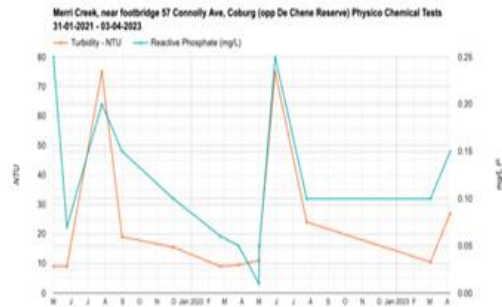


2023 Waterwatch Site Summary Report – January 2020 – April 2023.

ME_YMR141 Merri Creek at Connolly Ave near the footbridge (De Chene Reserve, Coburg. Monitors – Merri Birdies

Turbidity / Reactive Phosphate



Ammonia / Turbidity

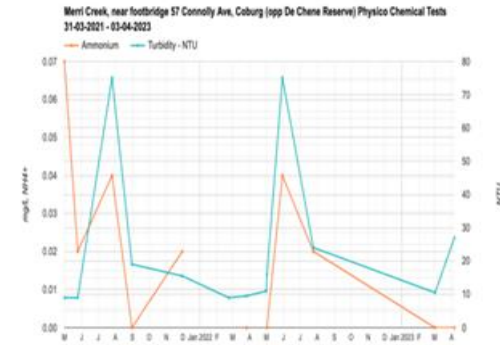


Photo of site with members of the Merri Birdies (from left): Fionnuala Spillane, Toni Espiritu (with daughter Willow) & Evelyn Dunn



There is a pattern between a rise in **turbidity** and often a corresponding rise in **ammonia** and **reactive phosphate** readings. Possible reasons could be due to higher rainfall periods and resultant stormwater runoff. Phosphate particles bind to soil, which is a major source of high turbidity. The Merri Creek has been experiencing [high turbidity readings over recent years](#).

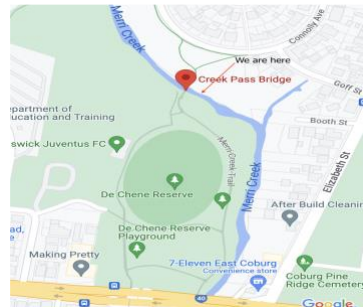
[The La Nina weather pattern affected Australia](#) from late 2020 to mid 2022. La Nina in southern Australia over this time typically bring cooler than average day time temperatures, increased cloud cover, more rain and warmer nights. This affected our ability to access our site at times due to flooding. This could possibly have had an influence on our data results.

Electrical conductivity (EC) (salinity) results show higher salinity readings for some months which indicates less dilution, usually in the drier summer months. EC levels were usually lower when turbidity was high, suggesting with high rainfall and inputs via stormwater drains, salinity within the water column is diluted. Water quality and low rainfall may increase salinity levels.

The pH levels were mostly consistent throughout the testing periods.

In most instances the pH and EC parameters were within the normal range for this section of the Merri Creek.

Site Introduction. The Merri Creek flows through the northern suburbs of Melbourne. It begins near Wallan, north of Melbourne and flows south for 70km until it joins the Yarra River at Dights Falls, Abbotsford. This site on the Merri Creek is highly urbanised, being used by walkers, cyclists and dog walkers. It is close to the Merri Creek Walking Track and opposite De Chene Reserve. It is also a site used for annual waterbug monitoring.



Objectives

To track and document the water quality of the Merri Creek at this site in Coburg.

Closely monitor water quality due to the urbanisation of the area.

Identify potential pollution source point(s).

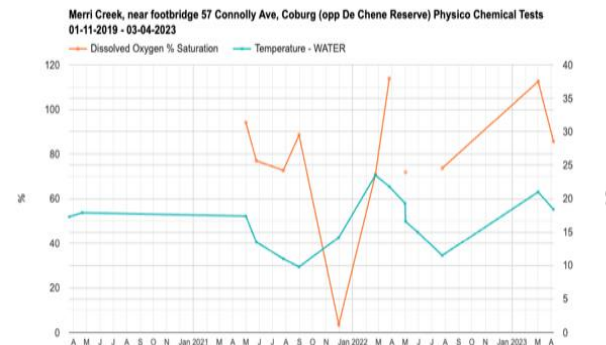
Educate and involve the local community.

To look at further water quality data for this site visit the Waterwatch Victoria online data portal (search using site code: ME_YMR141)

www.vic.waterwatch.org.au

Monthly Parameters

- Air & water temperatures
- Turbidity
- Ph levels
- Electro conductivity
- Dissolved oxygen
- Reactive phosphate
- Ammonium



Dissolved Oxygen (DO) / Water Temperature DO had unexplained fluctuations and gaps (due to lockdowns when sampling could not be conducted) but a clear correlation between water temperature can be seen. For much of the time, DO results were above 80% during the day which indicates a healthy DO level for aquatic life. There is an excellent riffle section at the sample site which could explain this (refer to photo at right)



Upstream photo of site showing good riffle section.