	4	7	1
Beetles/Dytiscid beetles, Whirligig beetles	3	0	6
Leeches	3	4	0
Snails (freshwater)	3	20	20
Flatworms	2	50	1
Very Tolerant			
Mosquito larvae	2	10	200
Midge larvae	2	0	20
Fly larvae	2	10	0
Freshwater segmented worms	1	5	10
Blood worms	1	10	10
Total Number Found		213	291
Total Bug Score		36	29
<b>Stream Condition</b>		Very Good	Fair

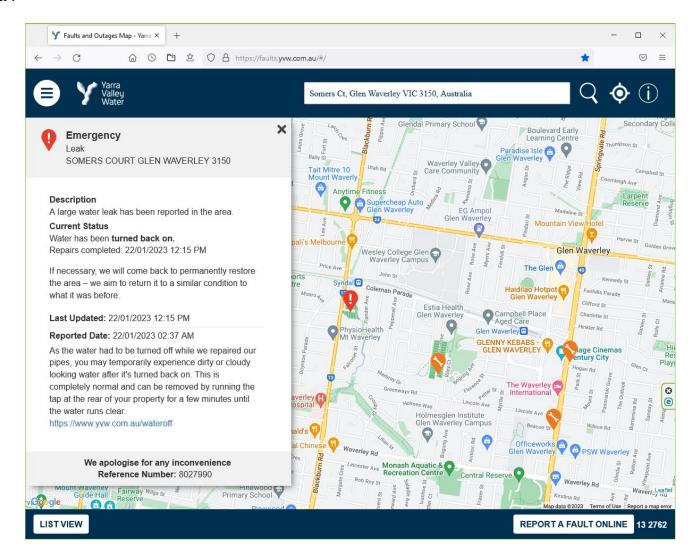
### **Comments:**

- There was abundant damselfly larvae at Site 2. It was observed that there was quite a number of adult (flying) dragonflies at Site 1b.
- The invertebrate survey ratings ('Waterwatch' method) were Very Good and Fair for both the downstream sites.
- Valley Creek water level was low and stagnant, oxygen level was Poor. There was a large number of mosquito larvae counted.
- Milky coloured water at Site 1a, at first suspected sewerage spill and reported to the EPA. However, ammonium test results were zero.

Fred went to look at the site at 2:20 pm. The creek is flowing quite slowly (much slower than site 1b), cloudy water (ducks feet visible), no smell. He took a photo at the litter trap (see below) - all the 1a flow is in the shallow flow beside the right-hand post. Some rocks at the bridge are wet some height above the level of the water that he saw.



Looking on Yarra Valley Water's emergency page on their website, there was a reported burst water main:



ML/FGB 22/01/23.