



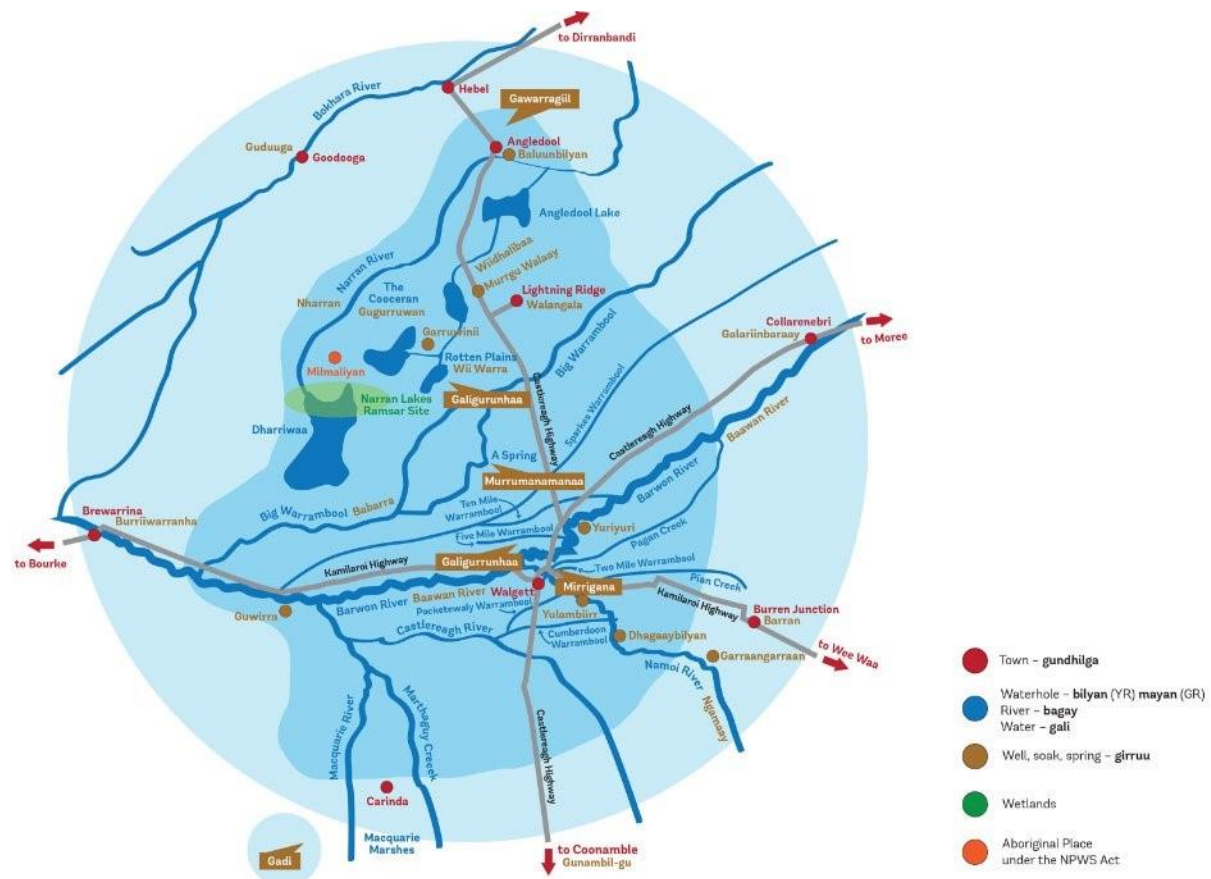
# Weekly River Monitoring Report

9th July 2024

# Introduction

This data was collected on Tuesday 9<sup>th</sup> July between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

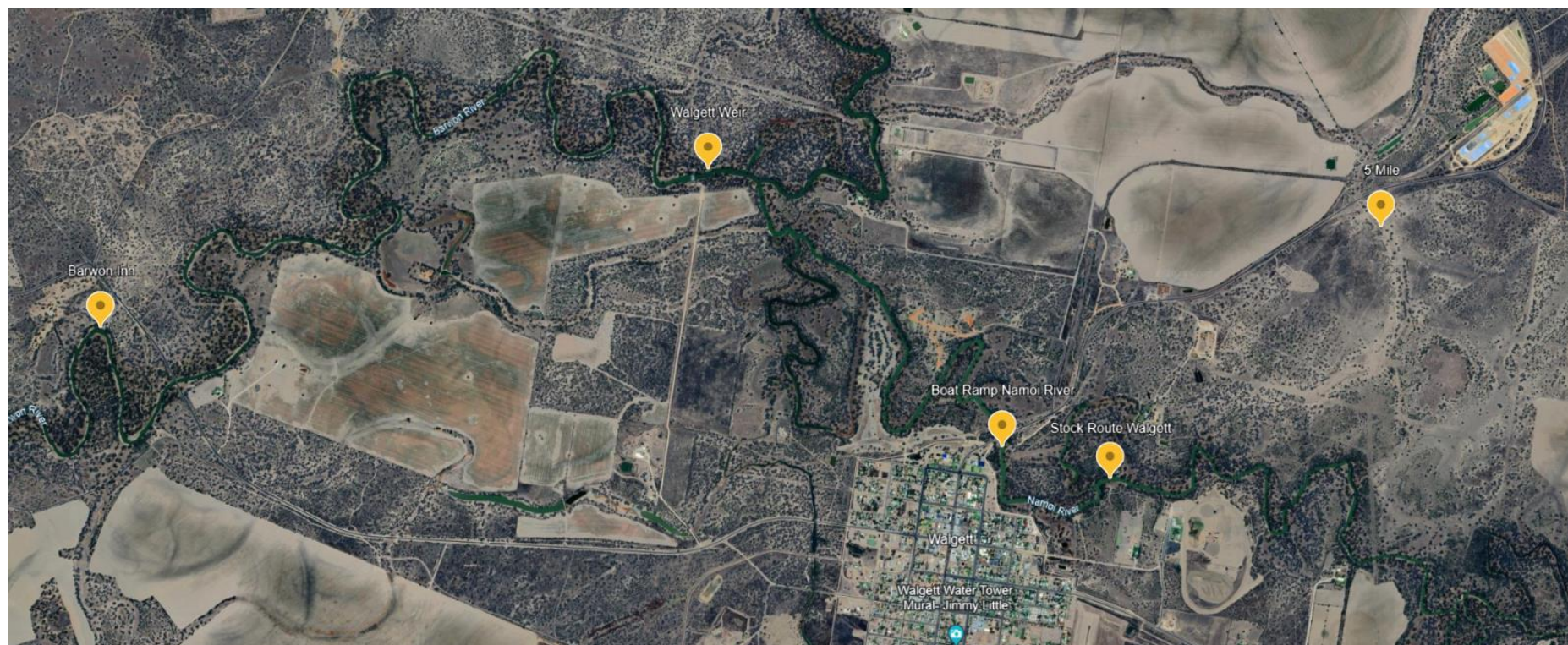
The Dharriwaa Elders Group River Rangers are conducting weekly water quality testing, measuring a range of factors that affect the quality of the river water. Different results affect the health of native animals and plants, and the health of the people that rely on the river for food and water.



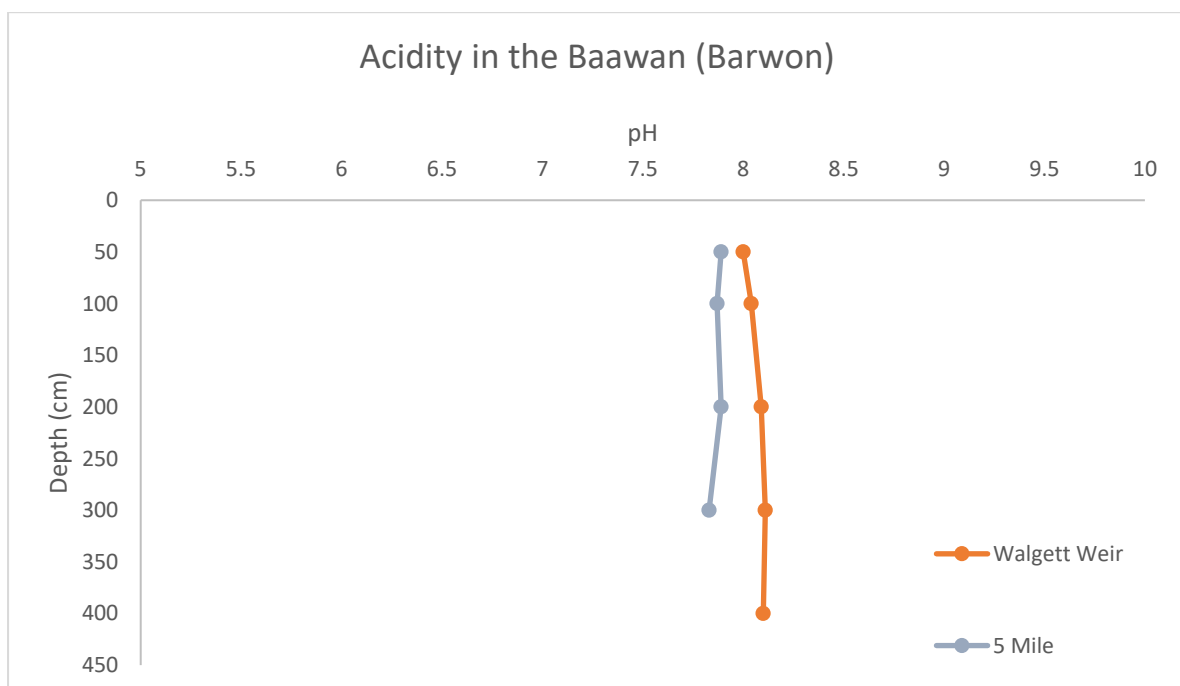
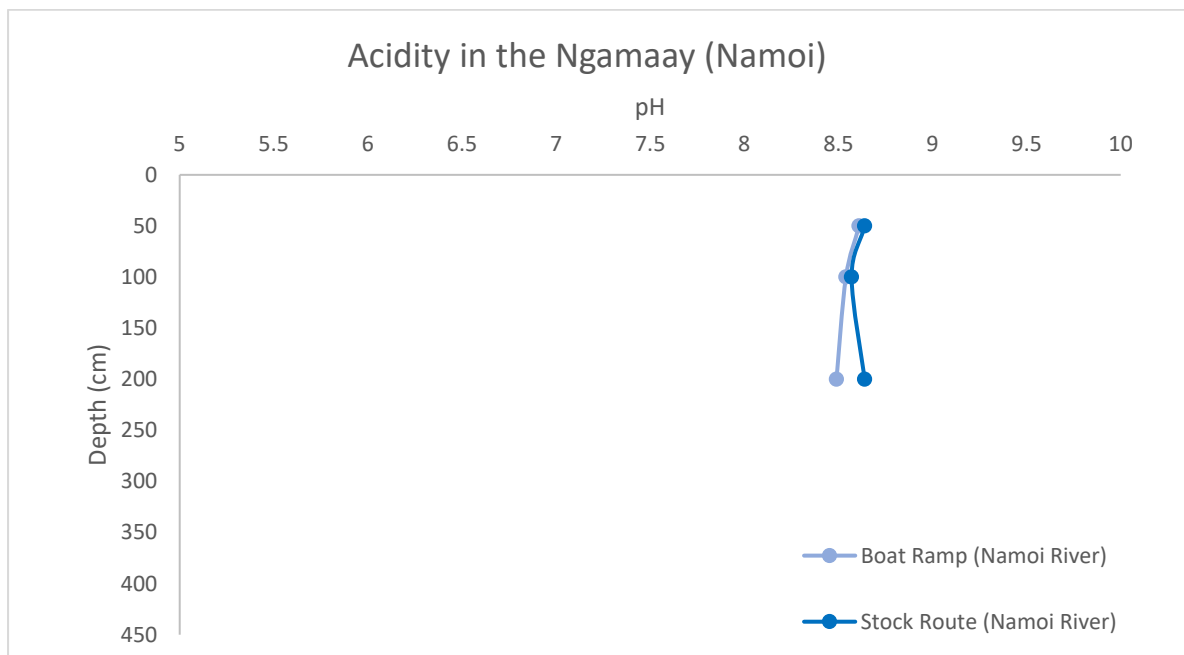
(Picture: Dharriwaa Elders Group area of interest)



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



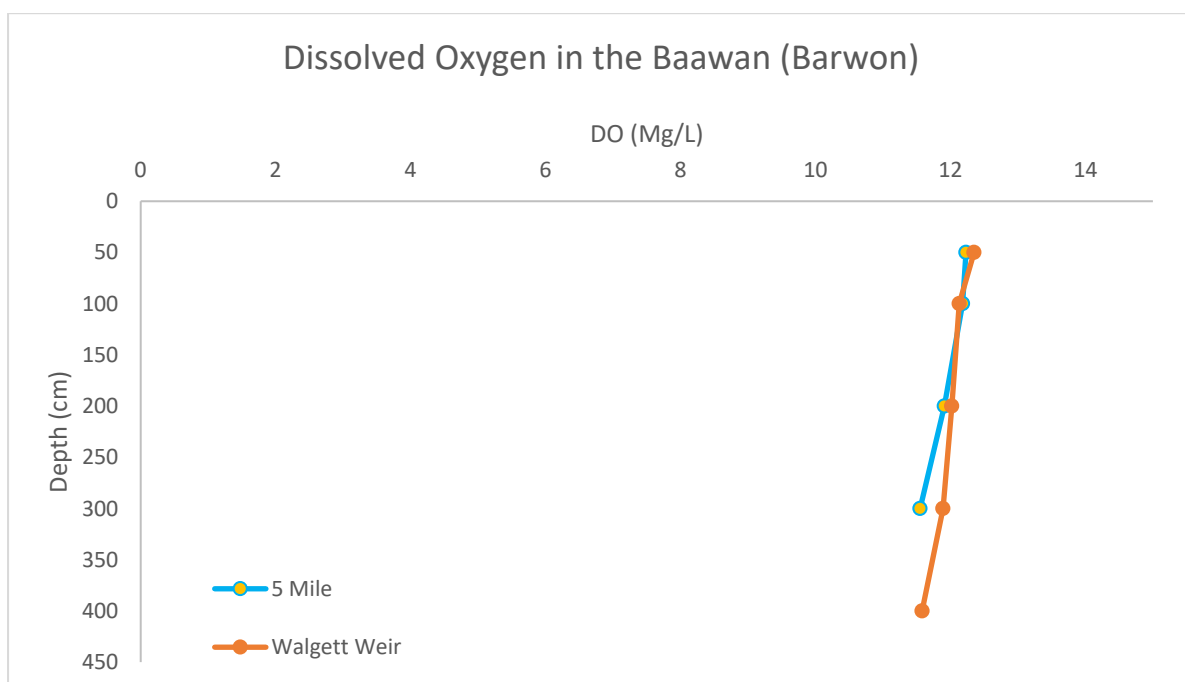
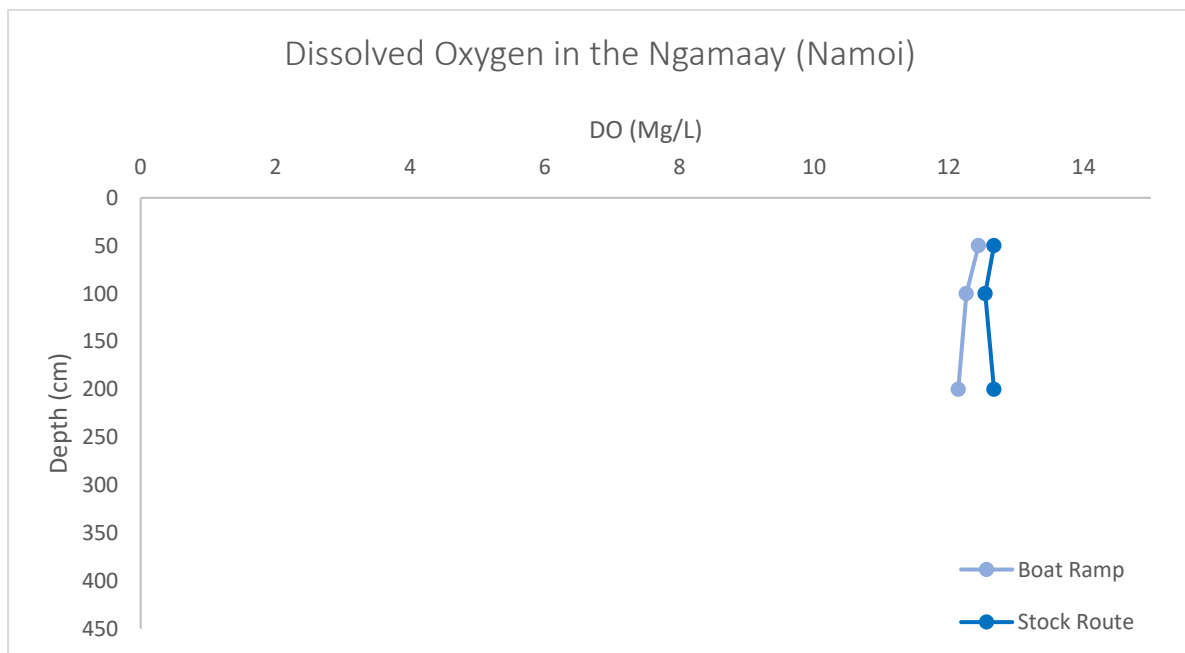
## Acidity in the Ngamaay and Baawan Rivers



The pH readings at both sites on the Ngamaay River are outside of the healthy range. The pH measured on the Baawan River are within the healthy range at both sites. The maximum reading is 8.64 and the minimum is 7.83.

**Healthy range: 6.5 - 8.5 pH**

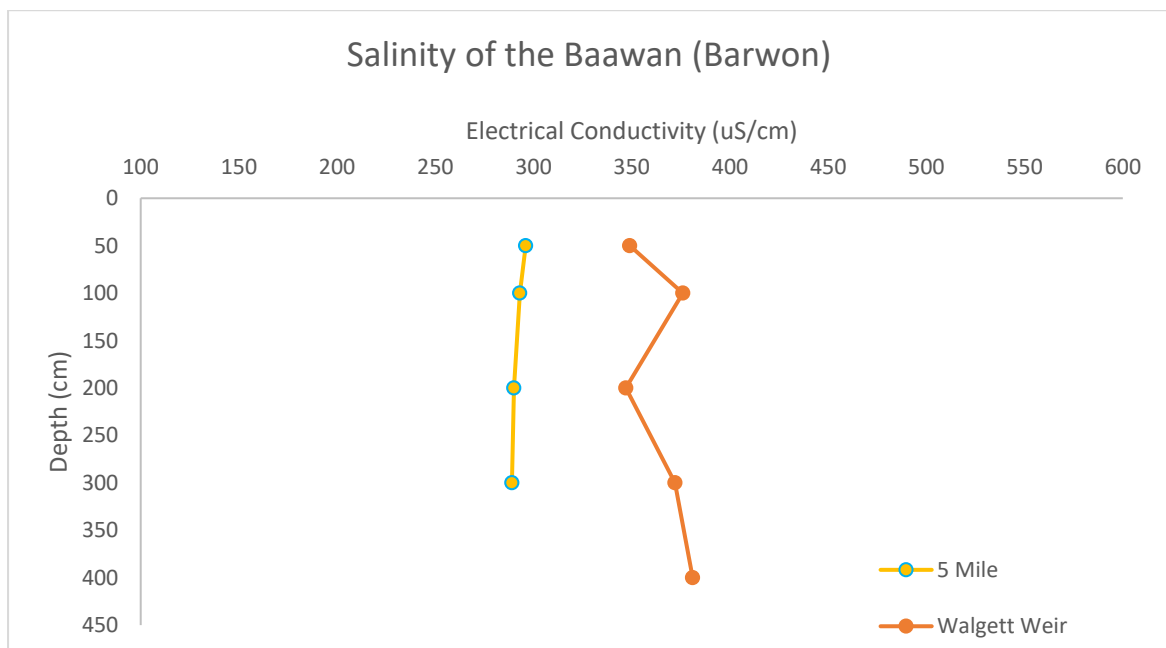
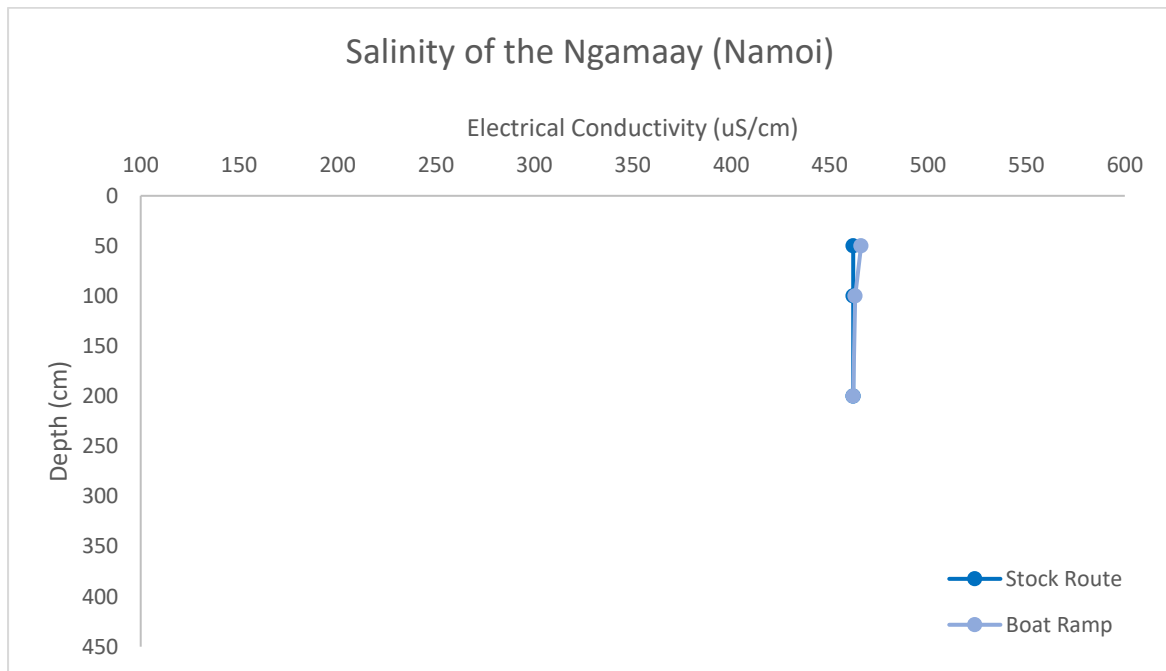
## Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen readings at all sites on the Baawan and Ngamaay River are high and outside the healthy range. The maximum reading is 12.67 and the minimum reading is 11.55.

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

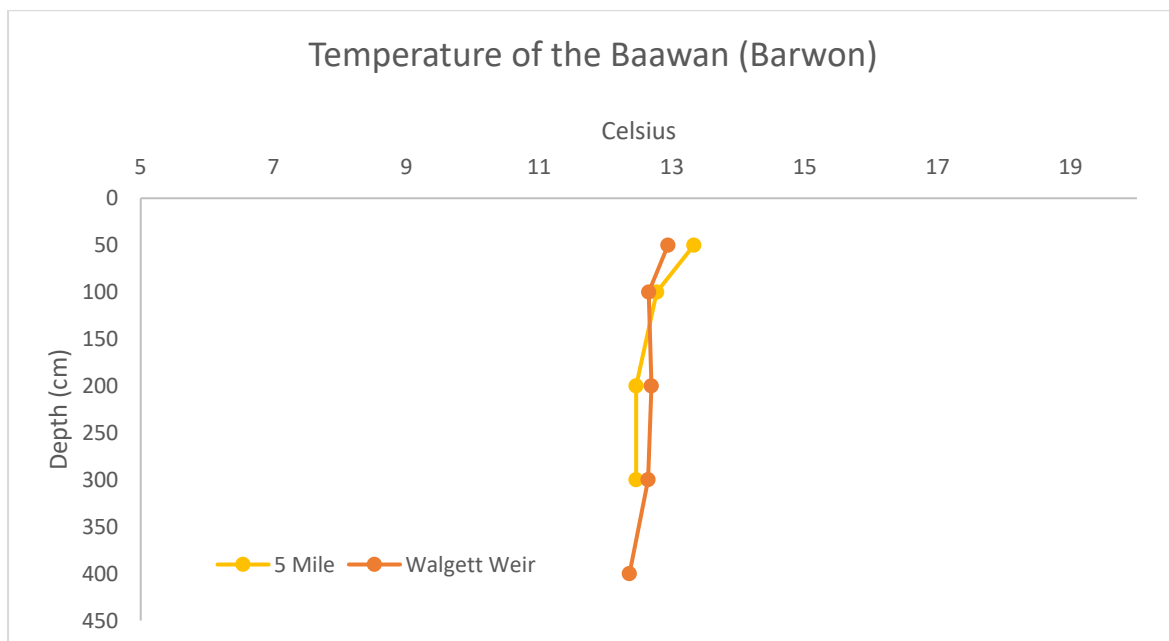
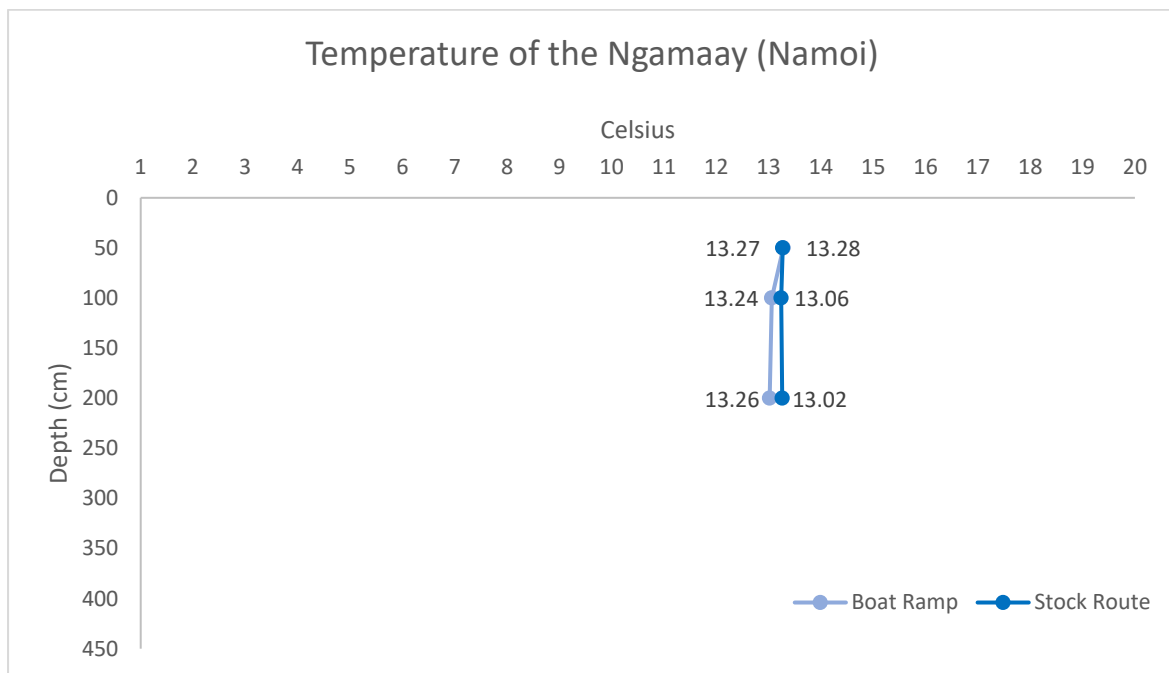
## Salinity in the Ngamaay and Baawan Rivers



The salinity measured at all sites on the Ngamaay and Baawan Rivers are within the healthy range. The maximum reading is 466 and the minimum reading is 290.

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

## Temperature in 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 13.33 and the minimum reading is 12.36.

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

## **Conclusion**

The pH readings at the Stock Route and Boat Ramp on the Ngamaay River are outside the healthy range. The readings indicate that the water is more on the alkaline side. The pH measured on the Baawan River at both the 5 Mile and the Walgett Weir are inside the healthy range. The water is not too acidic or too 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.