



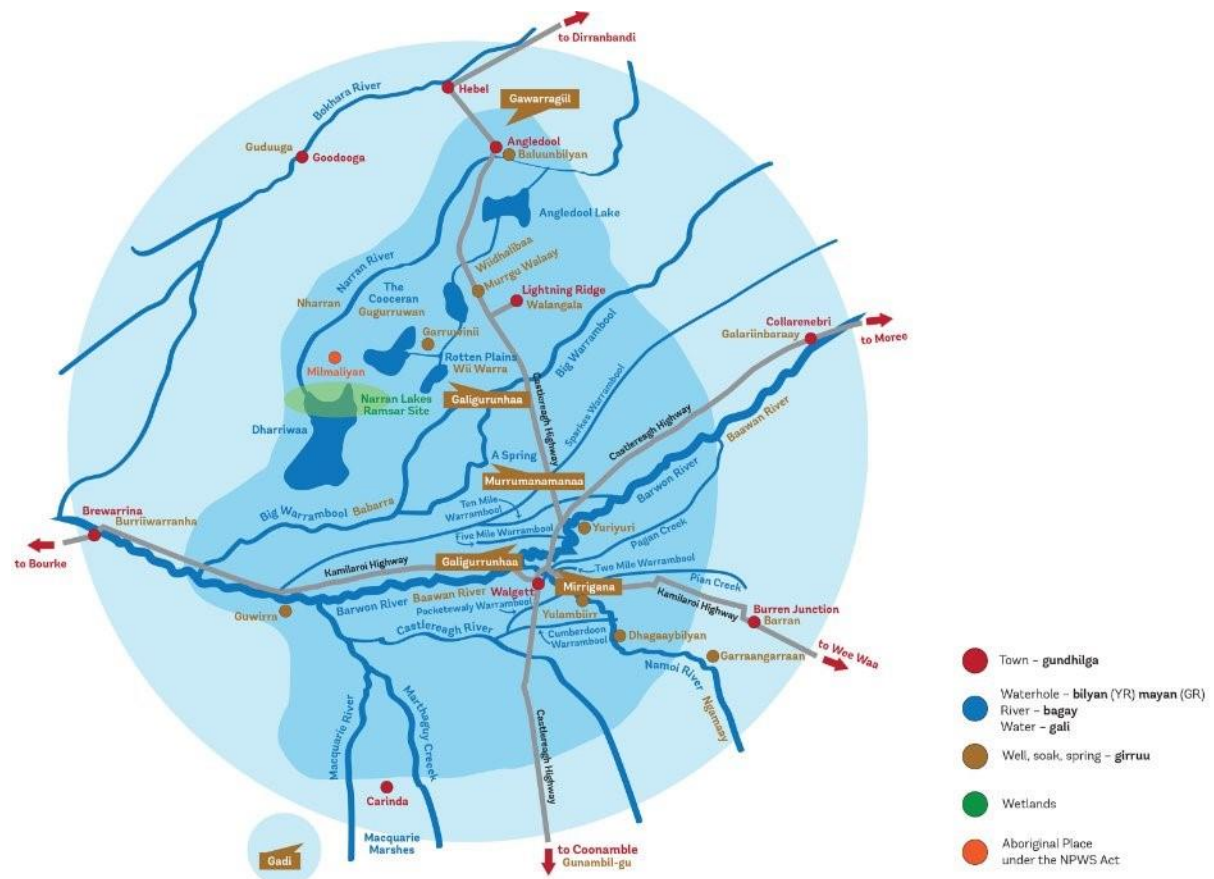
Weekly River Monitoring Report

2nd July 2024

Introduction

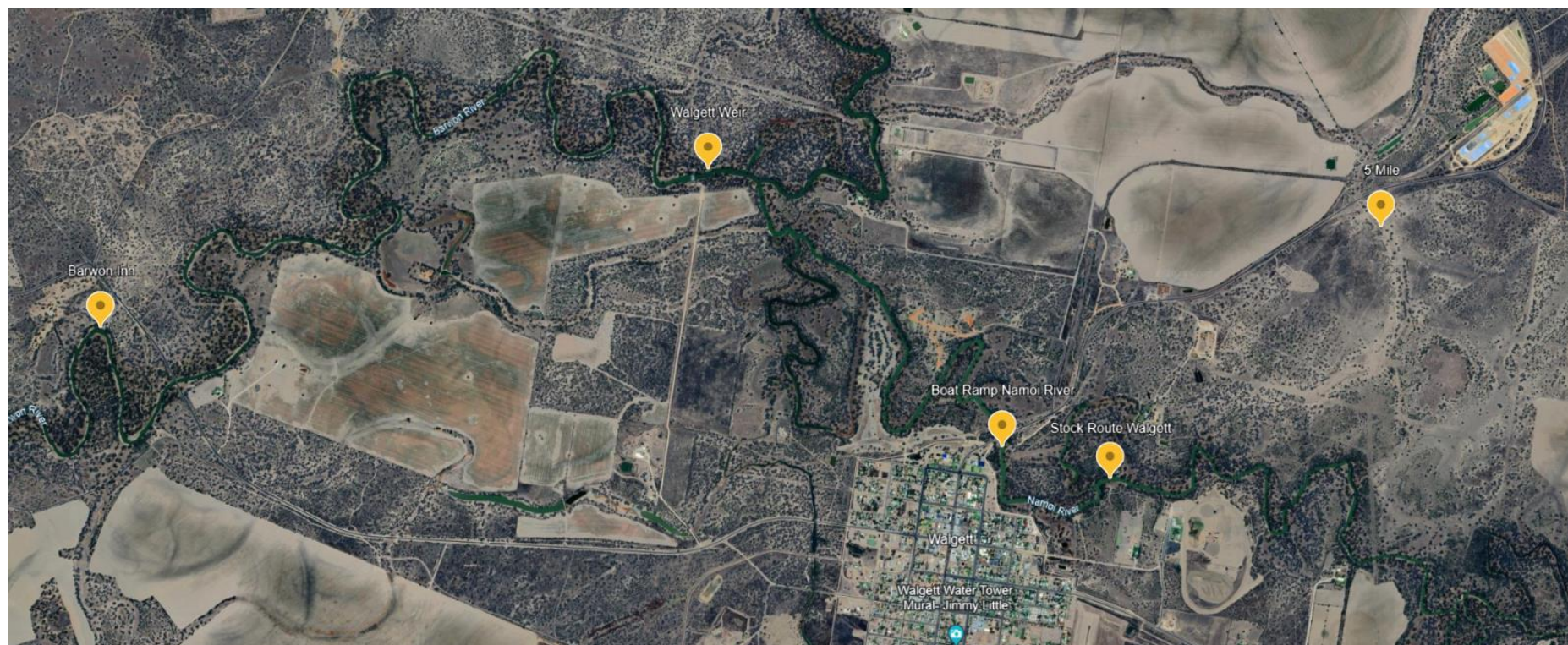
This data was collected on Tuesday 2nd July between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

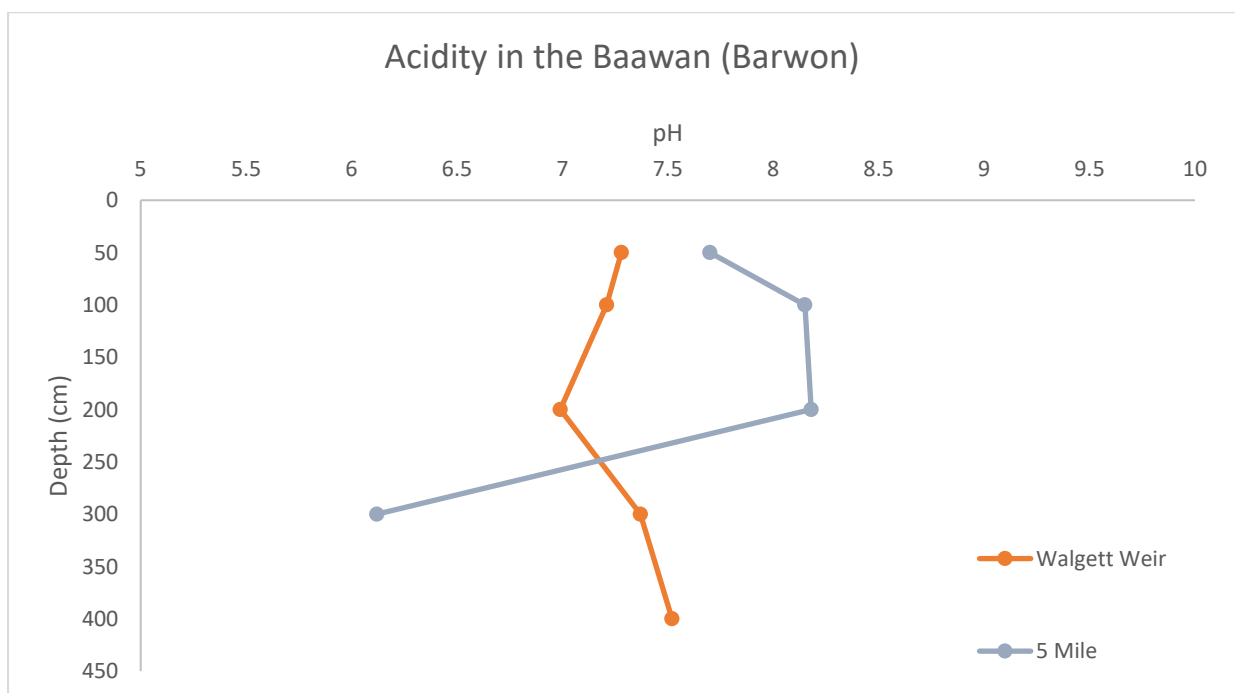
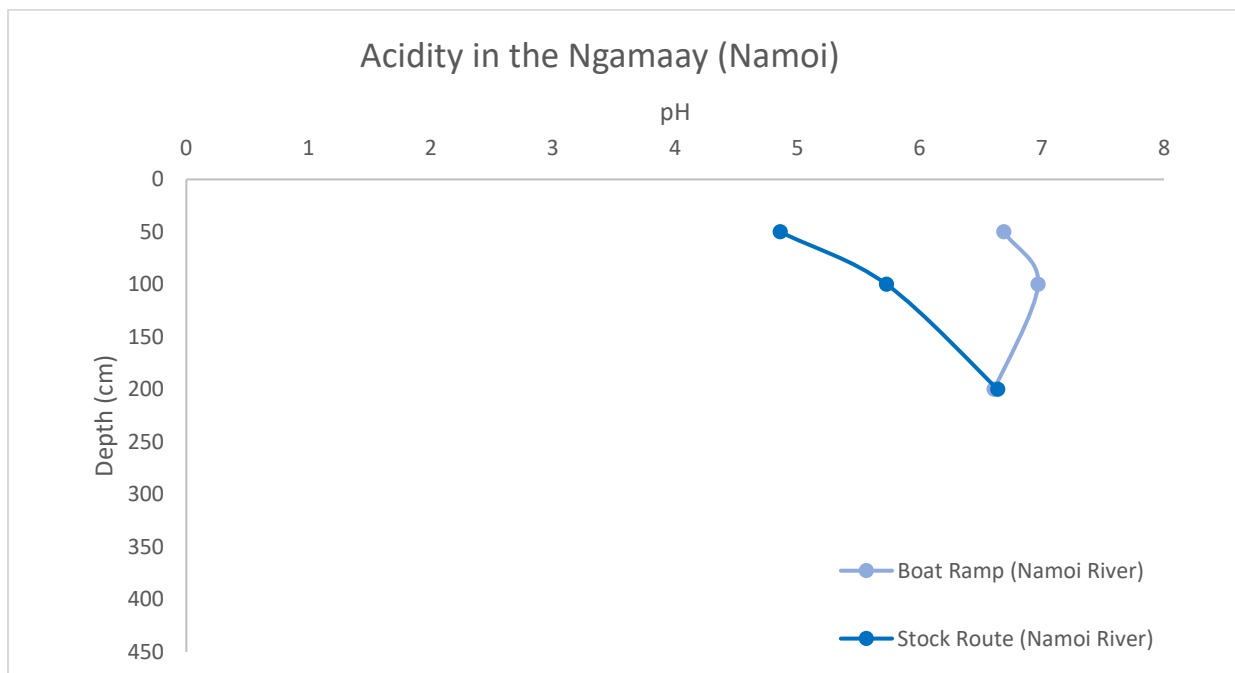


(Picture: Dharriwaa Elders Group area of interest)

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

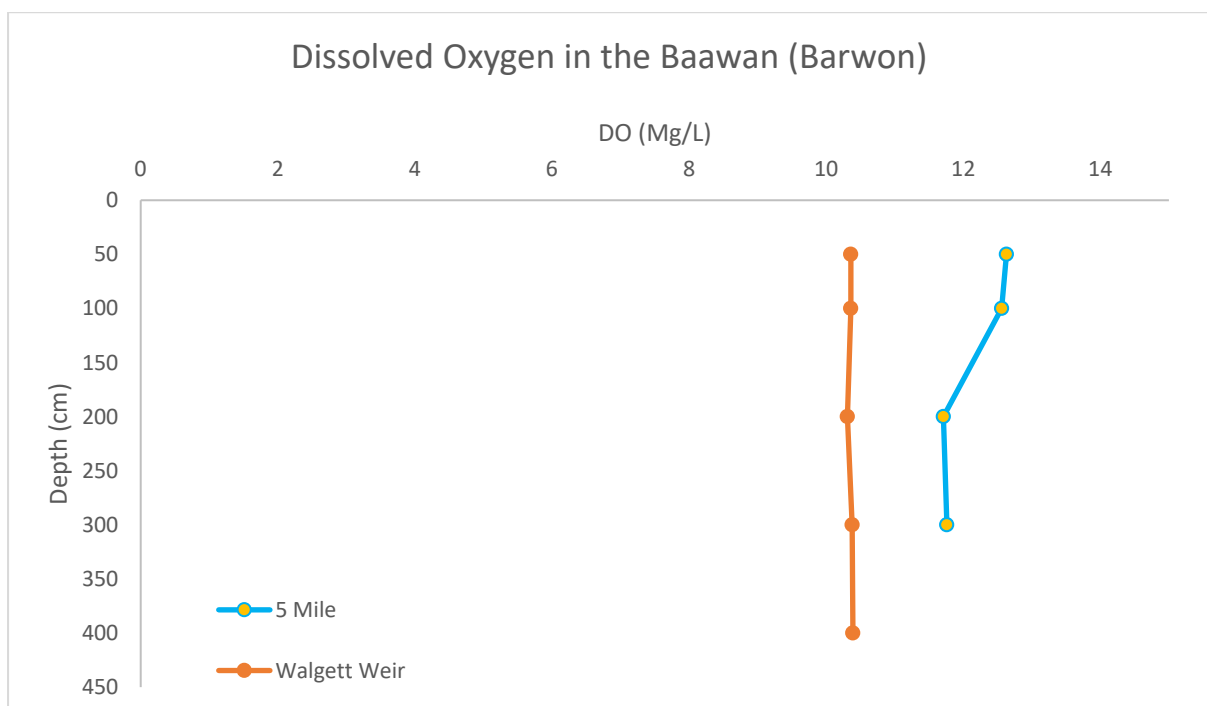
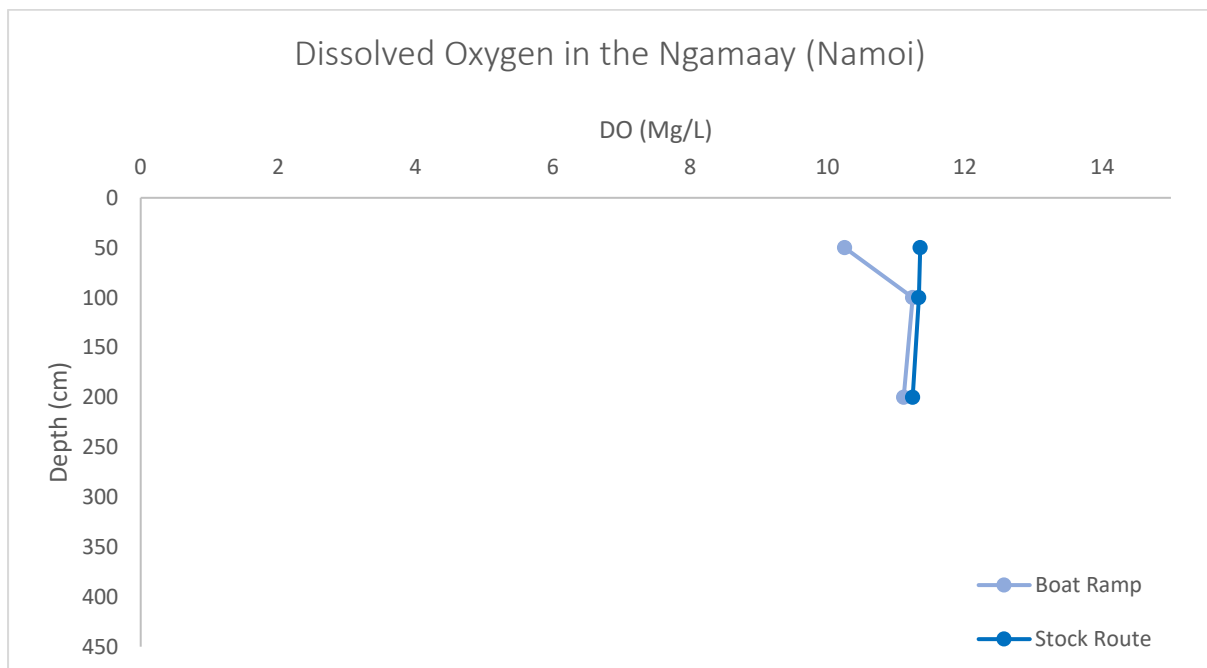


Acidity in the Ngamaay and Baawan Rivers



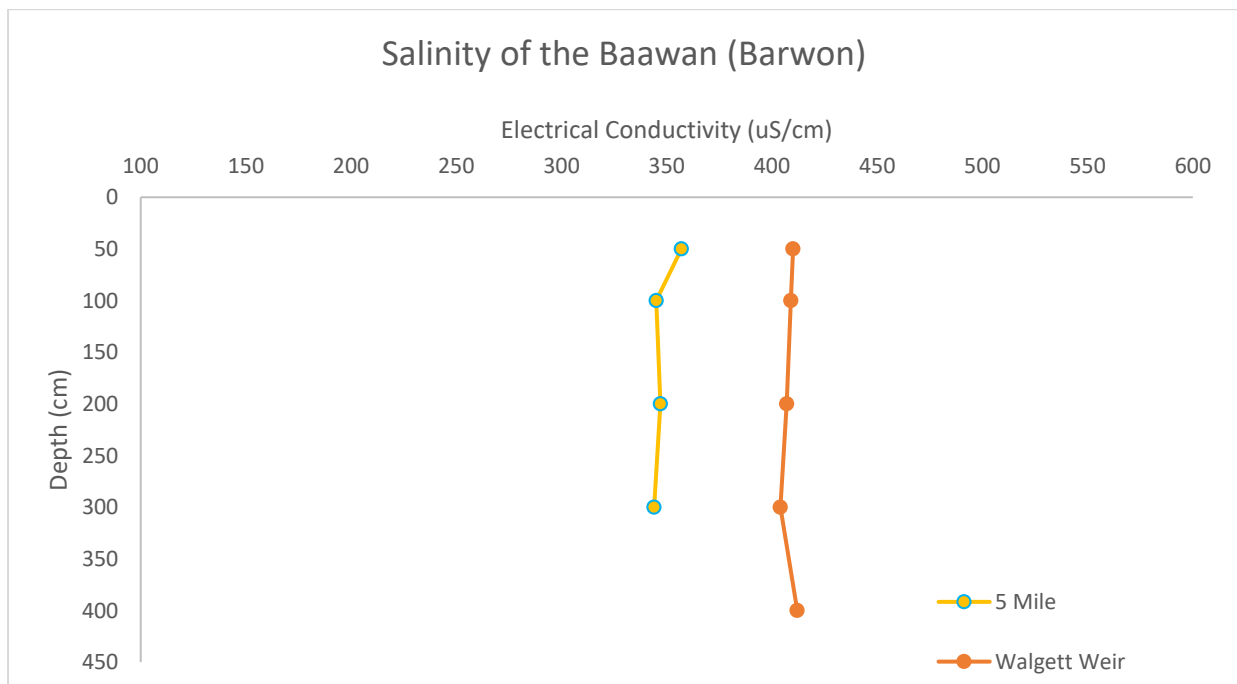
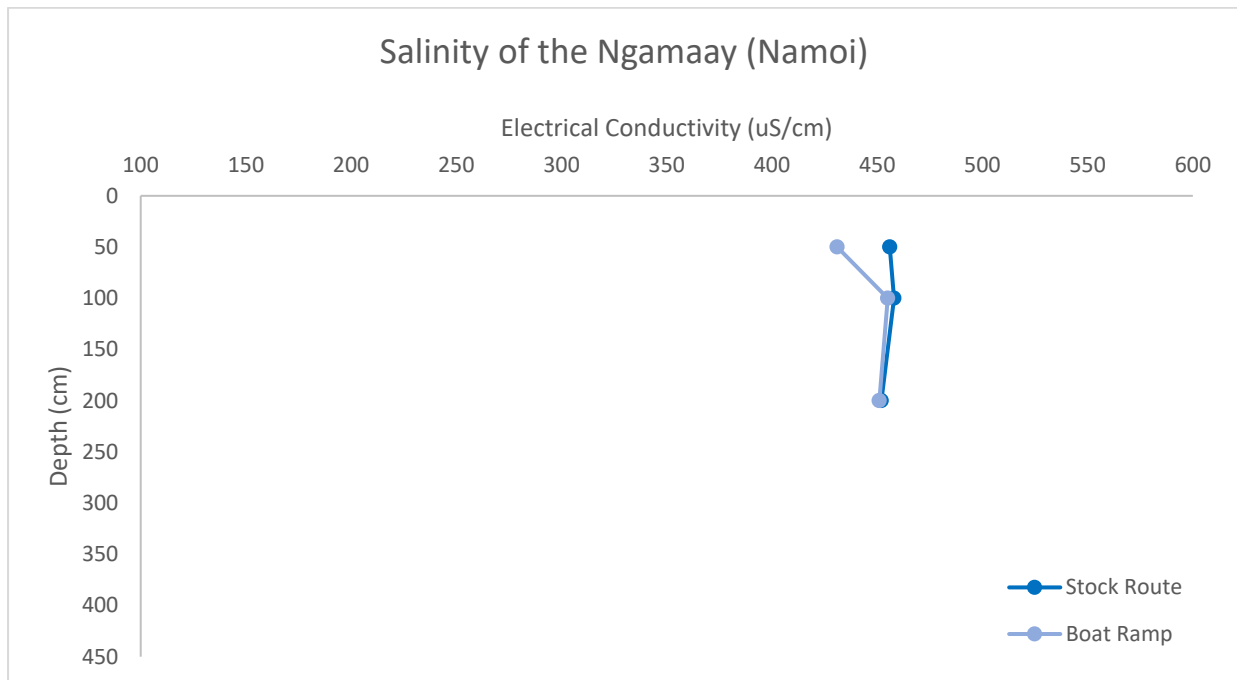
The first and second pH measurements at the Stock Route are outside the healthy range. They are within an acidic range. The last measurement is within the healthy range. The pH at the Boat Ramp and Walgett Weir is within a healthy range. The first, second and third pH measurements at 5 Mile is within a healthy range. The last measurement is outside the healthy range – it is acidic. The maximum is 8.18 and the minimum is 4.86.

Dissolved Oxygen in the Ngamaay and Baawan Rivers



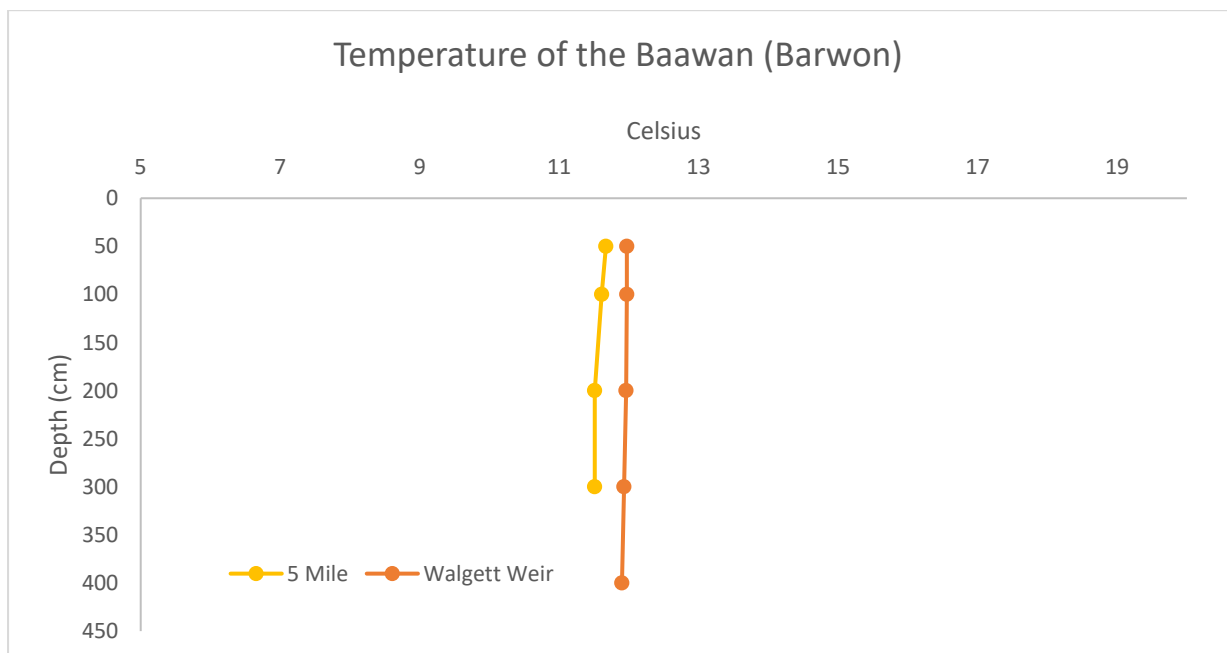
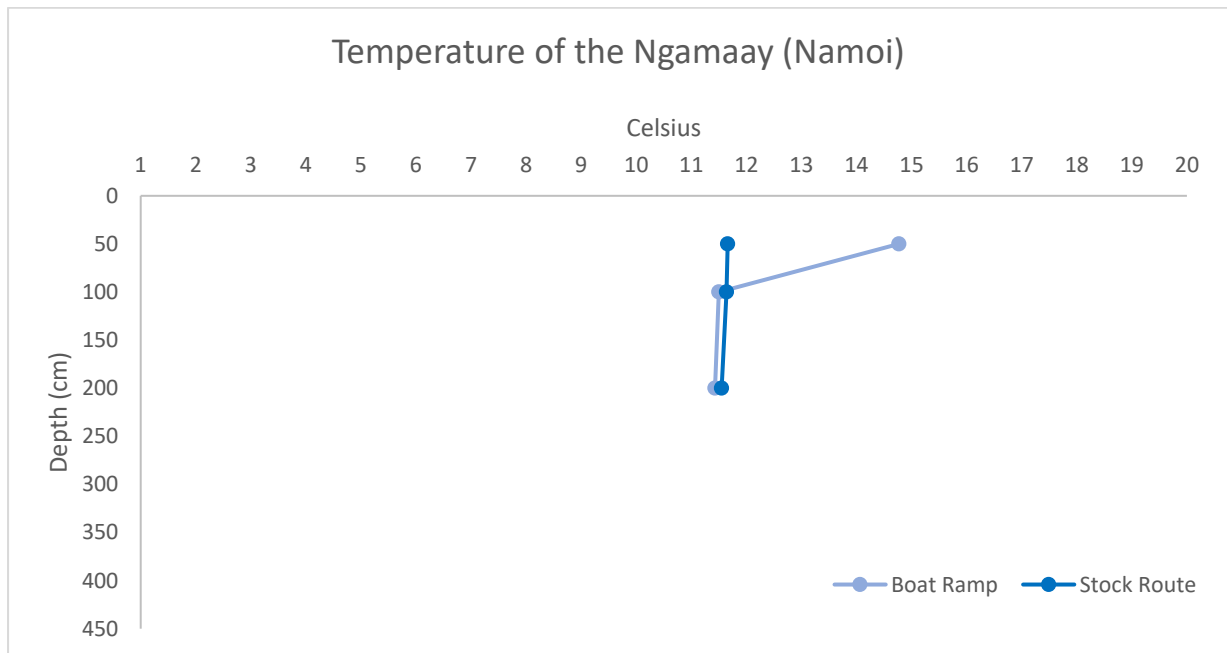
The dissolved oxygen readings are high at all sites on the Ngamaay and Baawan Rivers. It is quite normal for the dissolved oxygen levels to be high when the river temperature decreases. Since we are now in our cooler months we will most likely see higher dissolved oxygen readings. The maximum reading is 12.63 and the minimum is 10.25.

Salinity in the Ngamaay and Baawan Rivers



The salinity measured in the Baawan and Ngamaay Rivers at all sites are within a healthy range. The maximum reading is 458 and the minimum is 344.

Temperature in the Ngamaay and Baawan Rivers



The temperature measured at all sites on the Ngamaay and Baawan Rivers are outside the healthy range. The maximum reading is 14.77 and the minimum is 11.51.

Conclusion

The majority of the pH readings within the Ngamaay and Baawan Rivers are within the healthy range. There are three readings where the pH levels are outside the healthy range. They are more on the acidic side of pH.

When the water temperature is cooler the dissolved oxygen levels will increase. That is the reason we are now seeing high dissolved oxygen levels. Since we are in our cooler months of the year we will see higher dissolved oxygen levels. There is no danger to the fish in the rivers.

The salinity in the Ngamaay and Baawan Rivers are within a healthy range. This is good for freshwater fish.

The temperature measured at all sites on the Ngamaay and Baawan Rivers are outside of the healthy range. There is no extreme danger to the fish within the rivers. The water is cold but is typical for this time of year.