



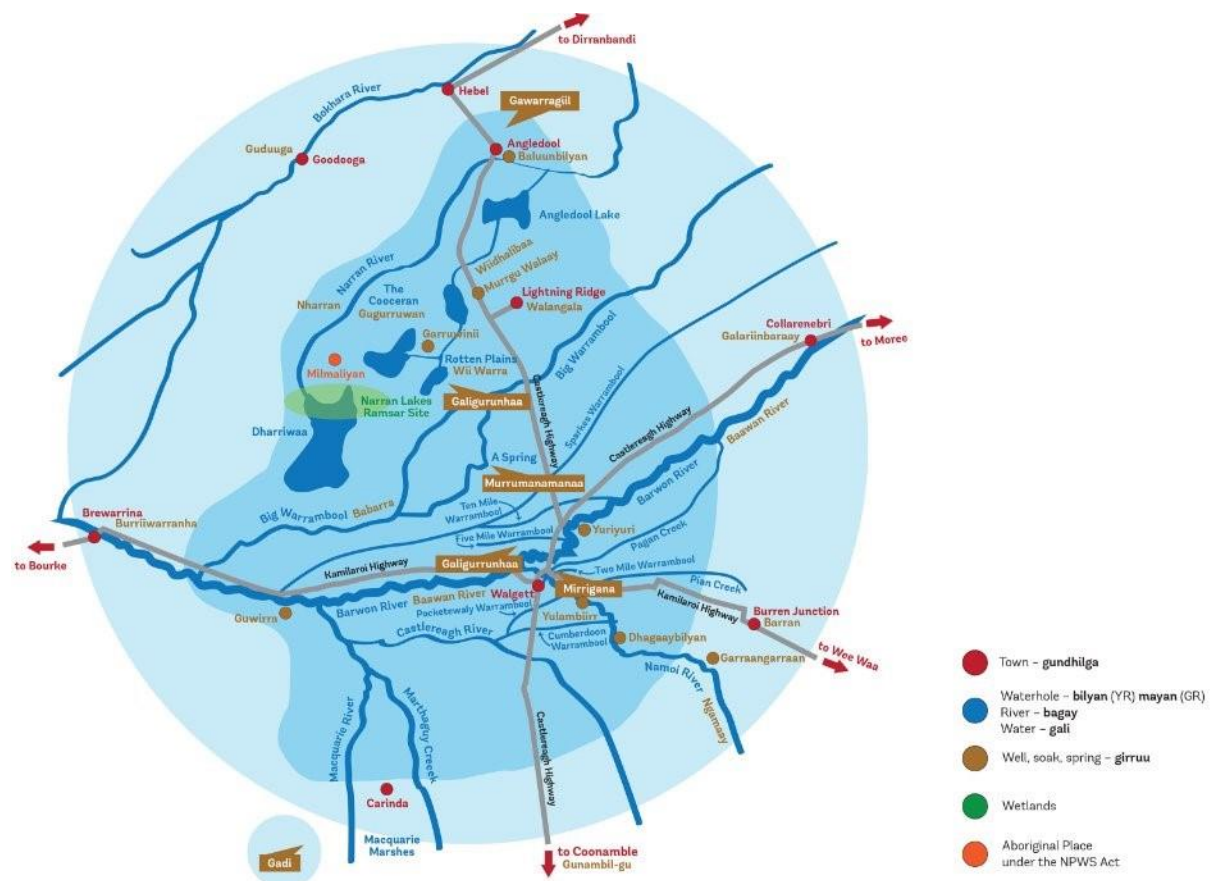
Weekly River Monitoring Report

3rd September 2024

Introduction

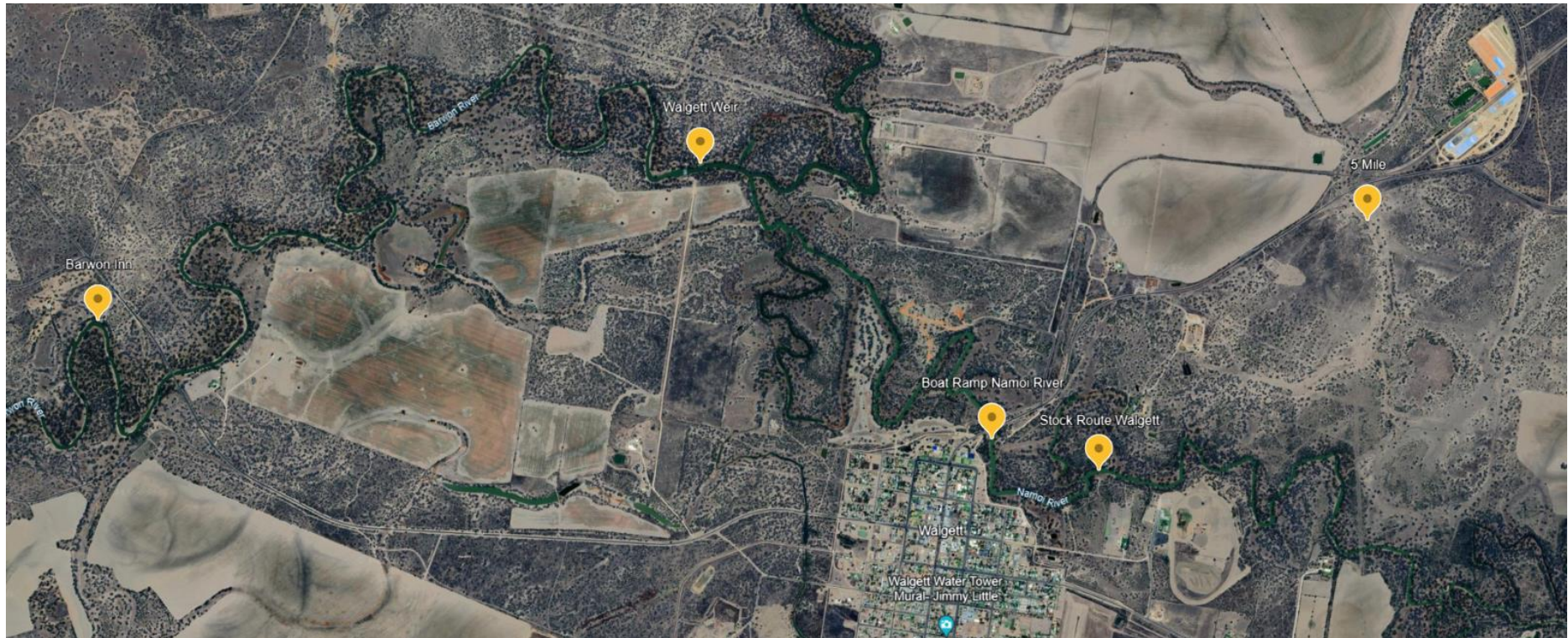
This data was collected on Tuesday 3rd September between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

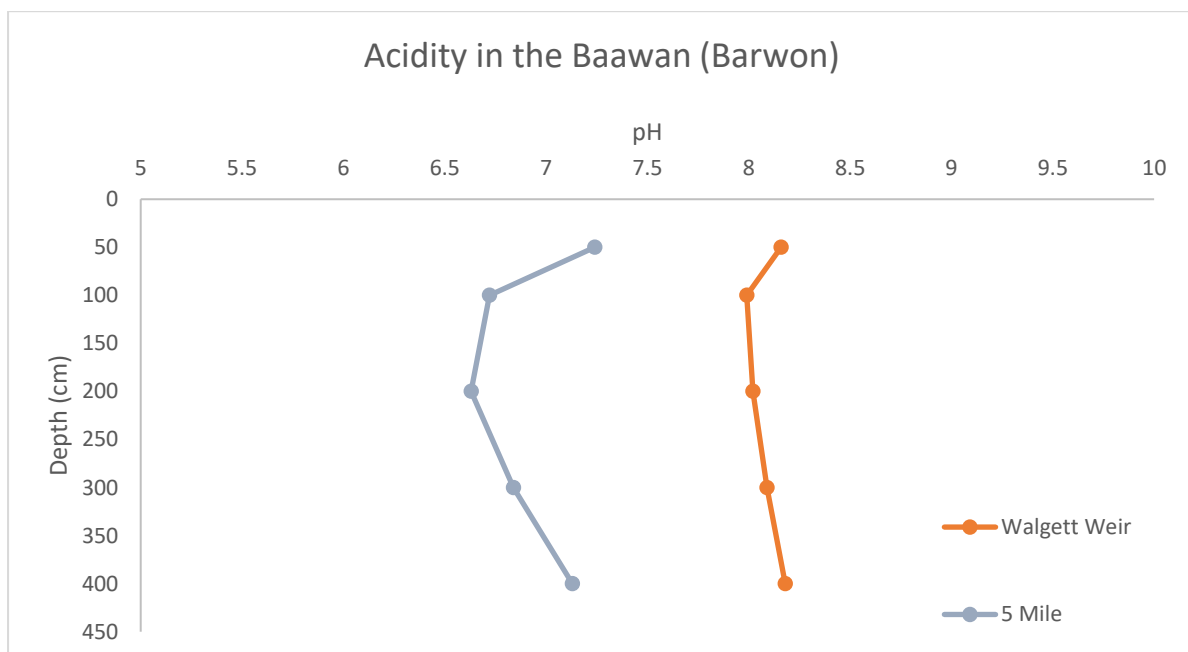
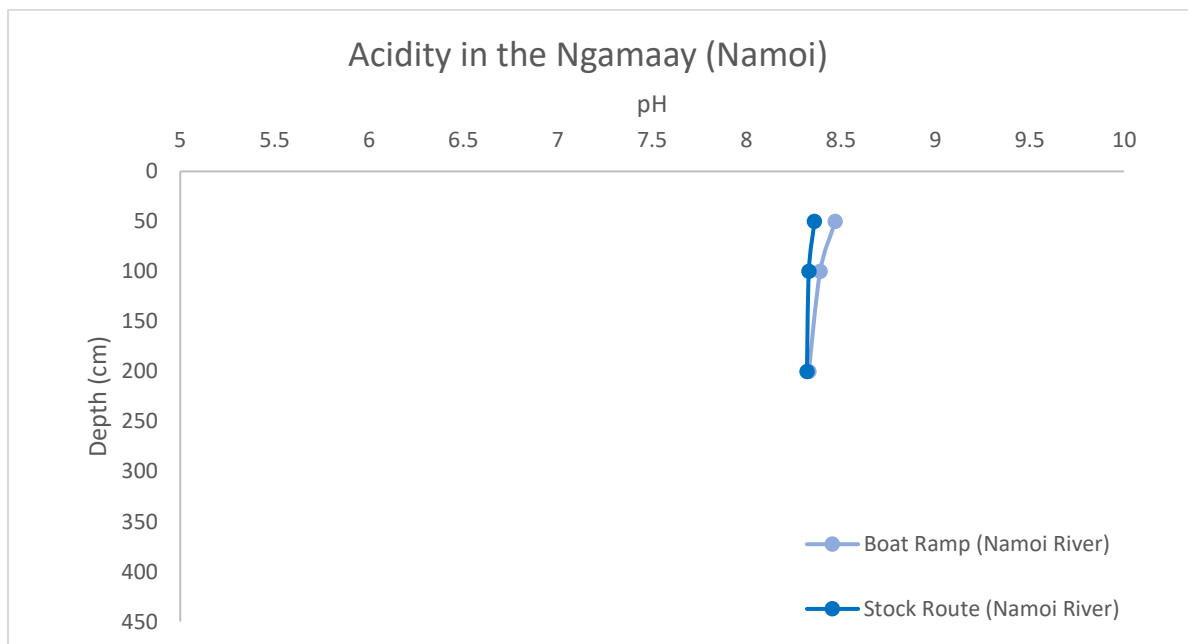


(Picture: Dharriwaa Elders Group area of interest)

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

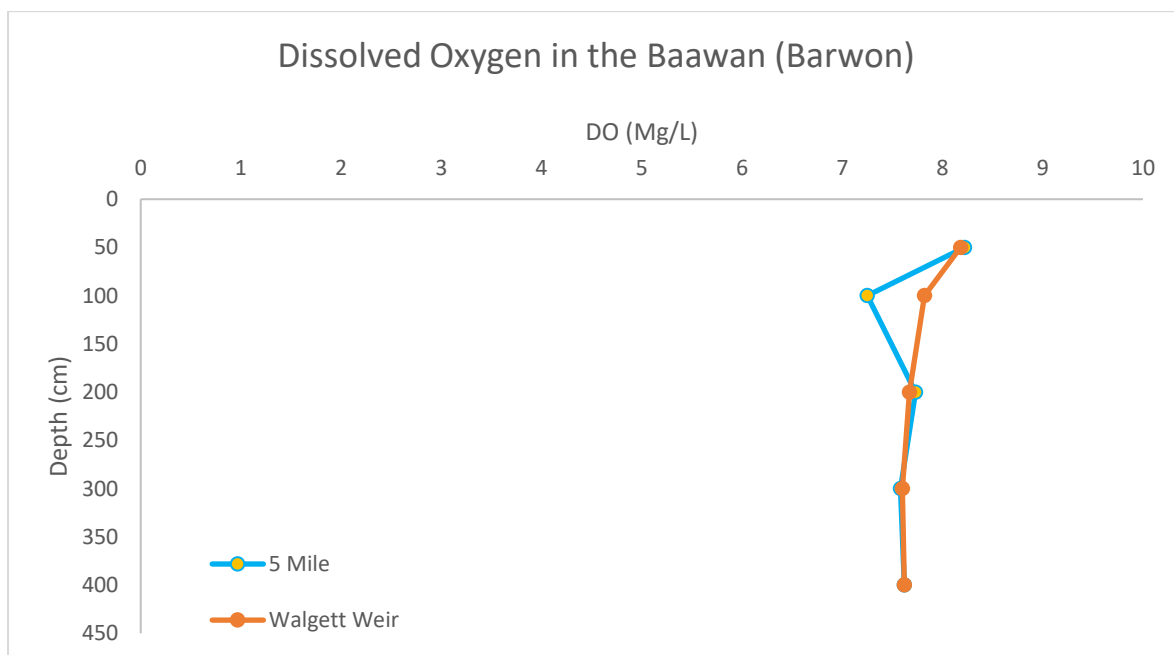
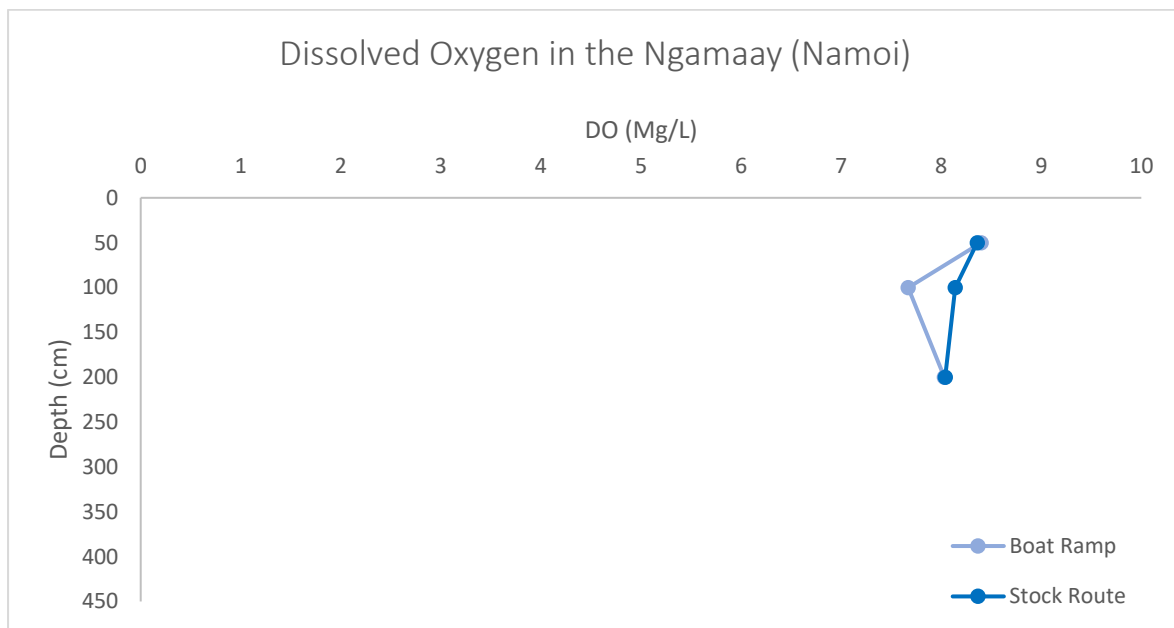


Acidity in the Ngamaay and Baawan Rivers



All pH readings at all sites on the Ngamaay and Baawan Rivers are within a healthy range. The maximum reading is 8.47 and the minimum reading is 6.63.
Healthy range: 6.5 - 8.5 pH

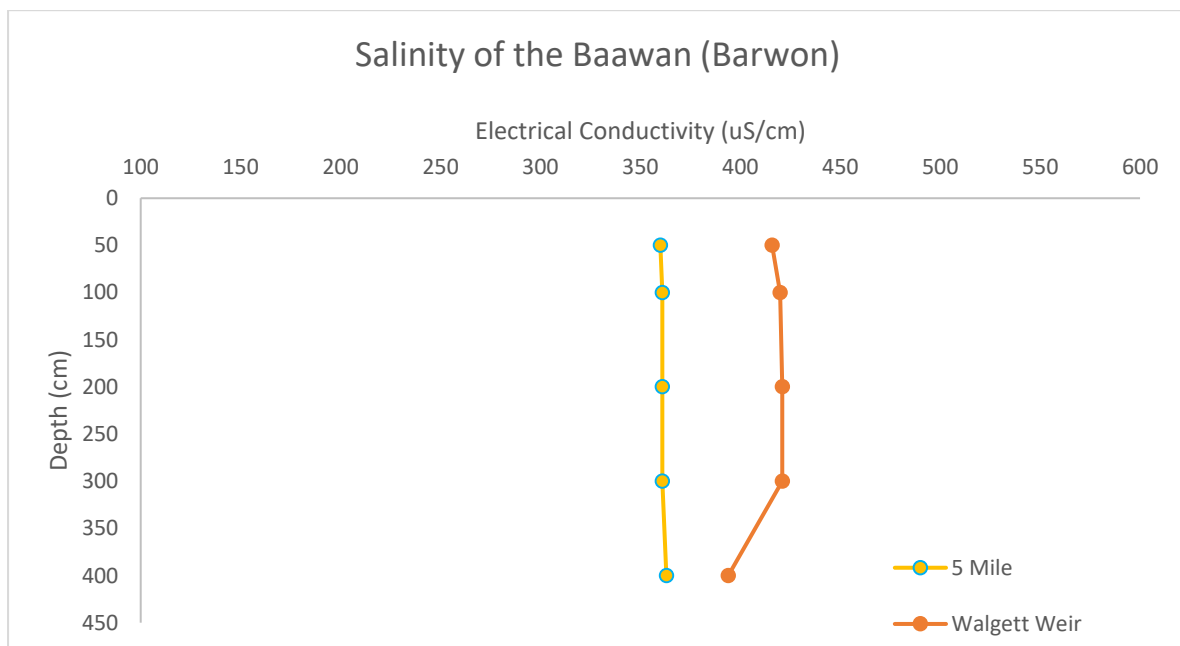
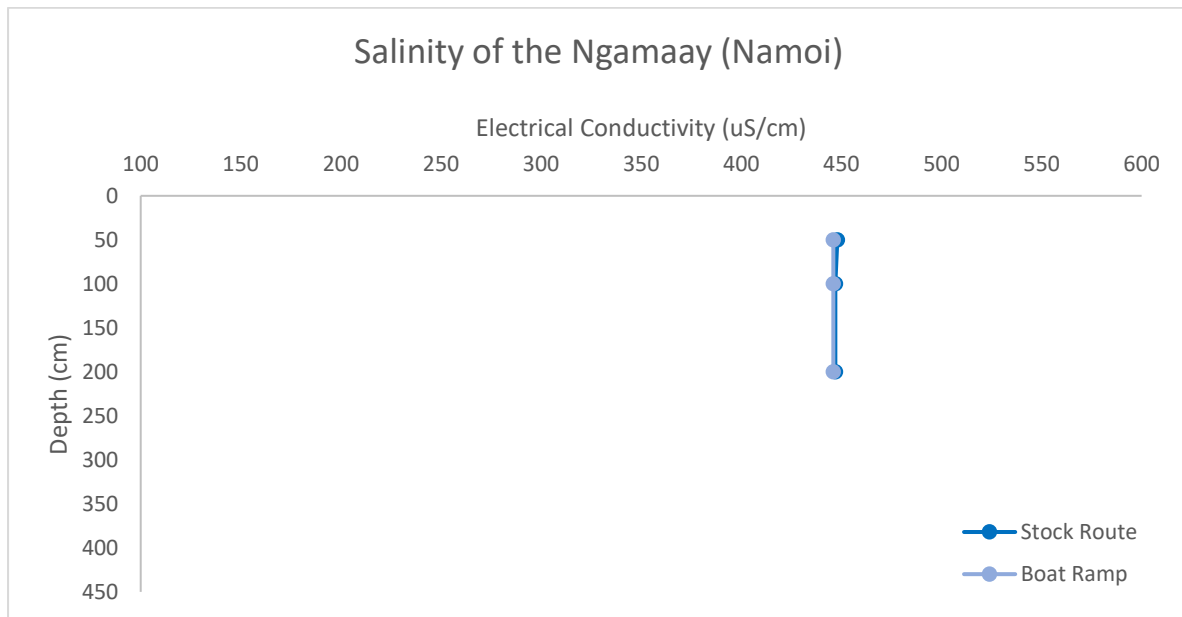
Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen reading at the Stock Route (Ngamaay River) is outside the healthy range. At the Boat Ramp (Ngamaay River) the first and last reading is outside the healthy range, the second reading is within the healthy range. The first reading at both the 5 Mile and Walgett Weir (Baawan River) are outside the healthy range. All other readings after the first ones are within the healthy range. The maximum reading is 8.36 and the minimum reading is 7.25.

Healthy Range: 6 - 8 (Mg/L)

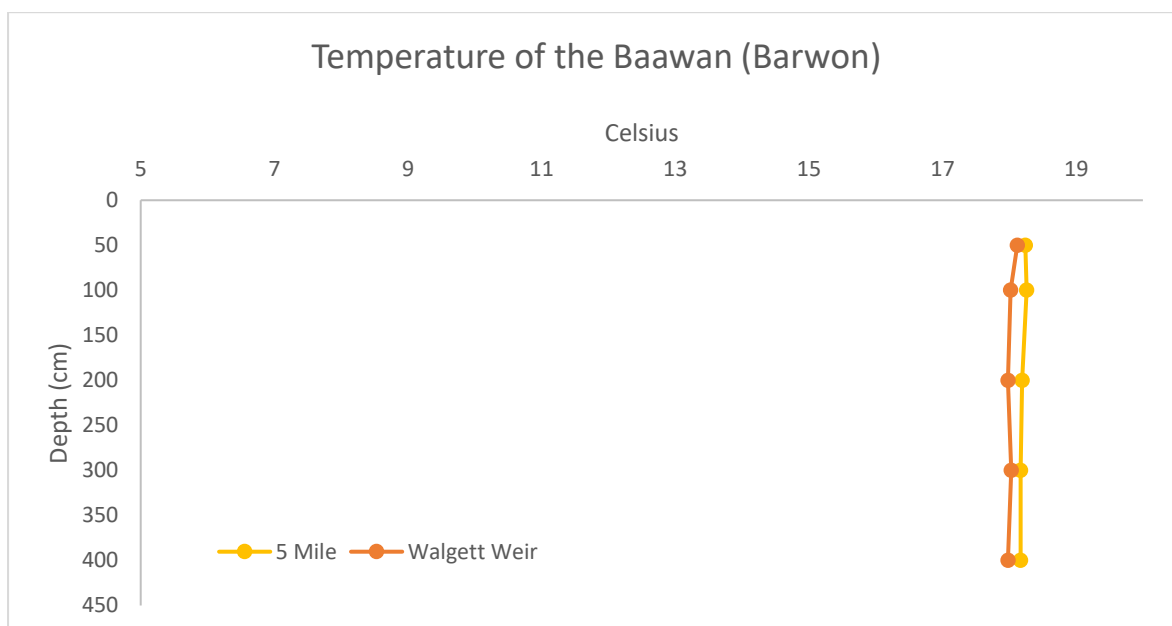
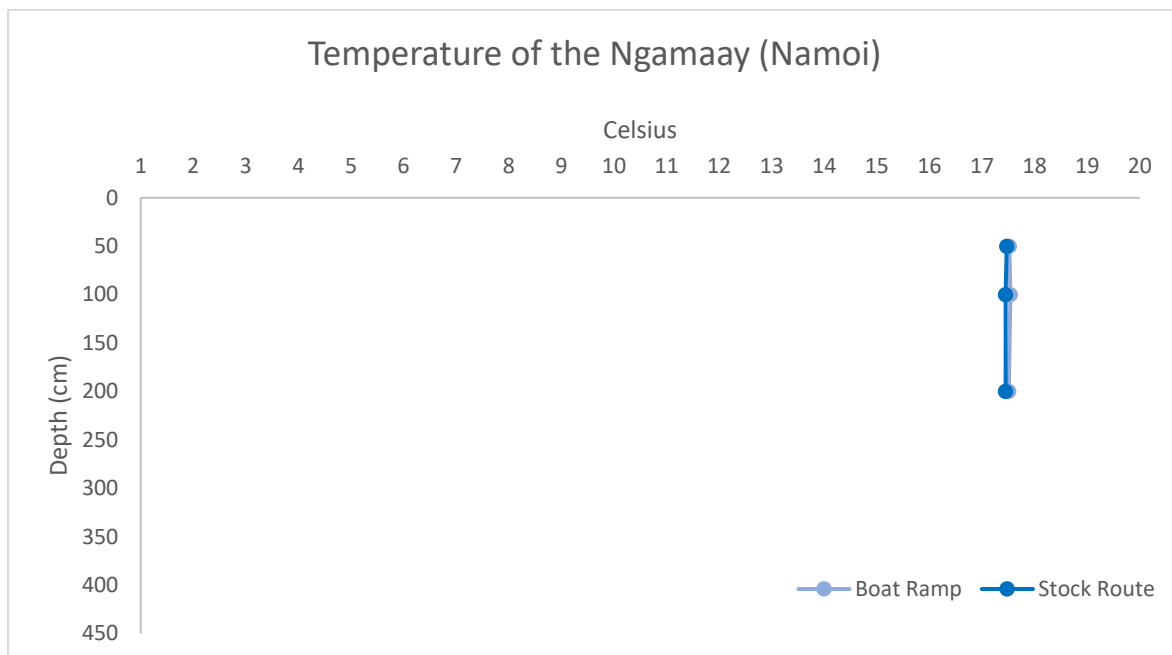
Salinity in the Ngamaay and Baawan Rivers



The salinity in the Ngamaay and Baawan Rivers are within a healthy range. The maximum reading is 448 and the minimum reading is 360.

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Baawan and Ngamaay Rivers



The temperature reading at the Boat Ramp and Stock Route (Ngamaay River) are outside the healthy range. The temperature measured at the Walgett Weir is inside the healthy range. At the 5 Mile there are two readings outside the healthy range all other readings are within the healthy range. The maximum reading is 18.26 and the minimum reading is 17.45.

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH readings in both the Ngamaay and Baawan Rivers are within a healthy range. Which means that the water is not too alkaline or too acidic.

The dissolved oxygen is outside the healthy range in the Ngamaay River but there are no dangers to the fish within the Ngamaay River. The first readings at both the 5 Mile and the Walgett Weir (Baawan River) are outside the healthy range all other readings following the first readings are within the healthy range.

The salinity at all sites on the Ngamaay and Baawan Rivers are within the healthy range. This is good for freshwater fish.

The temperature at the Boat Ramp and the Stock Route (Ngamaay River) are outside the healthy range. The temperature measured at the Walgett Weir (Baawan River) is within the healthy range. The third and last reading at the 5 Mile (Baawan River) is outside the healthy range, all other readings at the 5 Mile is within the healthy range. The readings outside the healthy range are colder temperatures. There is no extreme danger to the fish within the rivers.