



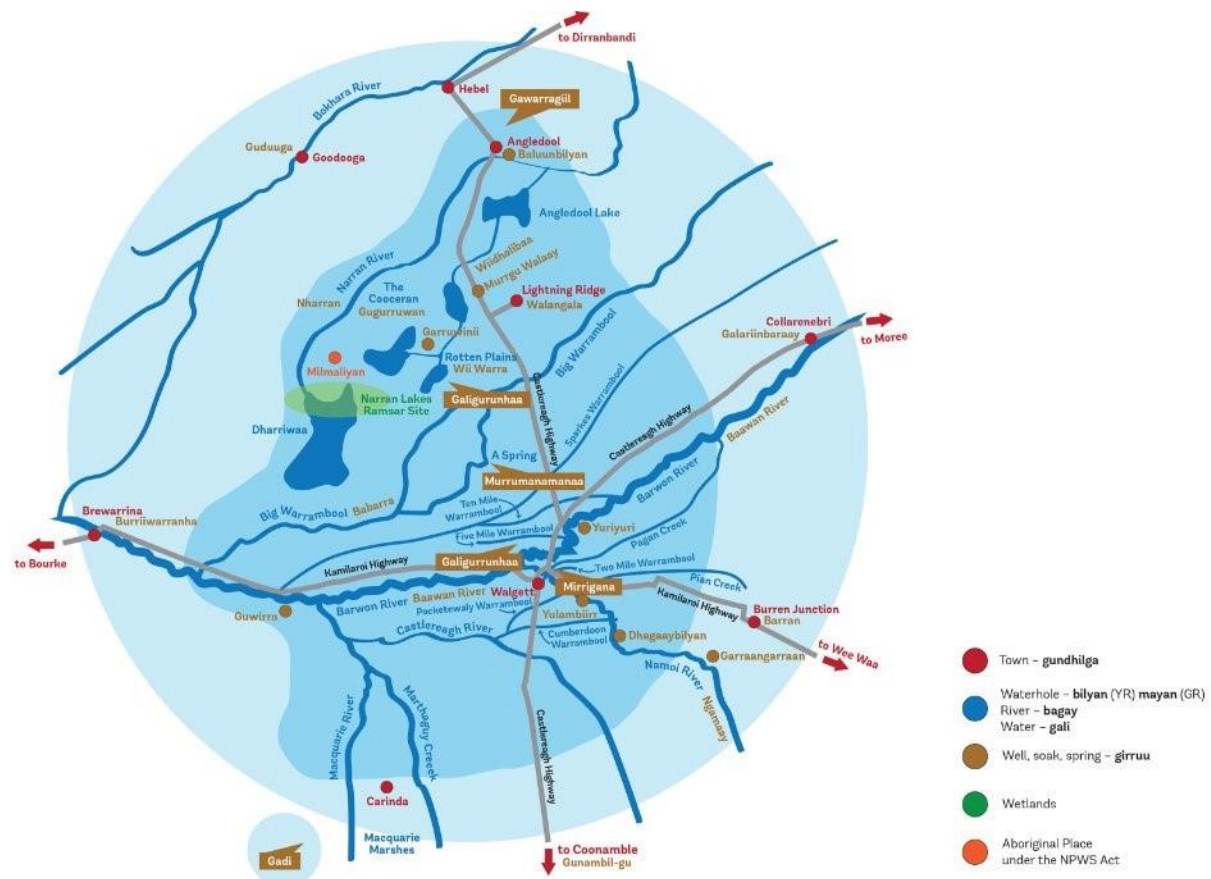
Weekly River Monitoring Report

23rd July 2024

Introduction

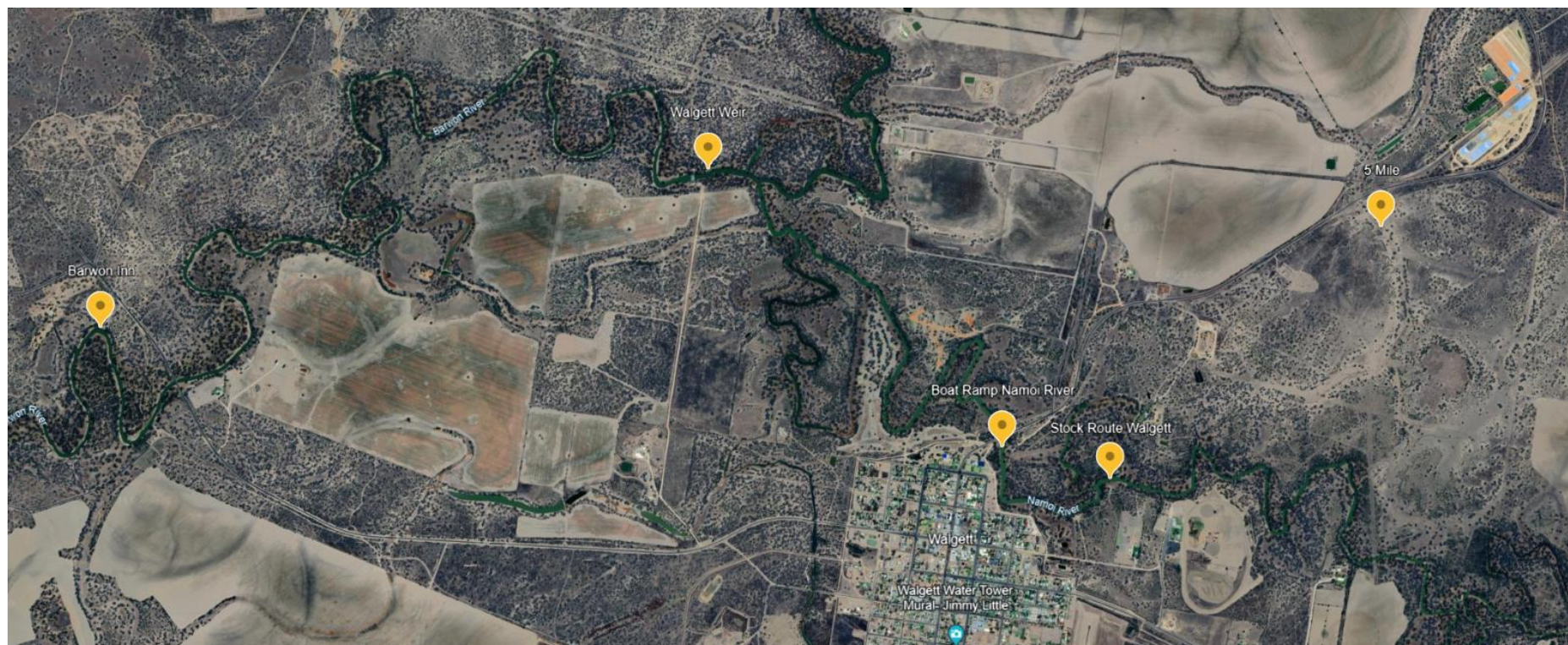
This data was collected on Tuesday 23rd July between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

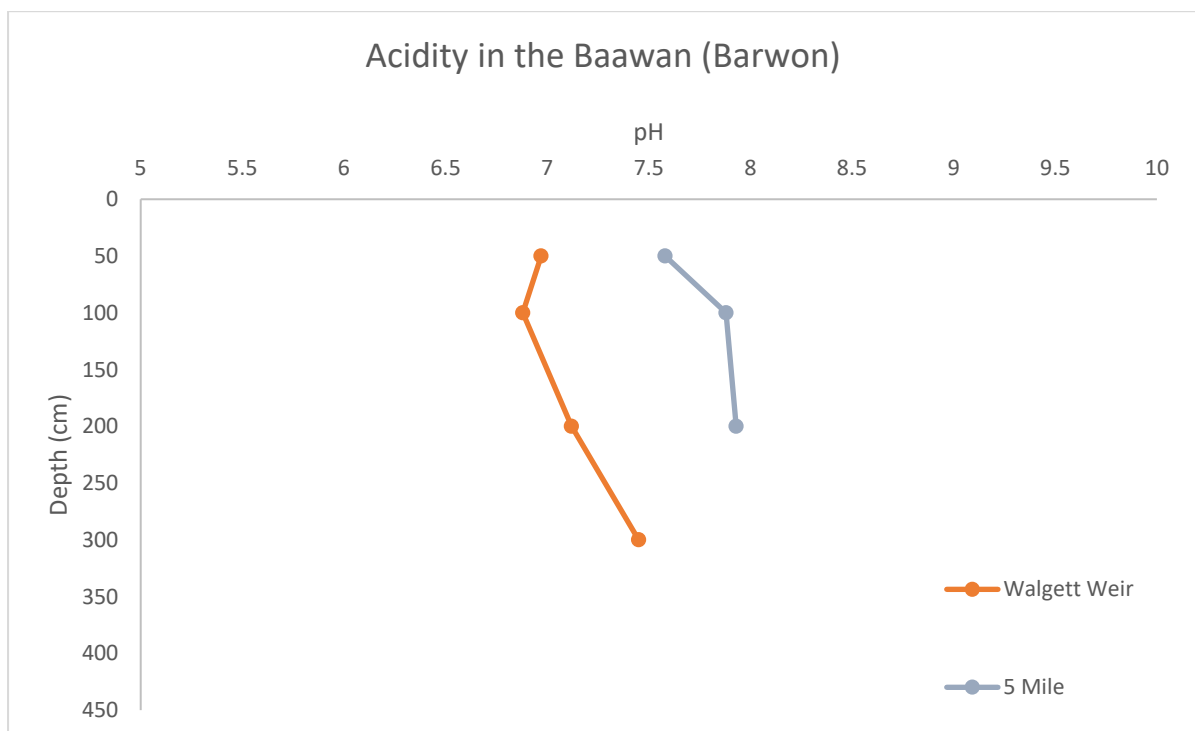
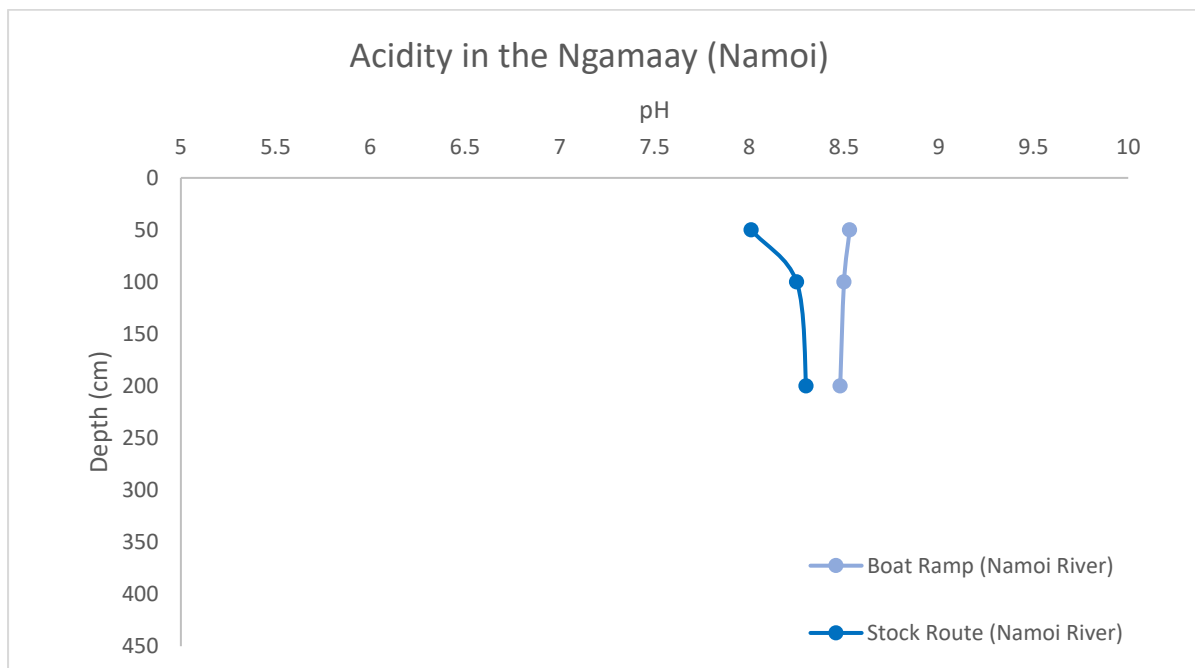


(Picture: Dharriwaa Elders Group area of interest)

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



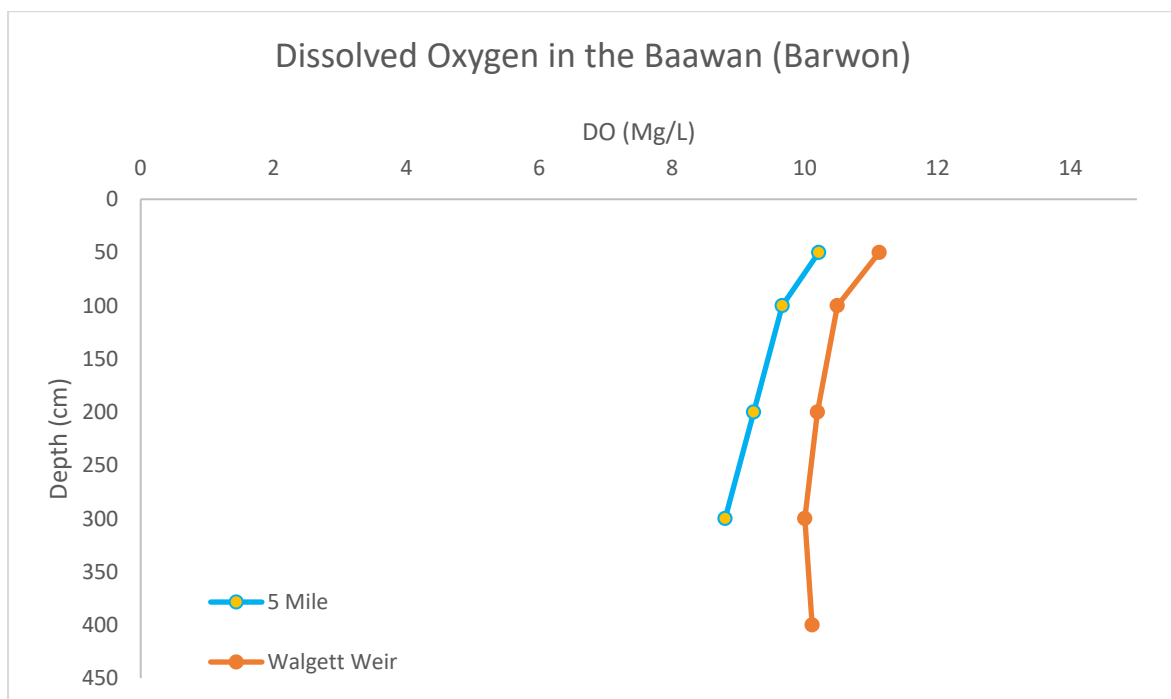
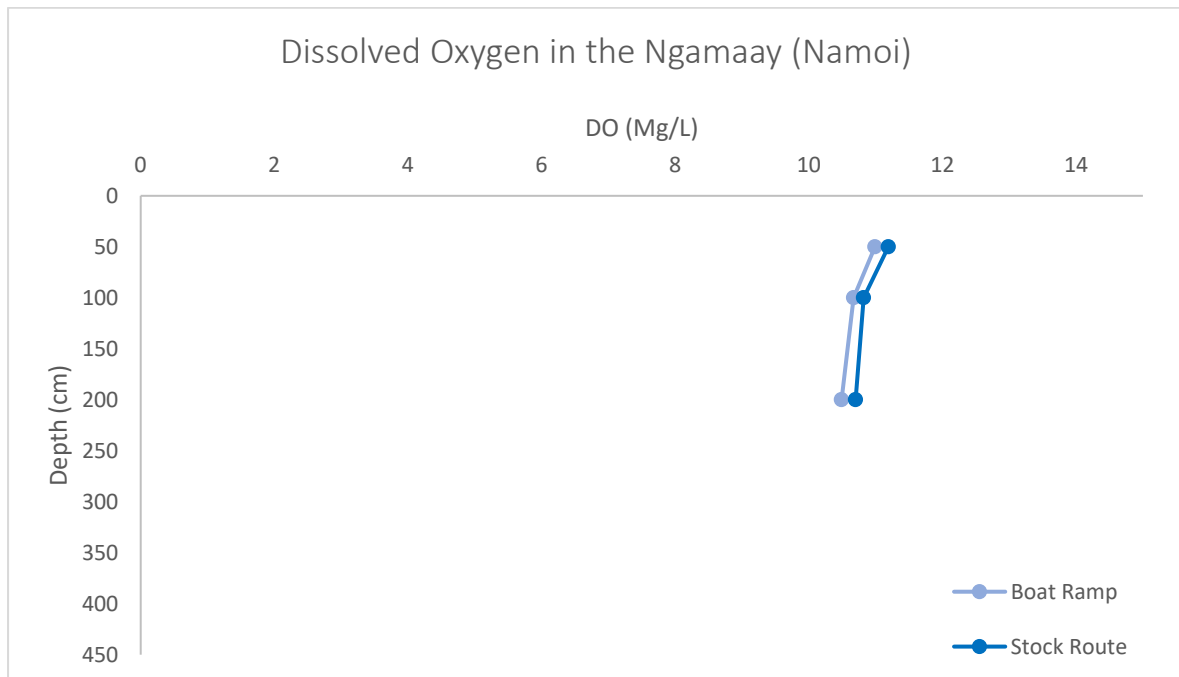
Acidity in the Ngamaay and Baawan Rivers



Majority of the pH readings are within the healthy range. There is only one reading outside the healthy range and that is the first depth reading at the Boat Ramp on the Ngamaay River. The maximum reading is 8.53 and the minimum reading is 6.88.

Healthy range: 6.5 - 8.5 pH

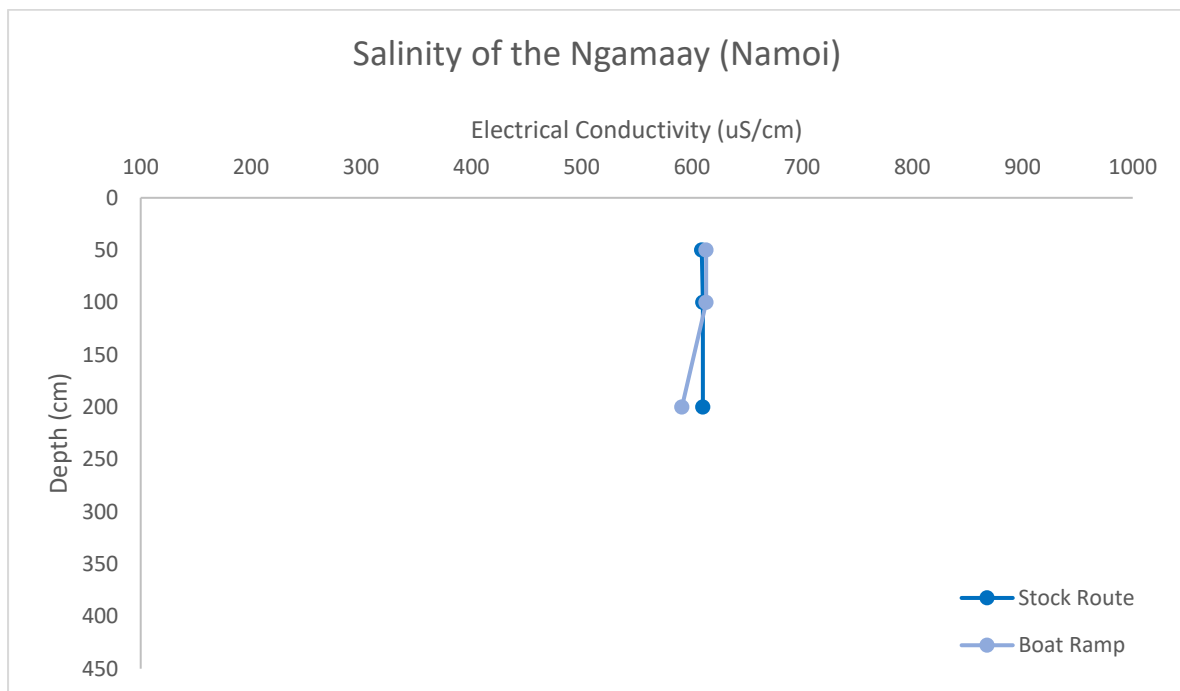
Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen readings at the 5 Mile (Baawan River) are within the healthy range. The dissolved oxygen readings at all other sites, Walgett Weir (Baawan River), Boat Ramp and Stock Route (Ngamaay River) are outside the healthy range and are just over the healthy range. The maximum reading is 11.19 and the minimum reading is 8.80.

Healthy Range: 6 - 8 (Mg/L)

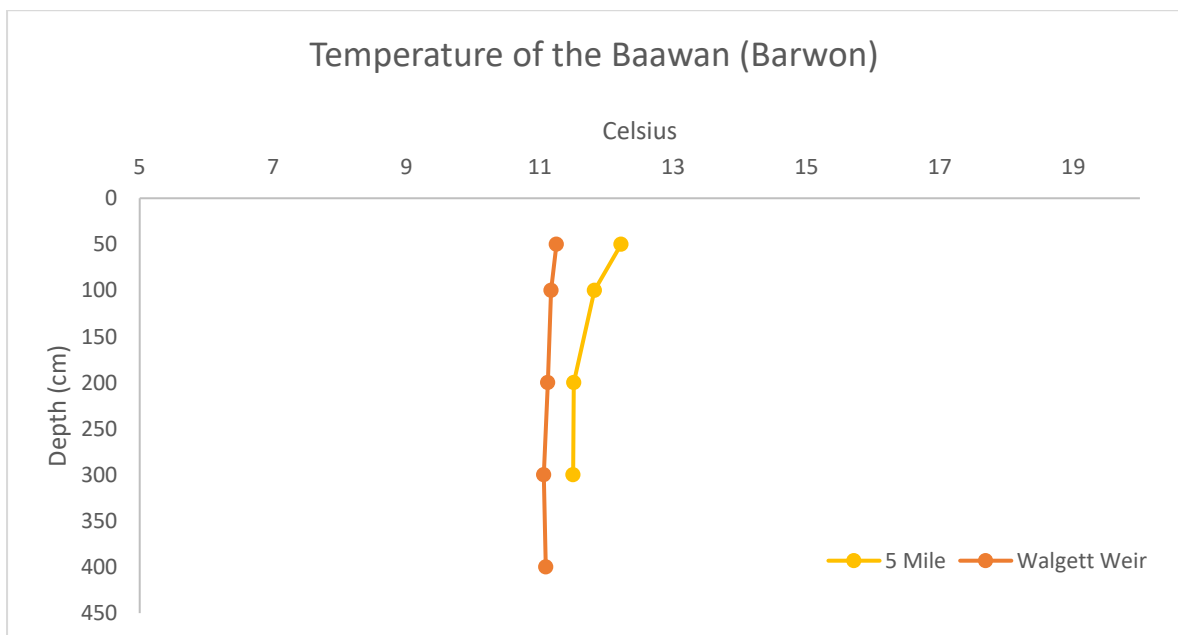
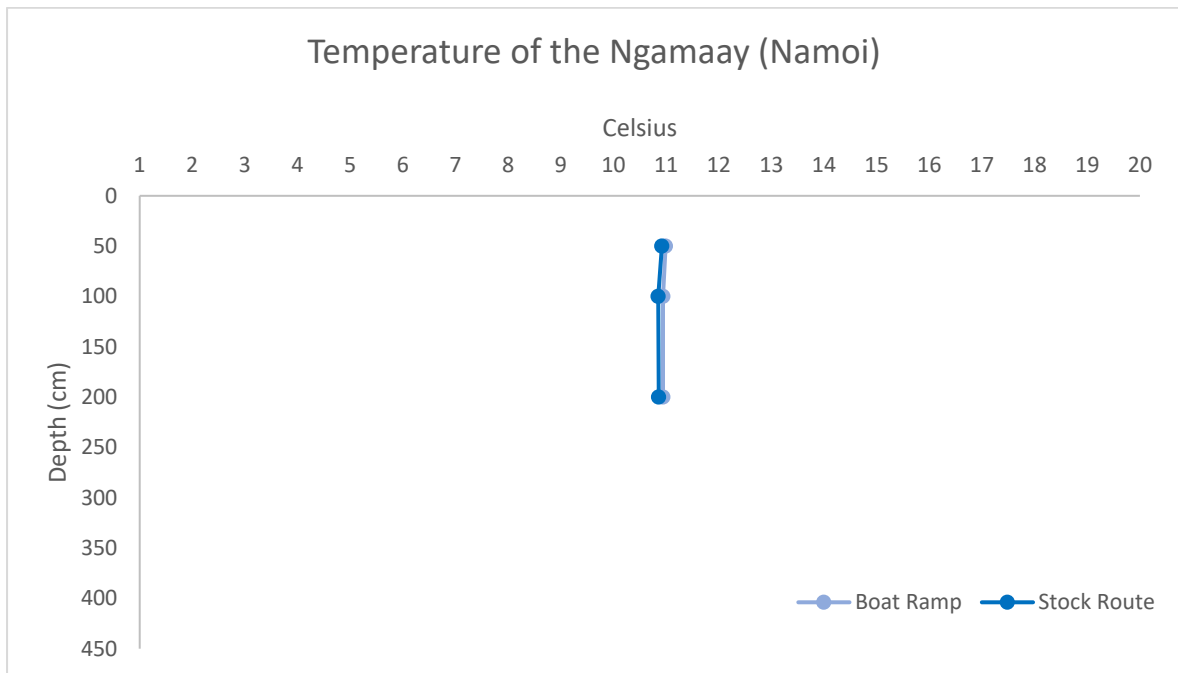
Salinity in the Ngamaay and Baawan Rivers



The salinity in the Ngamaay and Baawan Rivers are within a healthy range. This is good for the freshwater fish. The maximum reading is 613 and the minimum reading is 436.

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Ngamaay and Baawan Rivers



The temperature readings at all sites are outside the healthy range. The maximum reading is 11.42 and the minimum reading is 10.86.

Healthy Range: 18-28 degrees (Celsius)

Conclusion

There is only one pH reading that was outside the healthy range this week which was in the Ngamaay River at the Boat Ramp. All other pH readings were inside the healthy range.

At the 5 Mile in the Baawan River the dissolved oxygen is within the healthy range. All other sites on the Baawan and Ngamaay Rivers are outside the healthy range. When the water temperature is cooler the dissolved oxygen levels will increase. 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 at all sites and at all depths are within the 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.