



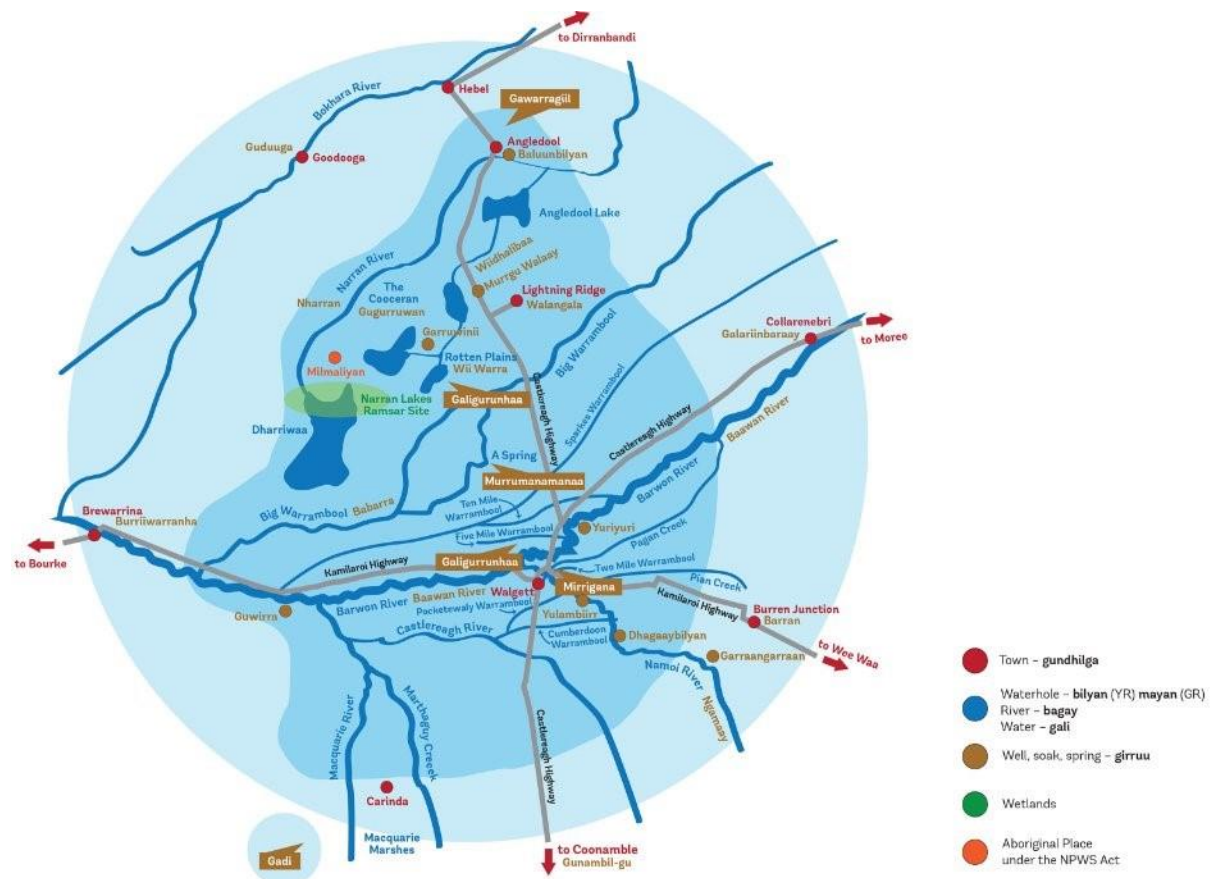
# Weekly River Monitoring Report

16th July 2024

# Introduction

This data was collected on Tuesday 16<sup>th</sup> July between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

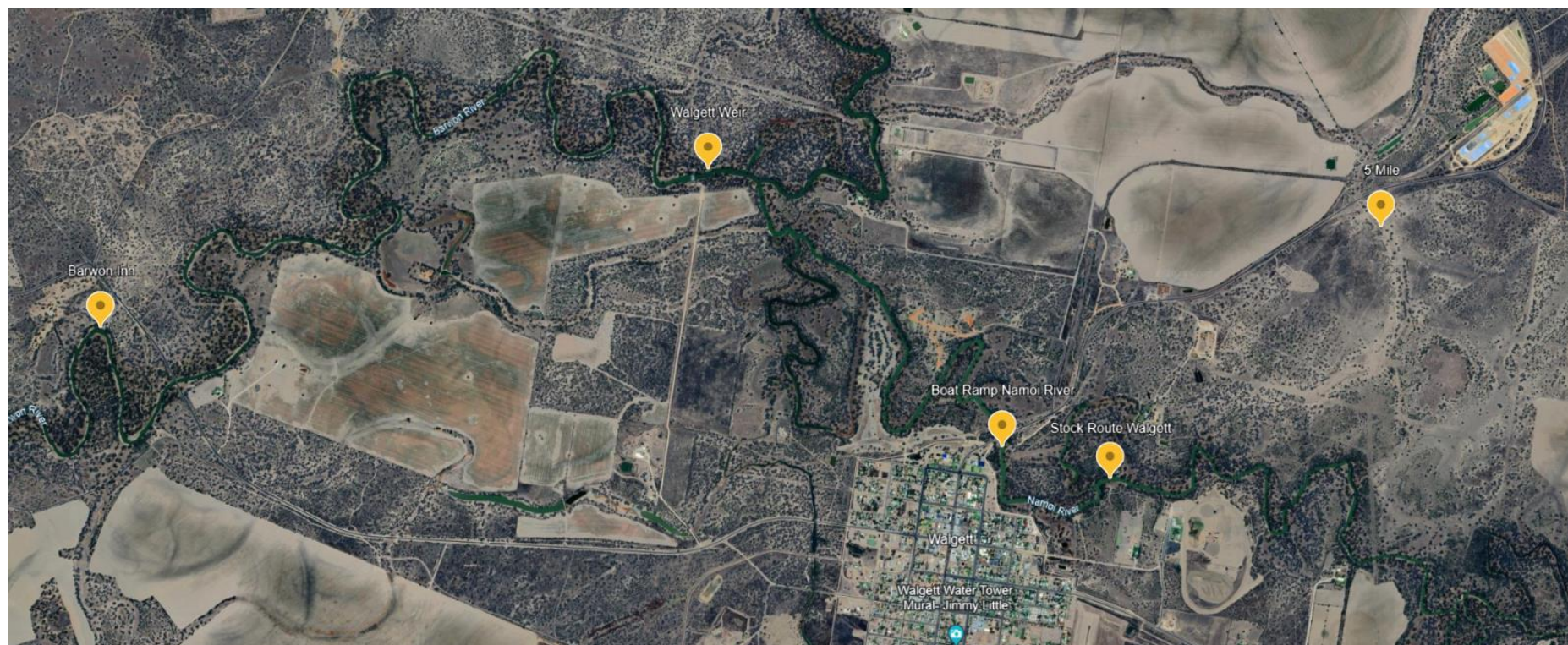
The Dharriwaa Elders Group River Rangers are conducting weekly water quality testing, measuring a range of factors that affect the quality of the river water. Different results affect the health of native animals and plants, and the health of the people that rely on the river for food and water.



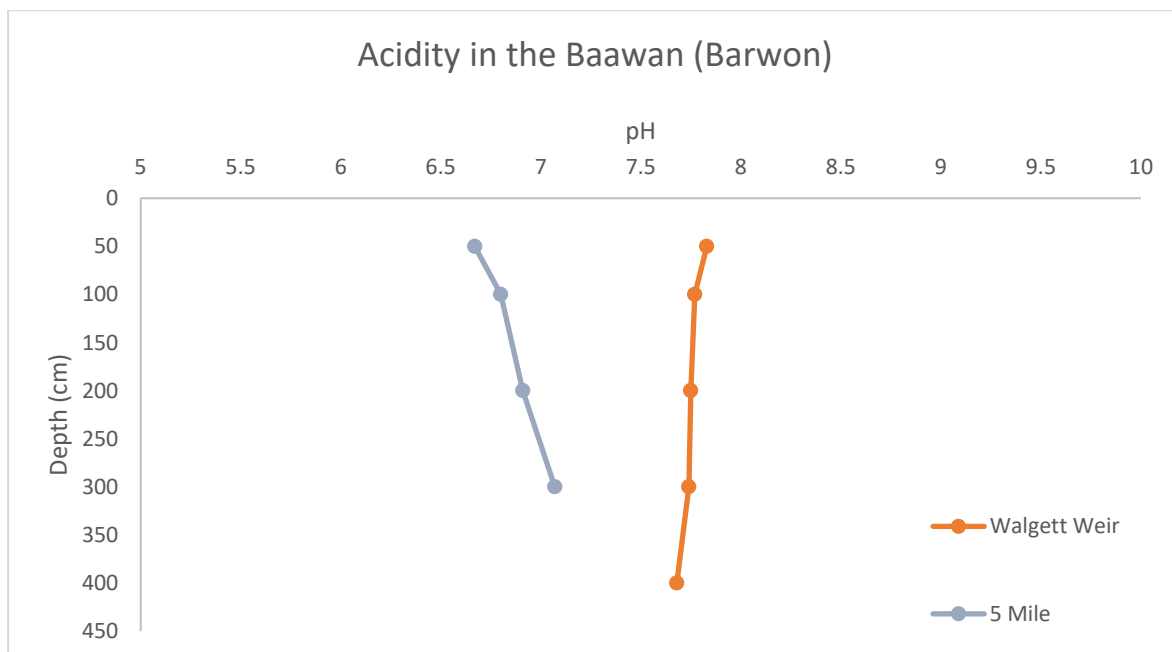
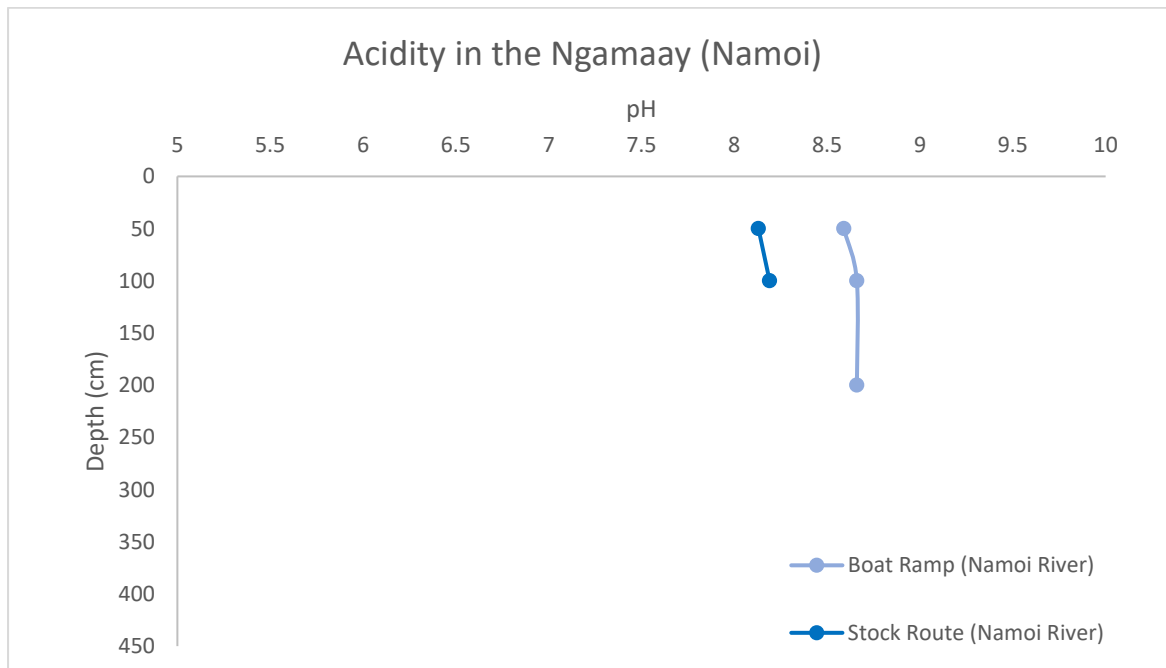
(Picture: Dharriwaa Elders Group area of interest)



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



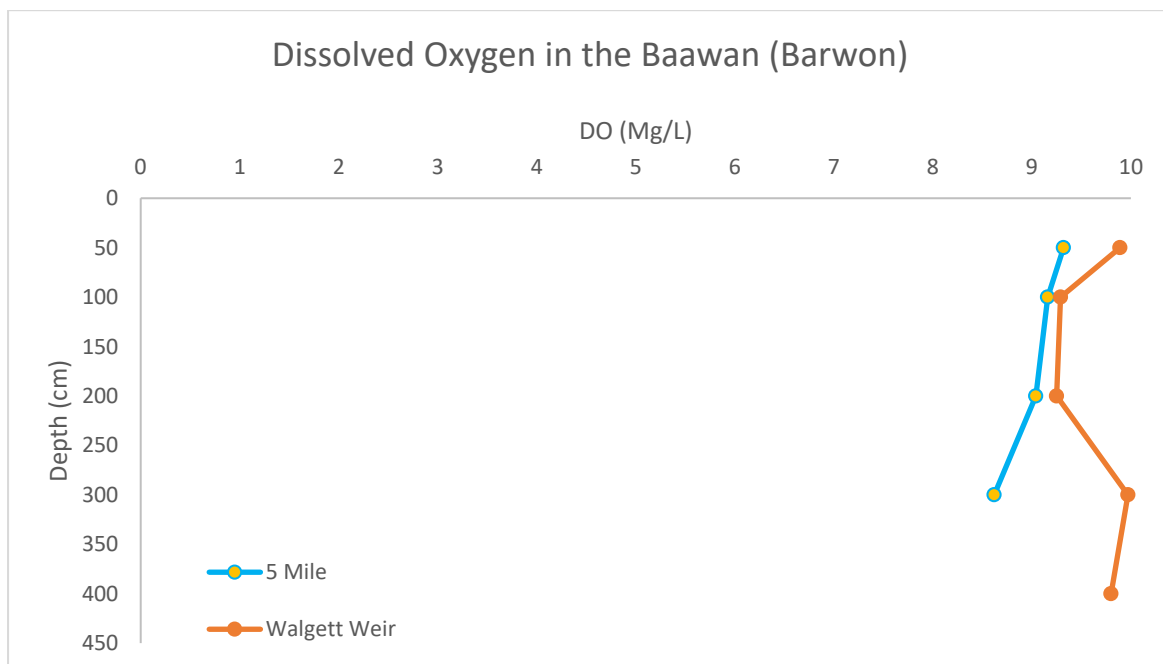
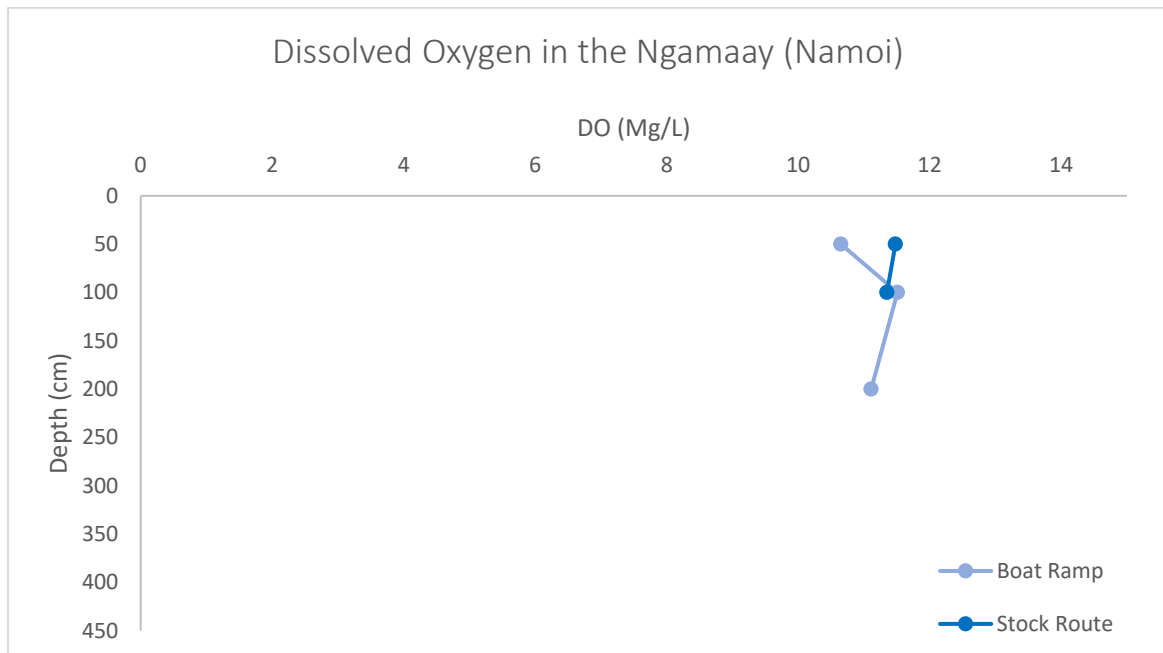
## Acidity in the Ngamaay and Baawan Rivers



The pH readings at the Boat Ramp (Ngamaay River), Walgett Weir and 5 Mile (Baawan River) are all within a healthy range. The pH reading at the Stock Route on the Ngamaay River is outside the healthy range more on the alkaline side. The maximum reading is 8.66 and the minimum reading is 6.67.

**Healthy range: 6.5 - 8.5 pH**

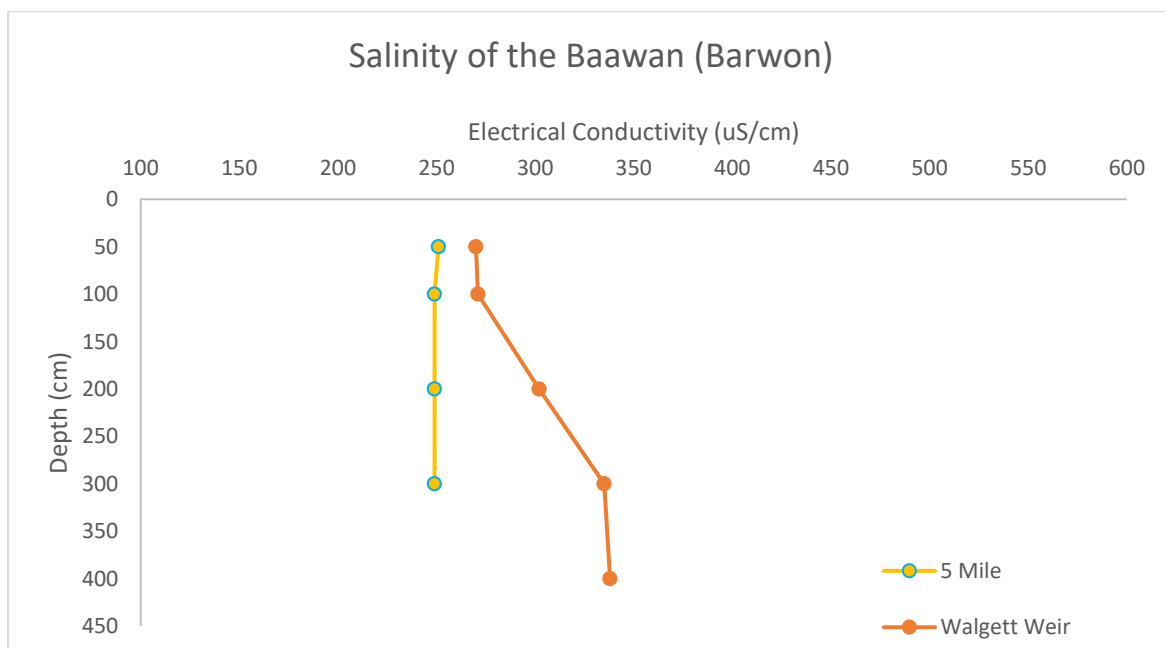
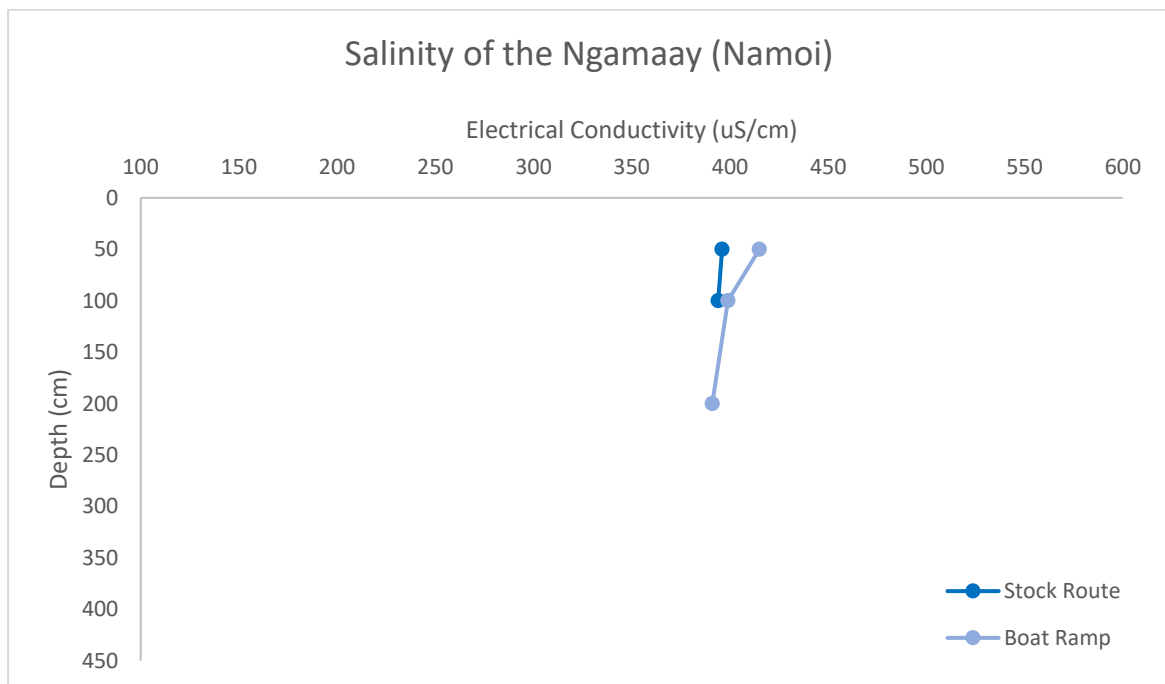
## Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen in the Baawan River is within the healthy range. The dissolved oxygen in the Ngamaay River is outside the healthy range and is high. The maximum reading is 11.48 and the minimum reading is 10.65.

**Healthy Range: 6 - 8 (Mg/L)**

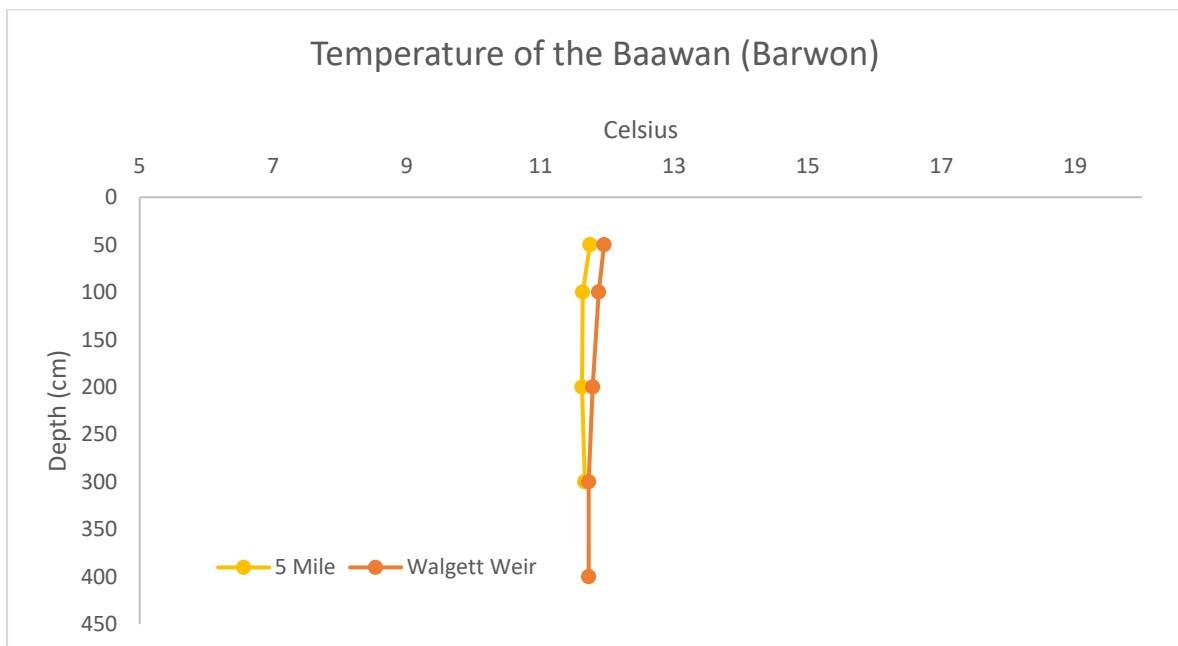
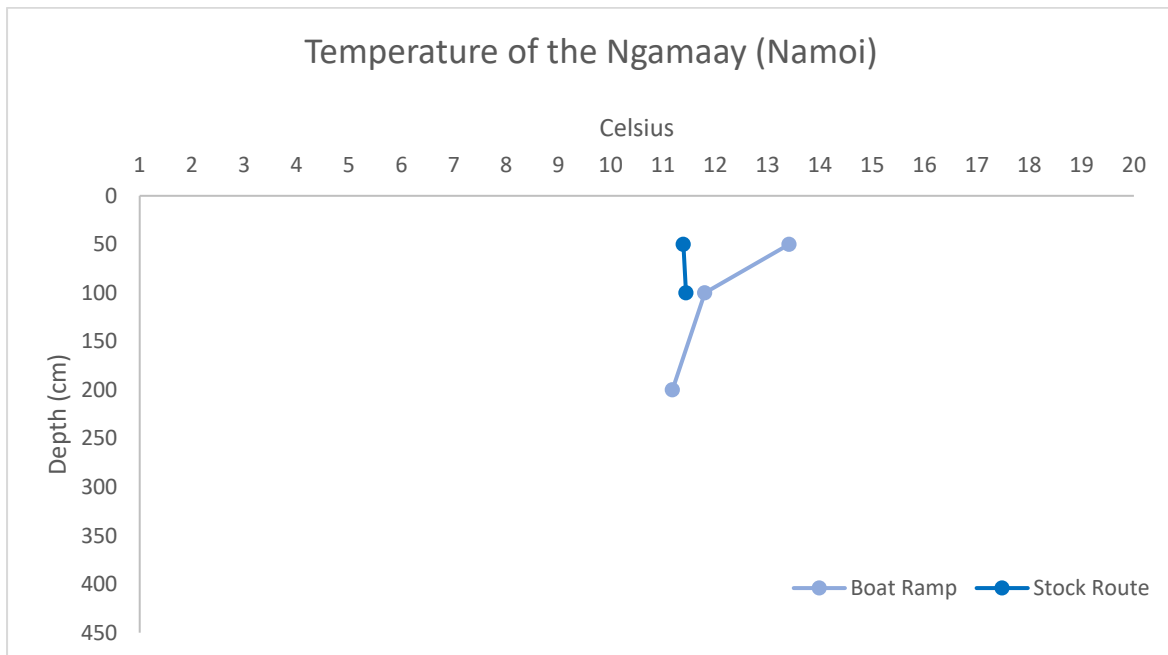
## Salinity in the Ngamaay and Baawan Rivers



The salinity readings at all sites are within the healthy range. This is good for freshwater fish. The maximum reading is 415 and the minimum reading is 249.

**Healthy Range: 125 - 2,200 uS/cm**

## Temperature of the Ngamaay and Baawan Rivers



The temperature measured at all sites along the Ngamaay and Baawan Rivers are outside the healthy range. The maximum reading is 13.41 and the minimum reading is 11.39.

**Healthy Range: 18-28 degrees (Celsius)**

## **Conclusion**

The pH readings at the Boat Ramp (Ngamaay River), Walgett Weir and 5 Mile (Baawan River) are all within the healthy range. The pH readings at the Stock Route (Ngamaay River) is outside the healthy range. The water is not too acidic or alkaline.

The dissolved oxygen readings at all sites are high and 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 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.