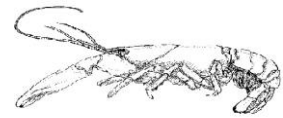




Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

Waterwatch Report 20 Oct 2019

Scope

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

Weather Conditions

Previous week: Partly cloudy, 11 mm rain.

Previous 24 hours: Partly cloudy.

During testing: Partly cloudy.

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 | 11.5 | 11.5 | 11.5 | 11.5 |
| Water Temp C | 12 | 12 | 12 | 11.5 |
| pH | 7.2 G | 7.0 E | 6.7 E | 7.0 E |
| Oxygen Conc. mg/l | | | 6.8 G | 8.7 E |
| Conductivity E.C. | 270 F | 200 G | 270 F | 240 G |
| Turbidity F.T.U | 18 F | 21 P | 20 P | 19 F |
| Phosphorus, soluble ppm | | | 0.062 P | 0.029 F |
| Ammonium NH ₄ ⁺ ppm | 0.00 E | 0.00 E | 0.08 G | 0.00 E |
| Stream Flow (volume) l/s | 6.1 | 4.2 | 12.0 | 0.2 |

(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 |
| Sensitive | | | |
| <i>Damselfly larvae</i> | 6 | 10 | 0 |
| <i>Freshwater Yabbies/Crayfish</i> | 5 | 0 | 1 |
| <i>Water Mites</i> | 5 | 0 | 0 |
| <i>Freshwater Slaters</i> | 5 | 0 | 3 |
| Tolerant | | | |
| <i>True Bugs (Backswimmers, Water Scorpions, Water Boatmen, Lesser Water Striders, Water Striders/Treaders)</i> | 4 | 1 | 2 |
| <i>Leeches</i> | 3 | 10 | 2 |
| <i>Snails (freshwater)</i> | 3 | 50 | 50 |
| <i>Flatworms</i> | 3 | 10 | 30 |
| Very Tolerant | | | |
| <i>Fly larvae</i> | 2 | 2 | 0 |
| <i>Freshwater segmented worms</i> | 1 | 20 | 50 |
| <i>Blood worms</i> | 1 | 20 | 30 |
| | | | |
| Total Number Found | | 123 | 168 |
| Total Bug Score | | 23 | 25 |
| Stream Condition | | Poor | Poor |

Comments:

- All the water chemistry results were Good or Excellent, except for Poor and Fair phosphorus results at sites 2 and 3 and Poor turbidity at sites 1B and 2.
- The waterbug samples from both sites 2 and 3 contained some creatures we don't see often (water slaters and a yabby in Valley Ck) but lacked sufficient overall variety or abundance to rate higher than Poor.

FGB 21/Oct/2019