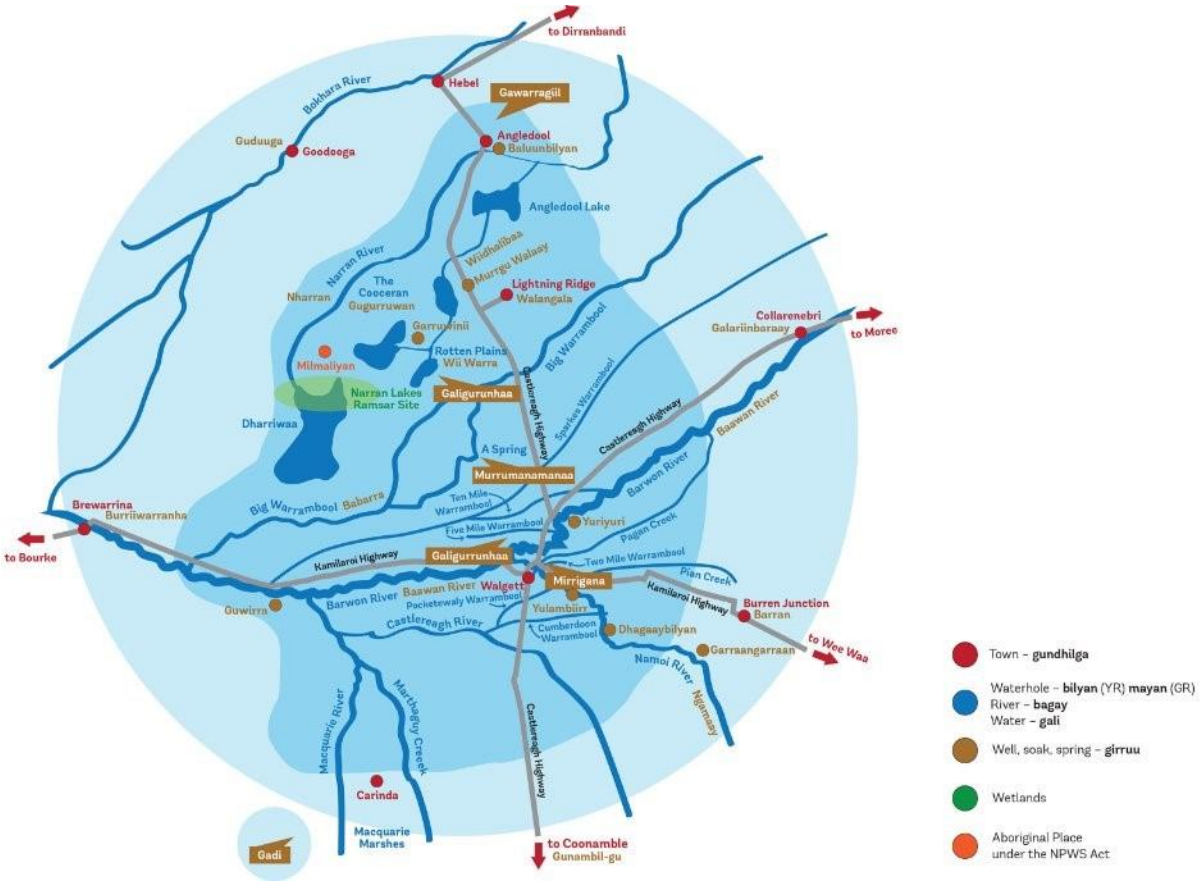
Water Quality Monitoring Report

5th May 2026

Introduction

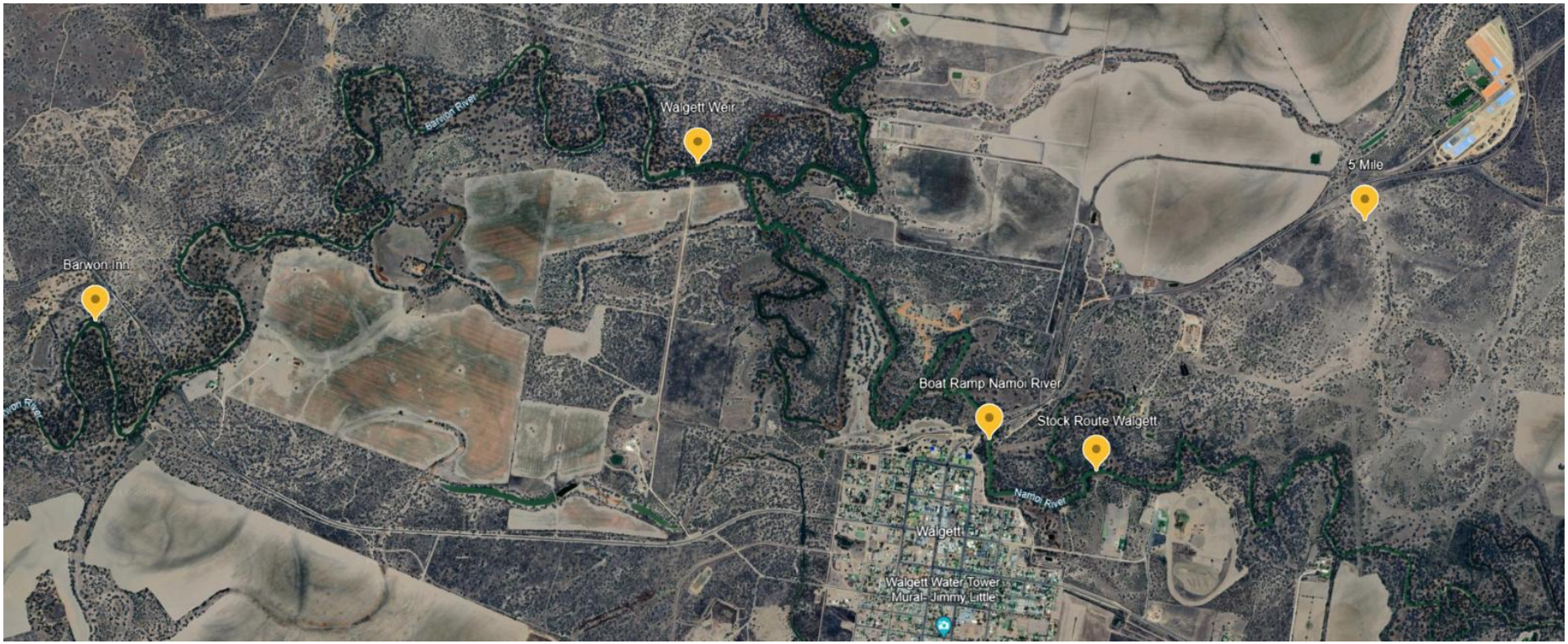
This data was collected on Tuesday 5th May 2026 between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

The Dharriwaa Elders Group River Rangers are conducting weekly water quality testing, measuring a range of factors that affect the quality of the river water. Different results affect the health of native animals and plants, and the health of the people that rely on the river for food and water.

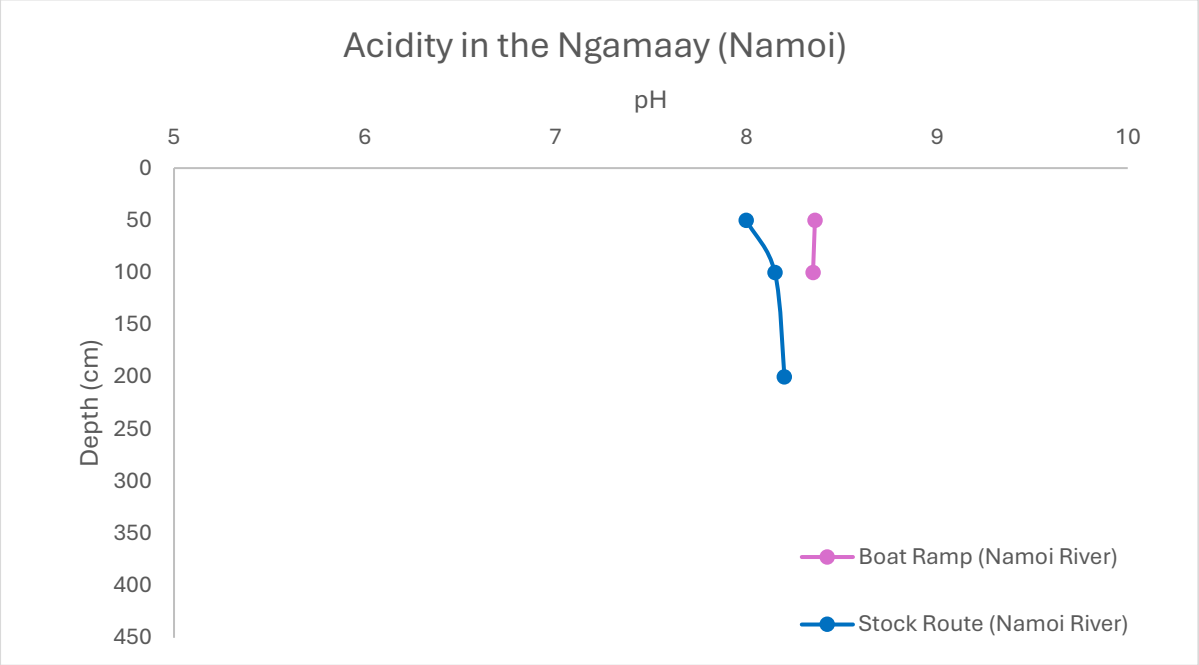


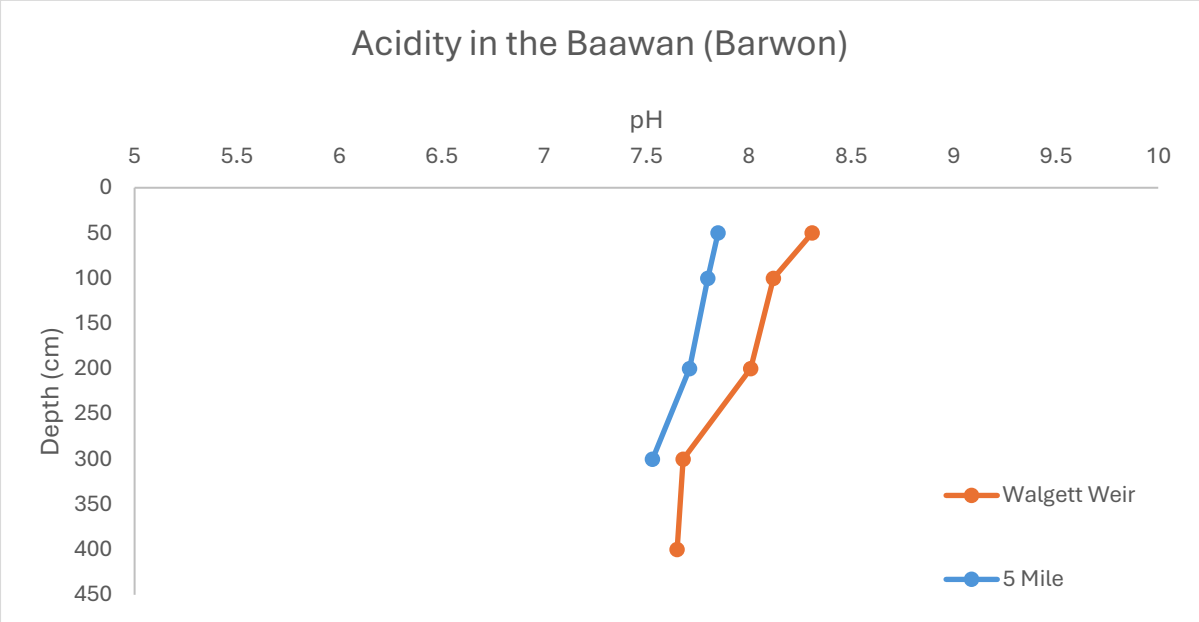
(Picture: Dharriwaa Elders Group area of interest)

Picture: Map of the Baawan (Barwon) River and Ngamaay (Namoi) River where the DEG River Rangers do their water quality monitoring.



Acidity in the Ngamaay and Baawan Rivers

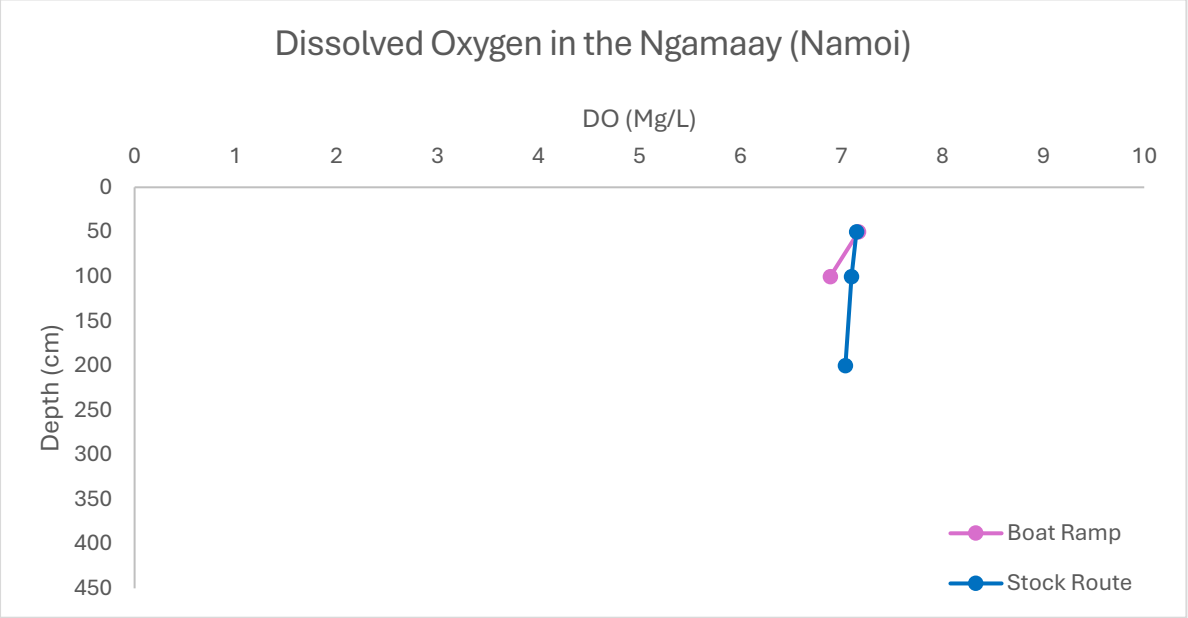


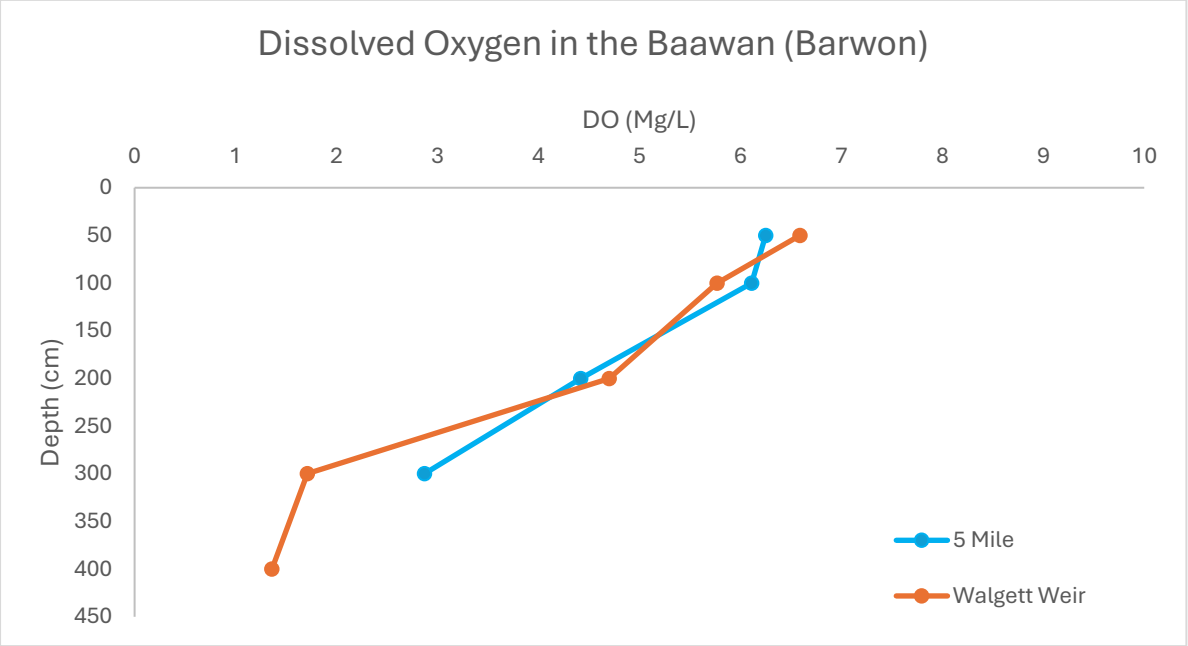


The pH levels at all sites on both the Ngamaay and Bawaan Rivers are wihtin the healthy range. The highest reading is 8.36 which is at the Boat Ramp in the Ngamaay River and the lowest reading is 7.53 which is at the 5 Mile in the Bawaan River.

Healthy range: 6.5 - 8.5 pH

Dissolved Oxygen in the Ngamaay and Baawan Rivers

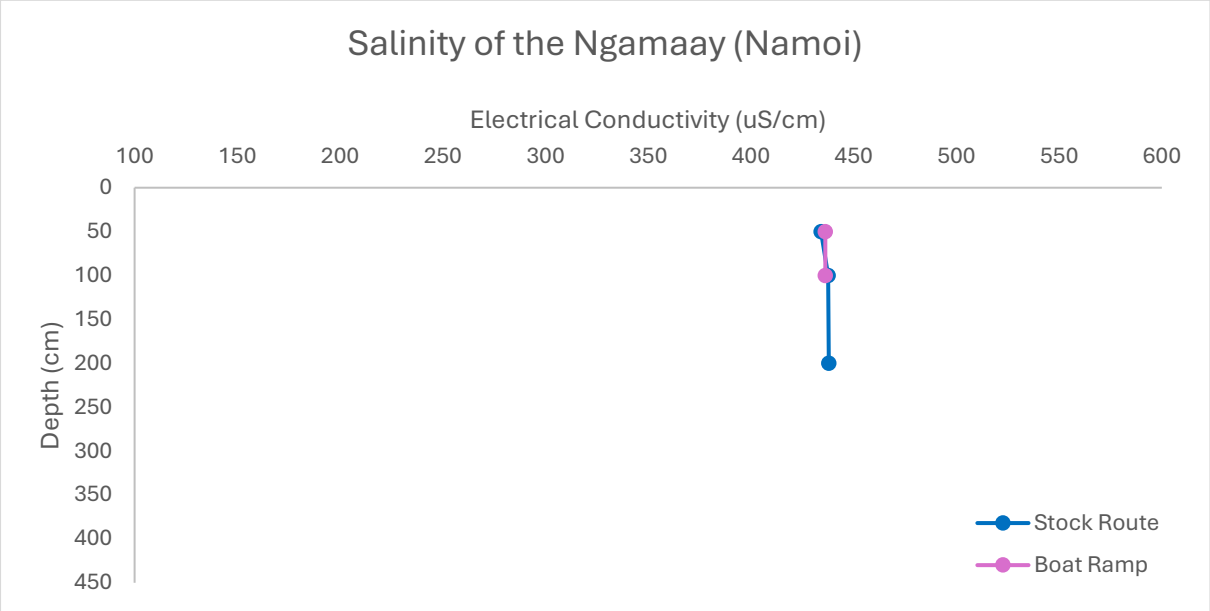


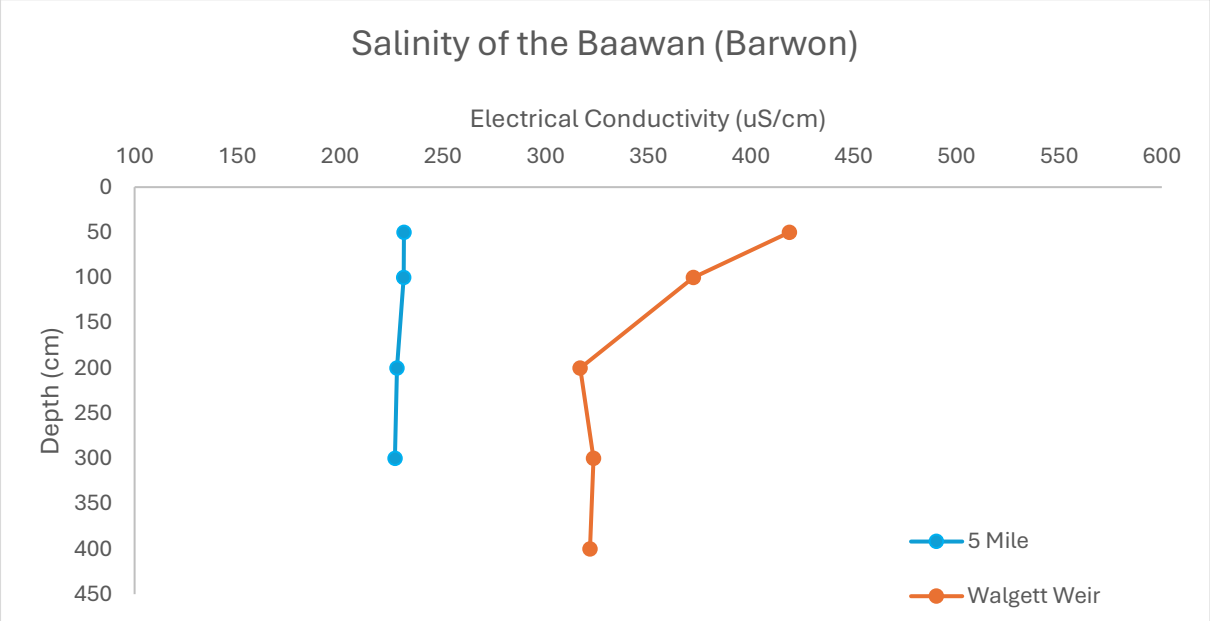


The dissolved oxygen in the Ngamaay River at both sites are within the healthy range. At the Walgett Weir and 5 Mile in the Baawan River the dissolved oxygen is outside the healthy range as we measured deeper into the river the dissolved oxygen drops to dangerous levels for the fish in the river. The highest reading is 7.17 which is in the Ngamaay River at the Boat Ramp. The lowest reading is 1.36 which is in the Bawaan River at the Walgett Weir.

Healthy Range: 6 - 8 (Mg/L)

Salinity in the Ngamaay and Baawan Rivers

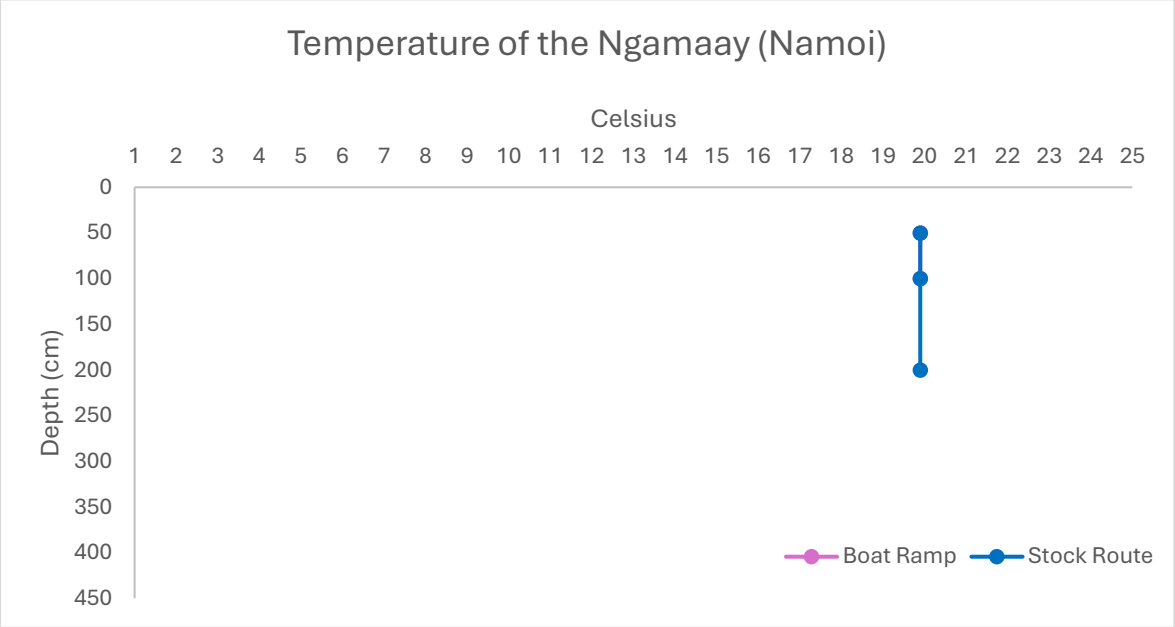


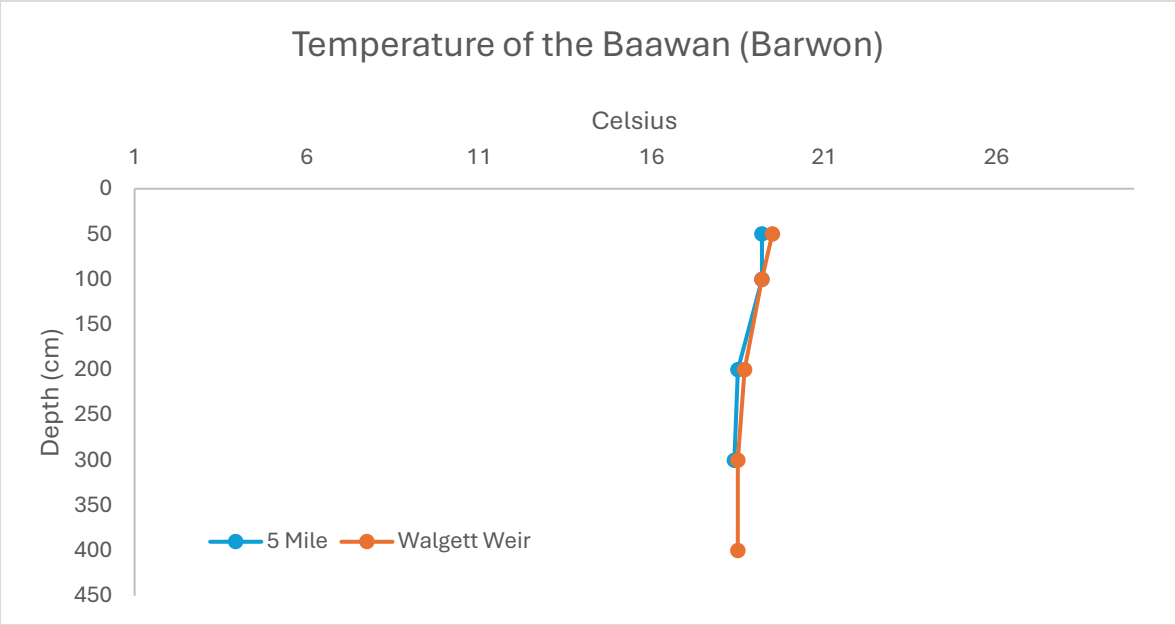


The salinity at all sites in the Ngamaay and Baawan Rivers are within the healthy range. The highest reading is 434 at the Stock Route in the Ngamaay River. The lowest reading is 226 in the Baawan River at the 5 Mile.

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Ngamaay and Baawan Rivers





The temperate at all sites in the Ngamaay and Baawan Rivers are within the healthy range. The highest reading is 19 which is at both sites in the Ngamaay River. The lowest reading is 18 which is at both sites in the Baawan.

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH and temperature are within the healthy range which means the water is not too acidic or too alkaline.

The salinity is also within the healthy range which is good for freshwater fish.

The dissolved oxygen readings in the Ngamaay and Baawan are quite concerning. As we get deeper into the river the readings drop drastically. At 3mg/L fish kills start to happen. The Ngarrangarra-li Walaaybaa Rangers will be visiting both sites to see if there are any signs of fish kills.