



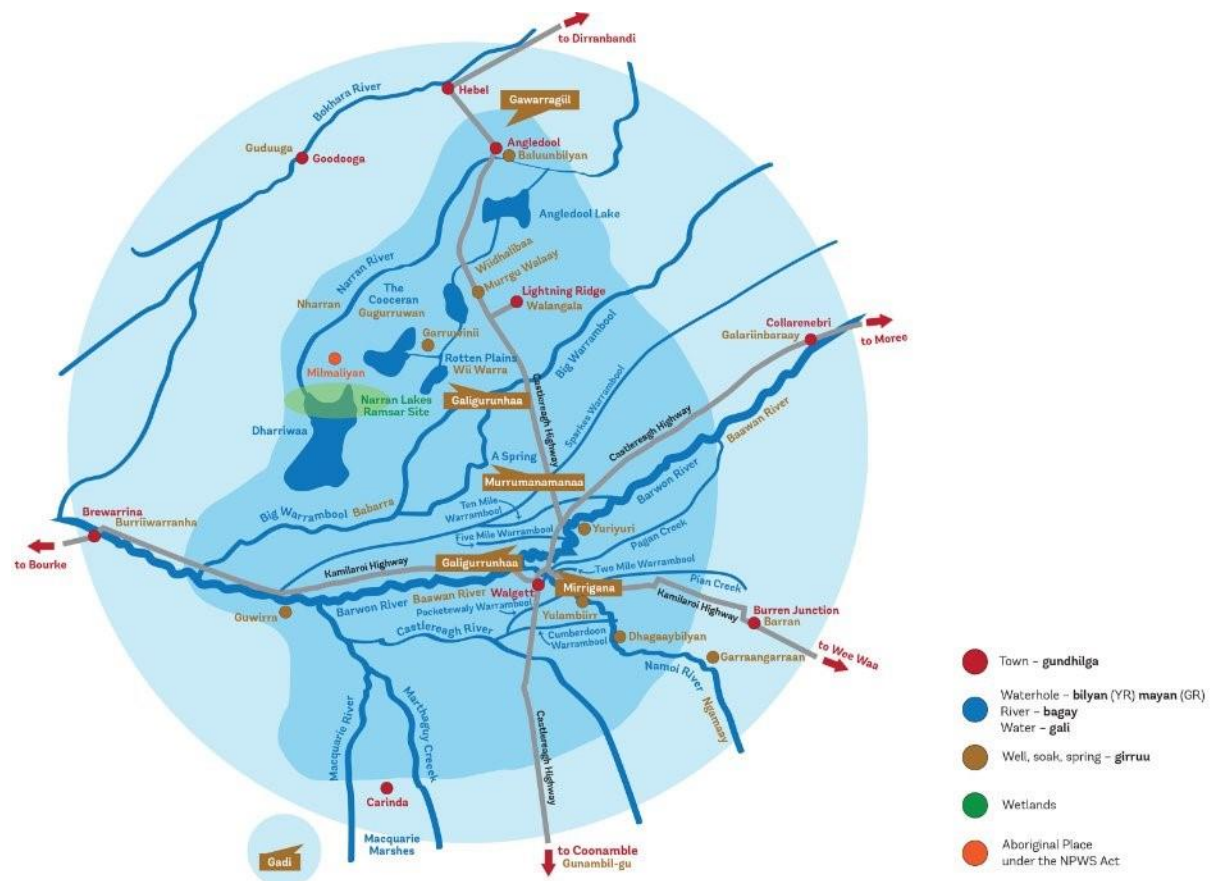
Weekly River Monitoring Report

4th June 2024

Introduction

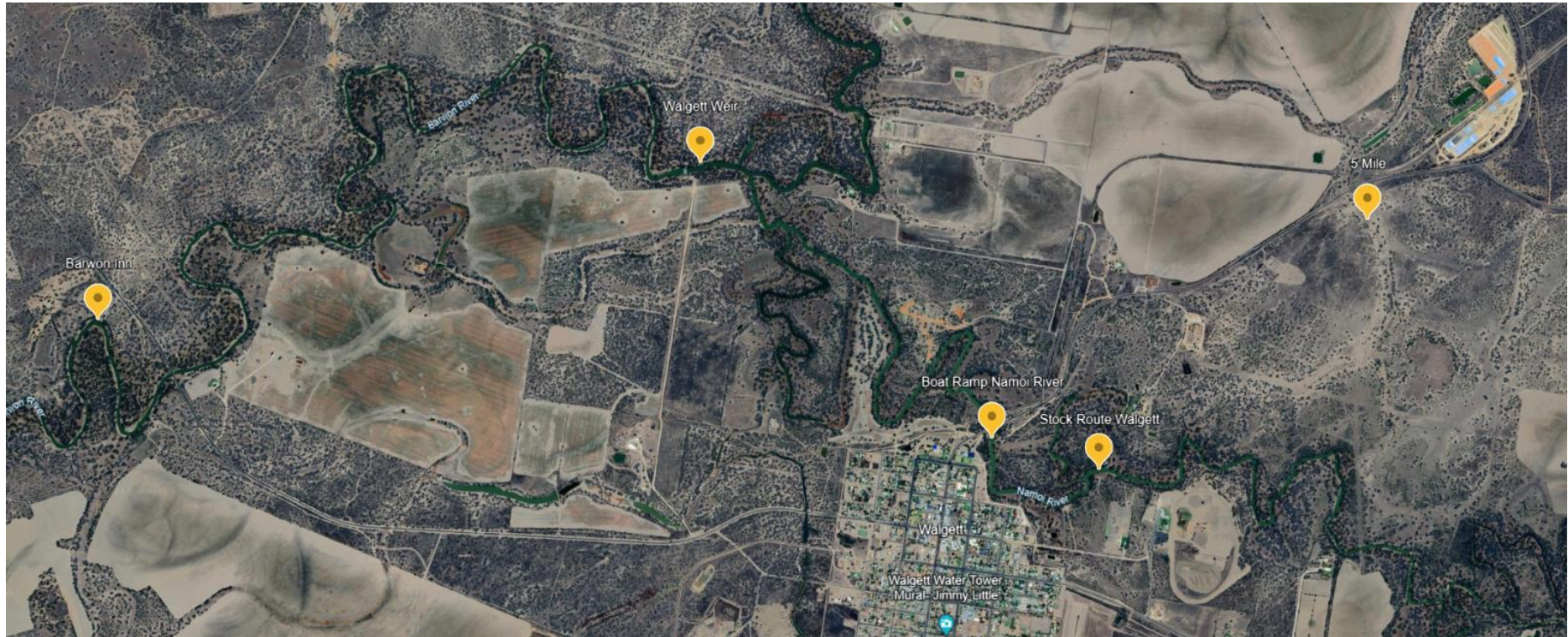
This data was collected on Tuesday 4th June 2024 between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

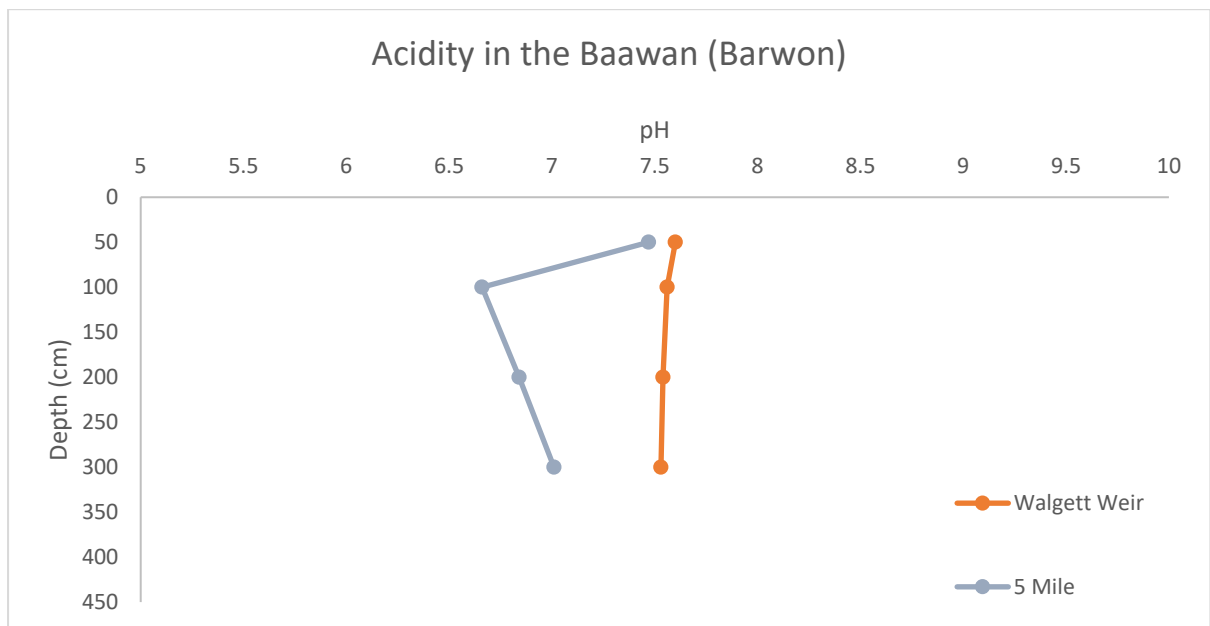
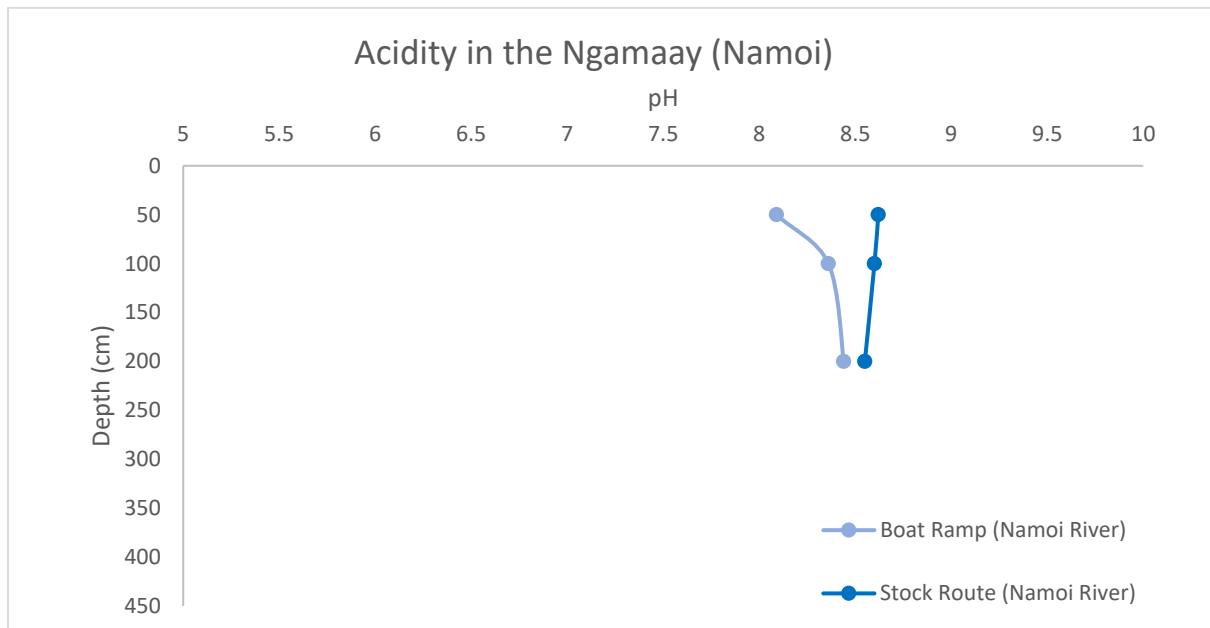


(Picture: Dharriwaa Elders Group area of interest)

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



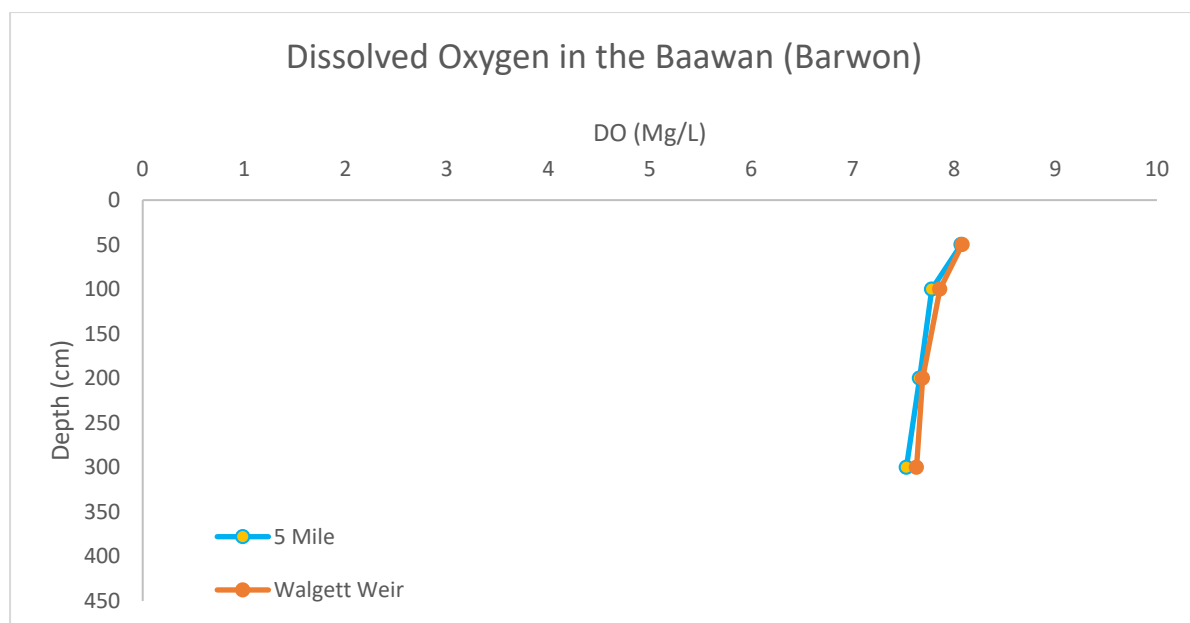
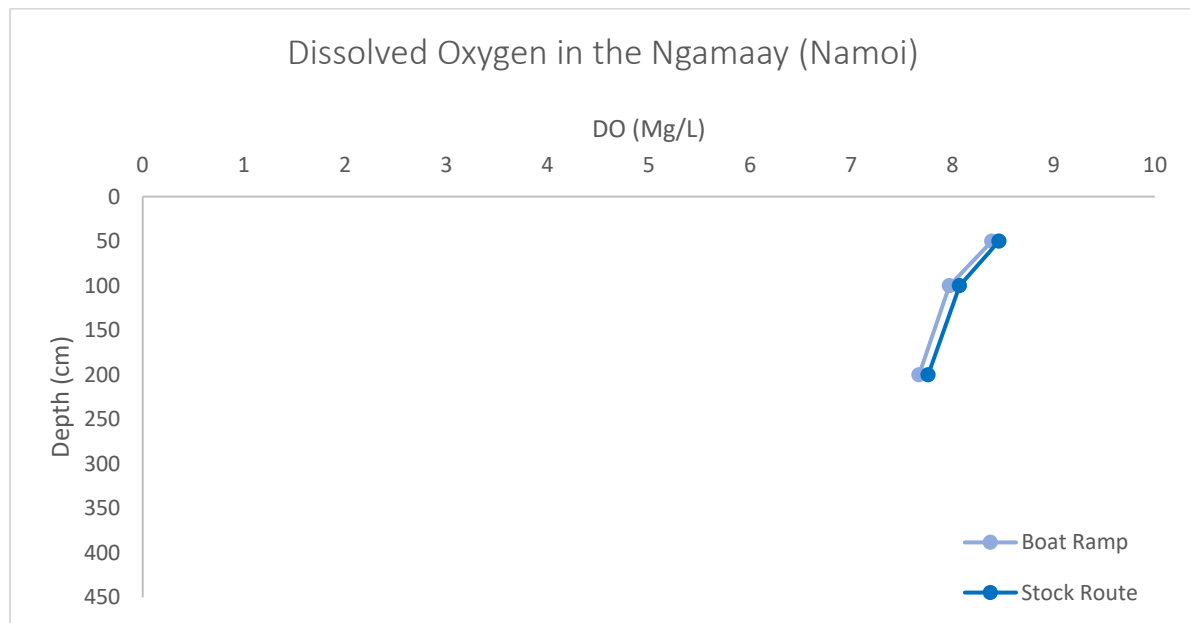
Acidity in the Ngamaay and Baawan Rivers



The pH at the Stock Route on the Ngamaay River is outside the healthy range at all depths. The pH readings at the Boat Ramp on the Ngamaay, and the Walgett Weir and 5 Mile on the Baawan River are all within a healthy range at all depths. The minimum reading is 6.66 and the maximum reading is 8.62.

Healthy range: 6.5 - 8.5 pH

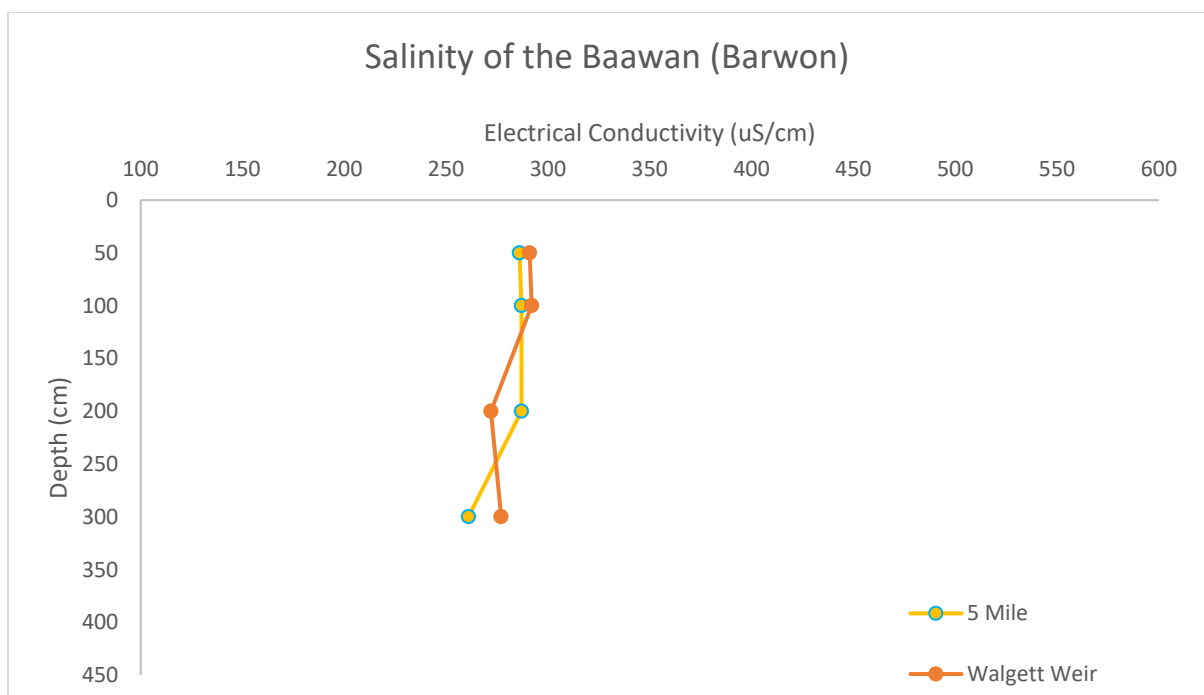
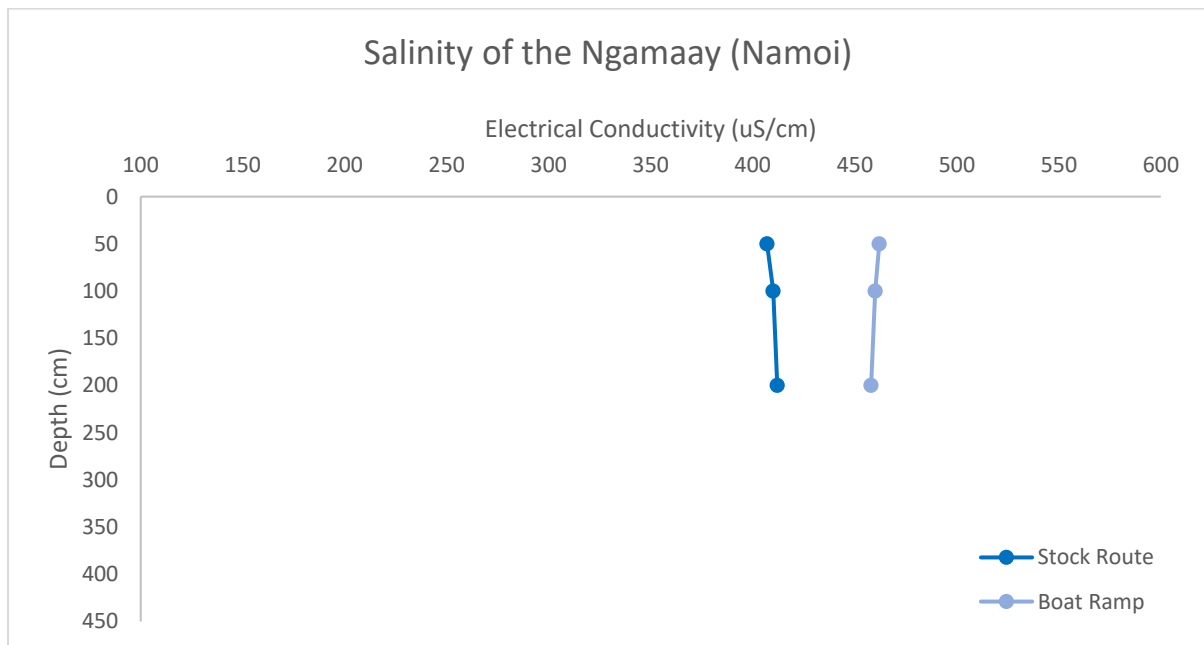
Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen measured at all sites at all depths is within a healthy range. This is good for aquatic life within the rivers. The minimum reading is 7.53 and the maximum reading is 8.46.

Healthy Range: 6 - 8 (Mg/L)

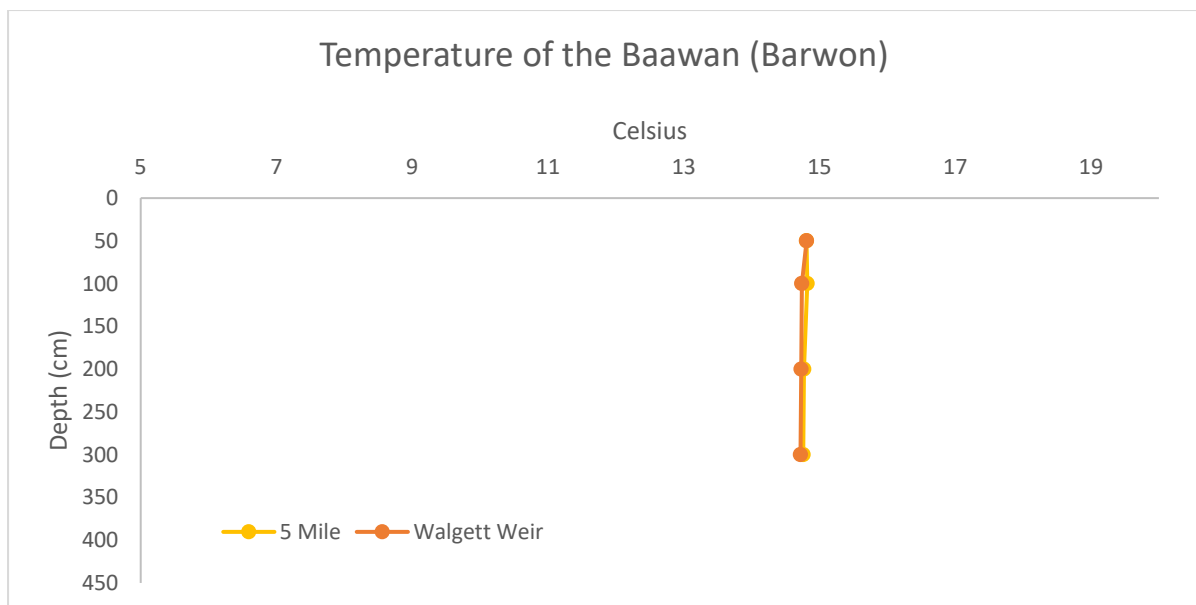
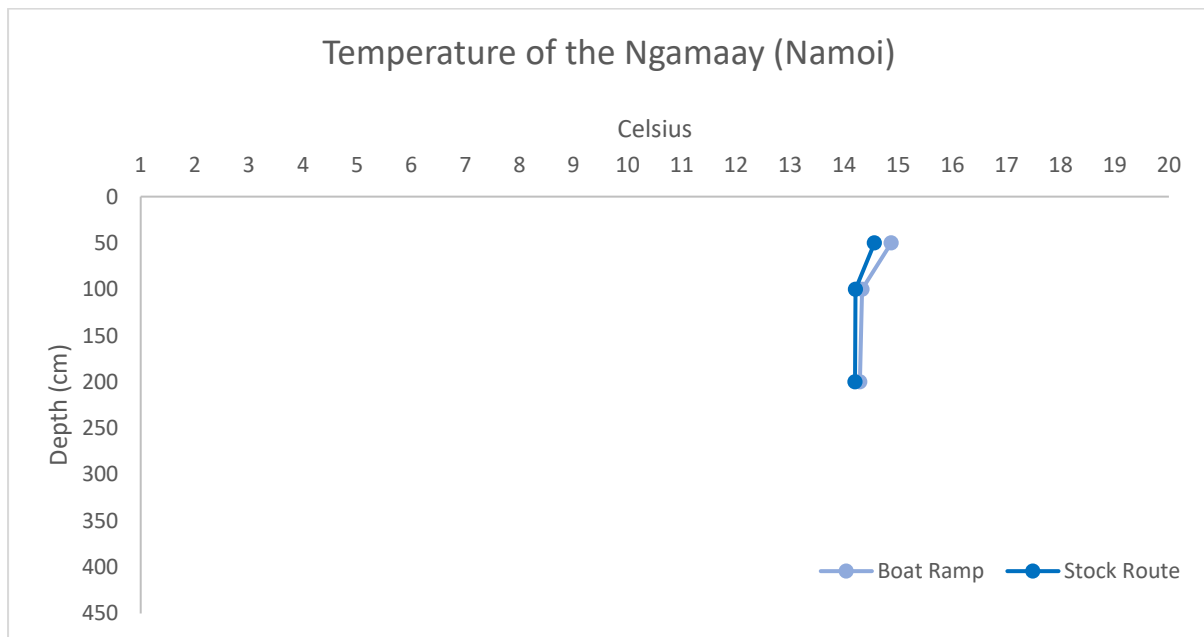
Salinity in the Ngamaay and Baawan Rivers



The electrical conductivity measured at each site at each depth is all within a healthy range. This is good for freshwater fish. The minimum reading is 261 and the maximum reading is 462.

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Ngamaay and Baawan Rivers



The temperature at all depths at all sites is outside of the healthy range for the fish in the rivers. The minimum reading is 14.20 and the maximum reading is 14.87.

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH measured at the Boat Ramp (Ngamaay River), 5 Mile and Walgett Weir (Baawan River) are all within a healthy range. The pH measured at the Stock Route (Ngamaay River) is outside the healthy range and is more on the alkaline side.

The dissolved oxygen and the electrical conductivity measured at all sites at all depths are within a healthy range.

The temperature measured at all sites at all depths are outside the healthy range but there is no extreme danger to the fish within the rivers. The water is cold but it is typical for this time of year.