



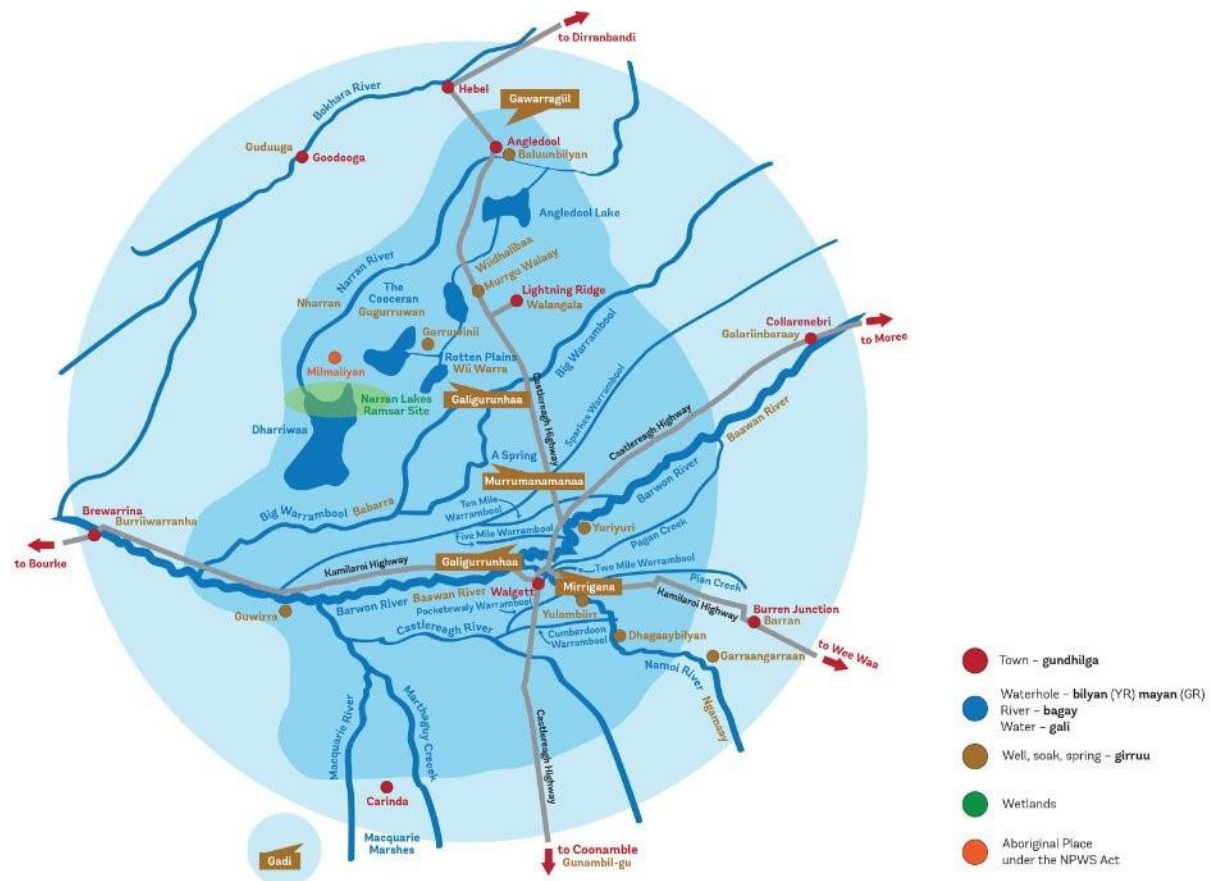
# Weekly Water Monitoring Report

2nd December 2024

# Introduction

This data was collected on Monday 2<sup>nd</sup> December between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

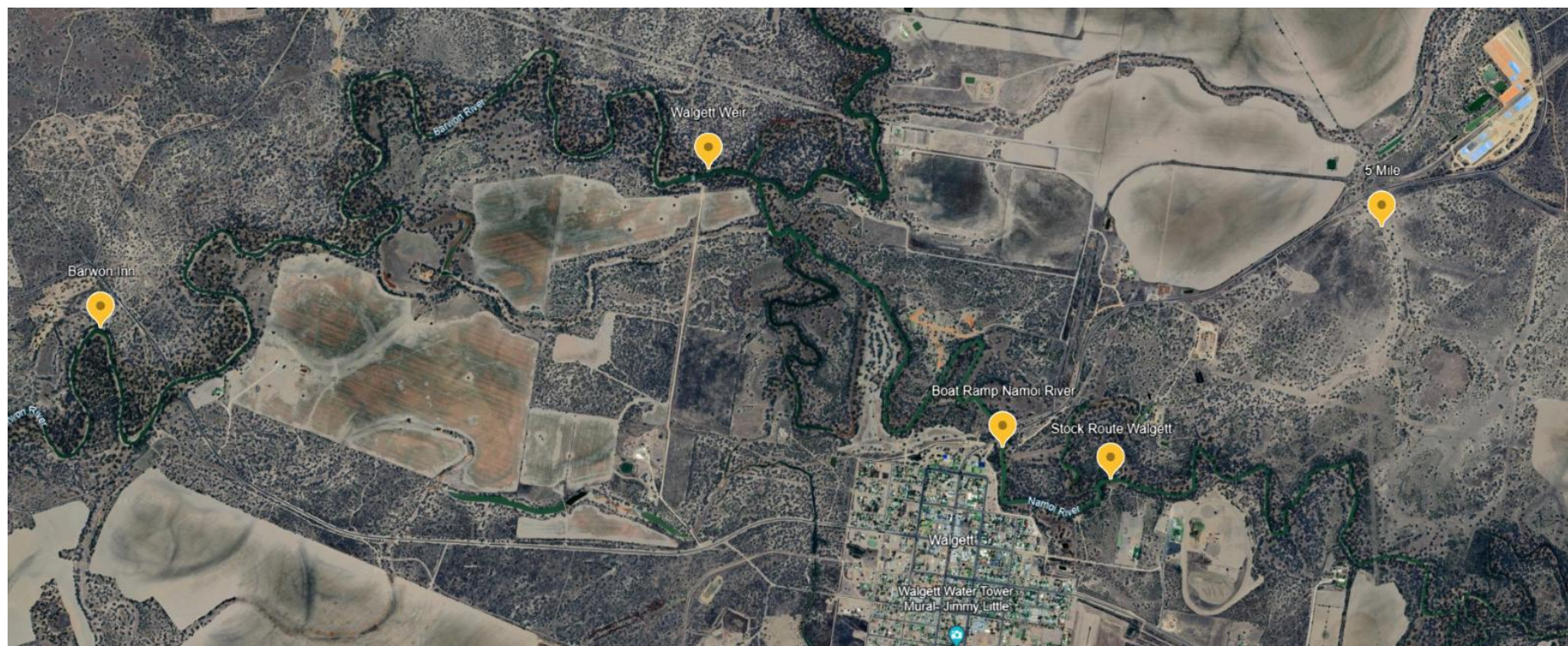
The Dharriwaa Elders Group River Rangers are conducting weekly water quality testing, measuring a range of factors that affect the quality of the river water. Different results affect the health of native animals and plants, and the health of the people that rely on the river for food and water.



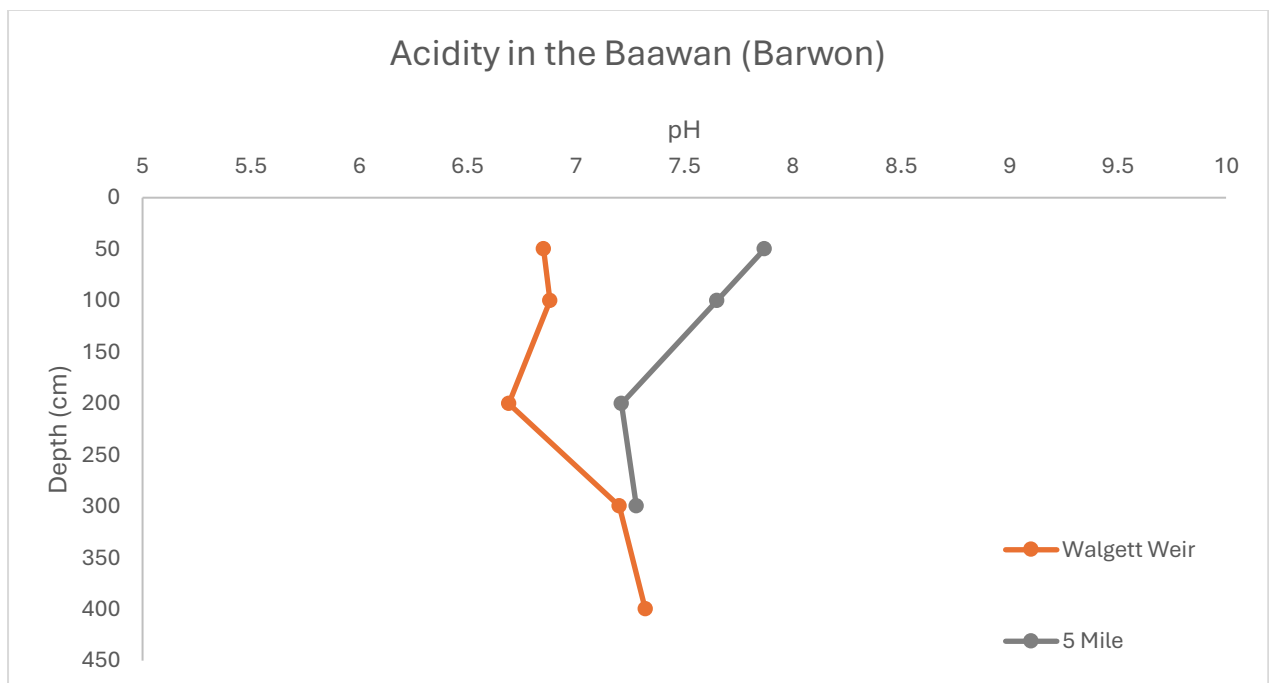
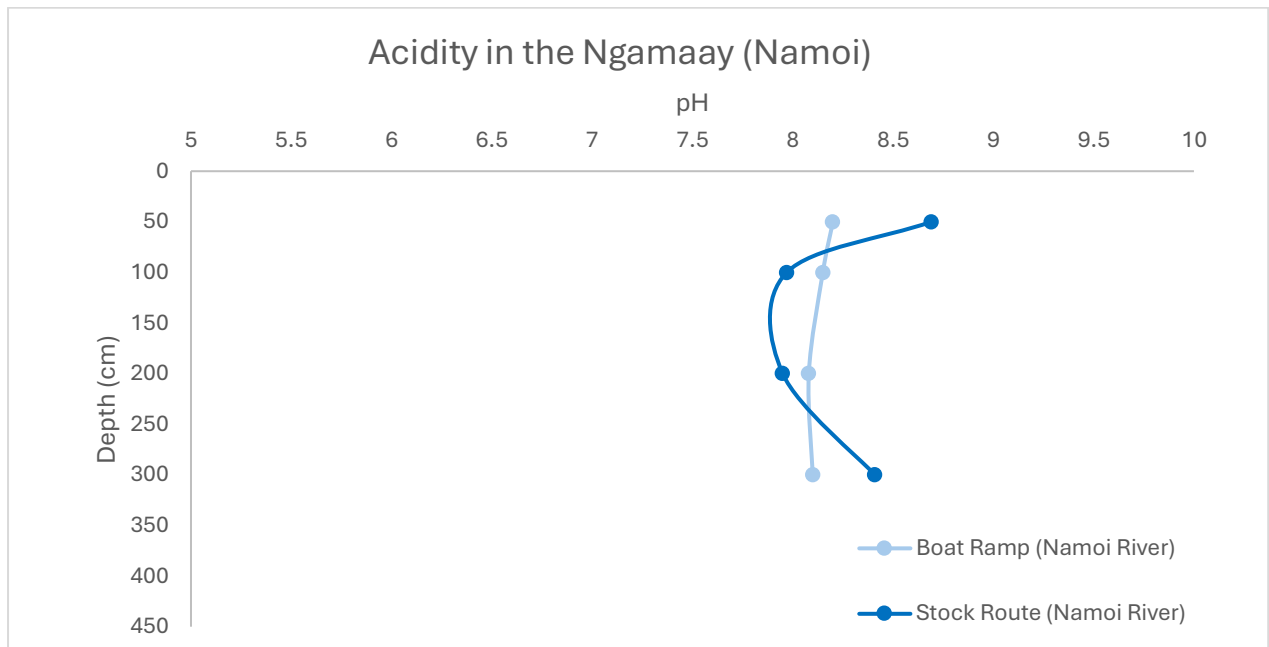
(Picture: Dharriwaa Elders Group area of interest)



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



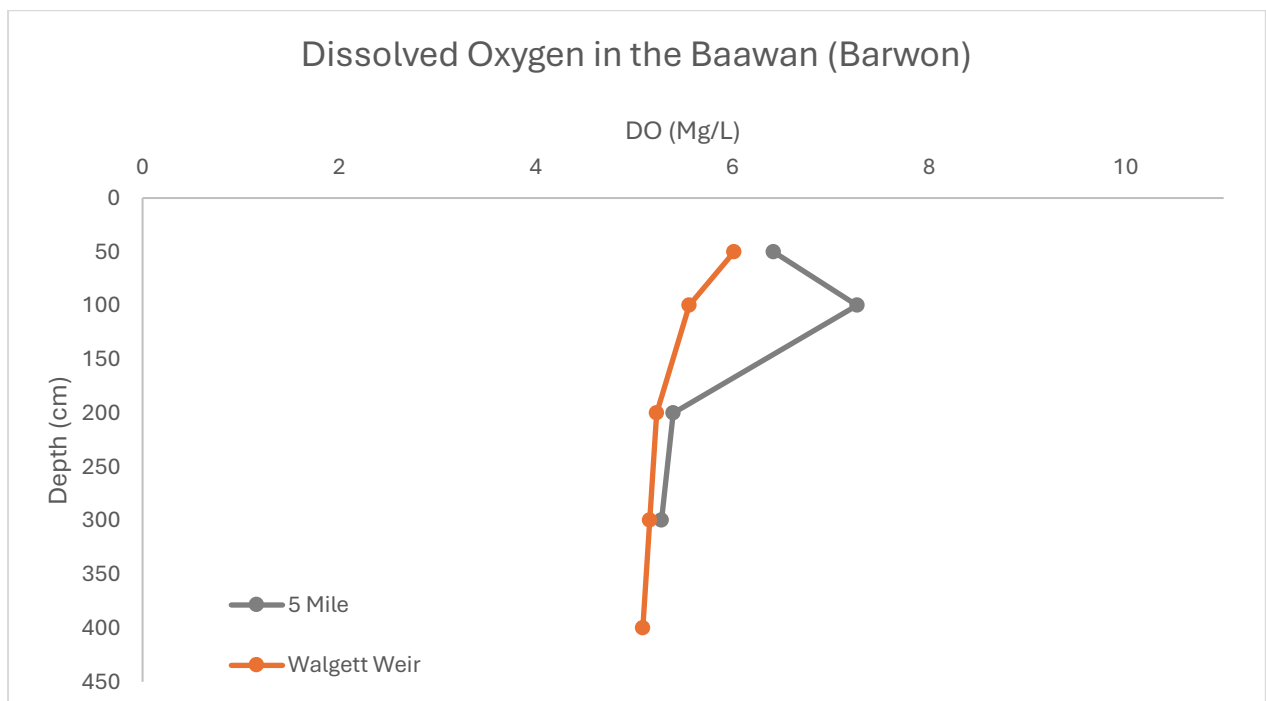
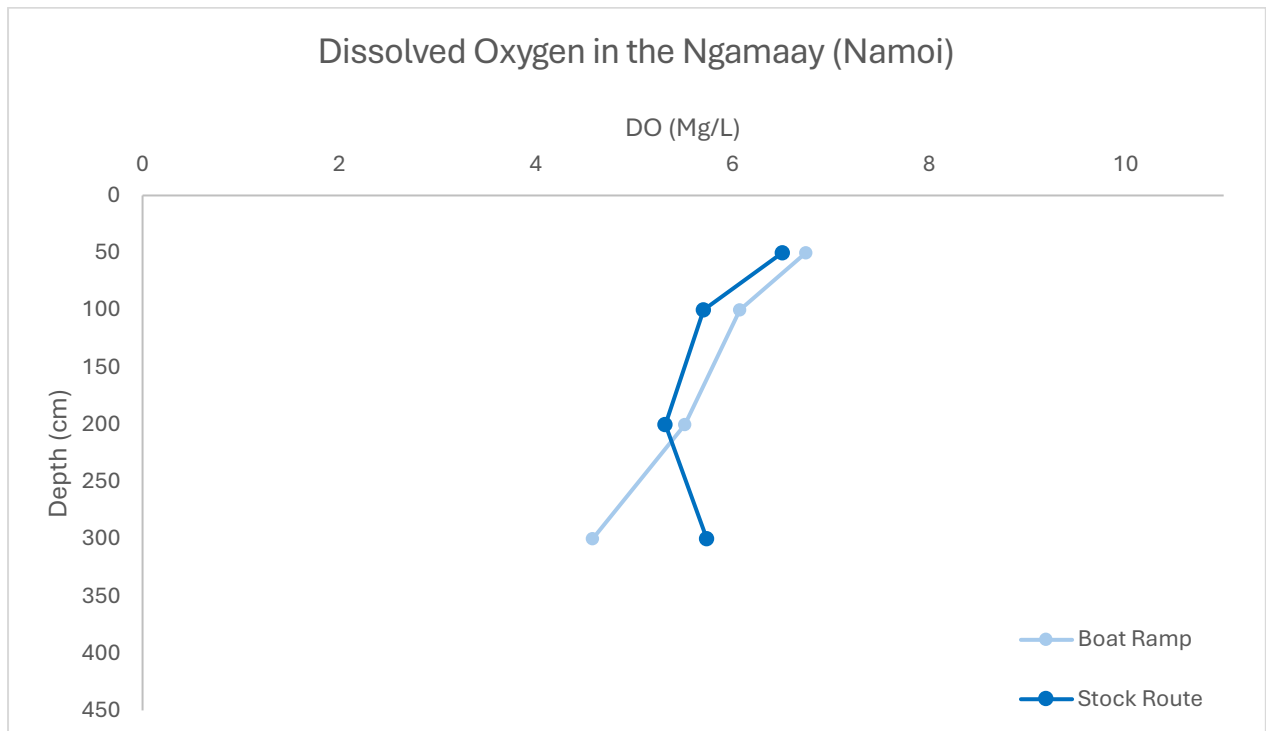
## Acidity in the Ngamaay and Baawan River



The pH in the Baawan is at a healthy level at all depths. The pH in the Ngamaay is at a healthy level at all sites except Stock Route at 50cm. The reading is not high enough to cause concern. The minimum reading is 6.69 and the maximum reading is 8.69.

**Healthy range: 6.5 - 8.5 pH**

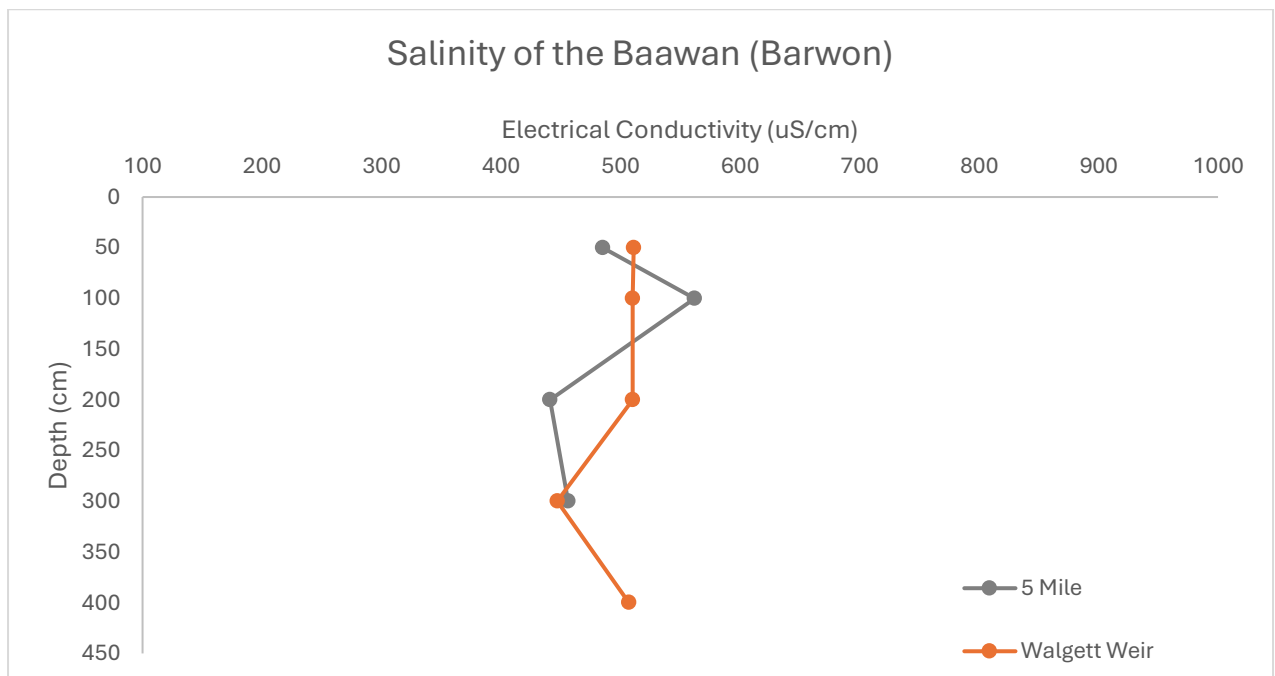
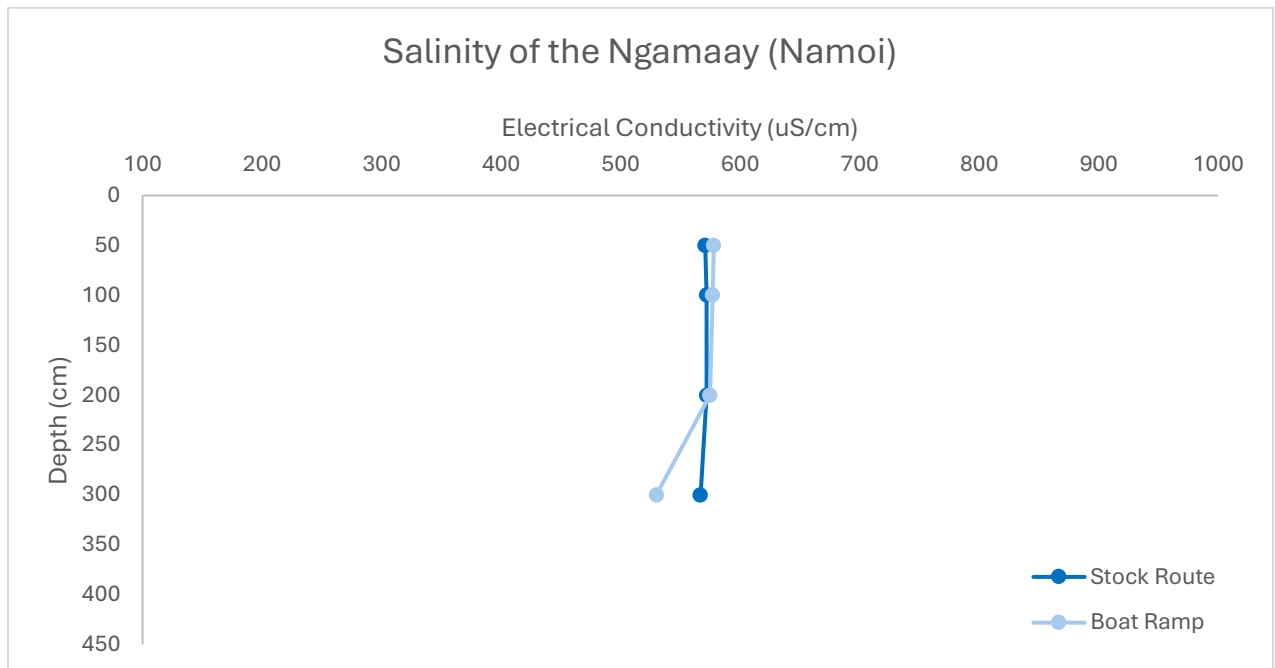
## Dissolved Oxygen in the Ngamaay and Baawan River



The dissolved oxygen readings are within healthy levels at 50cm at all sites and at 1 metre at 5 Mile but drop below the healthy range as the readings become deeper. The readings are mostly not cause for concern except at the Boat Ramp in the Ngamaay, where it is quite low. The minimum reading is 4.58 and the maximum is 7.27.

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

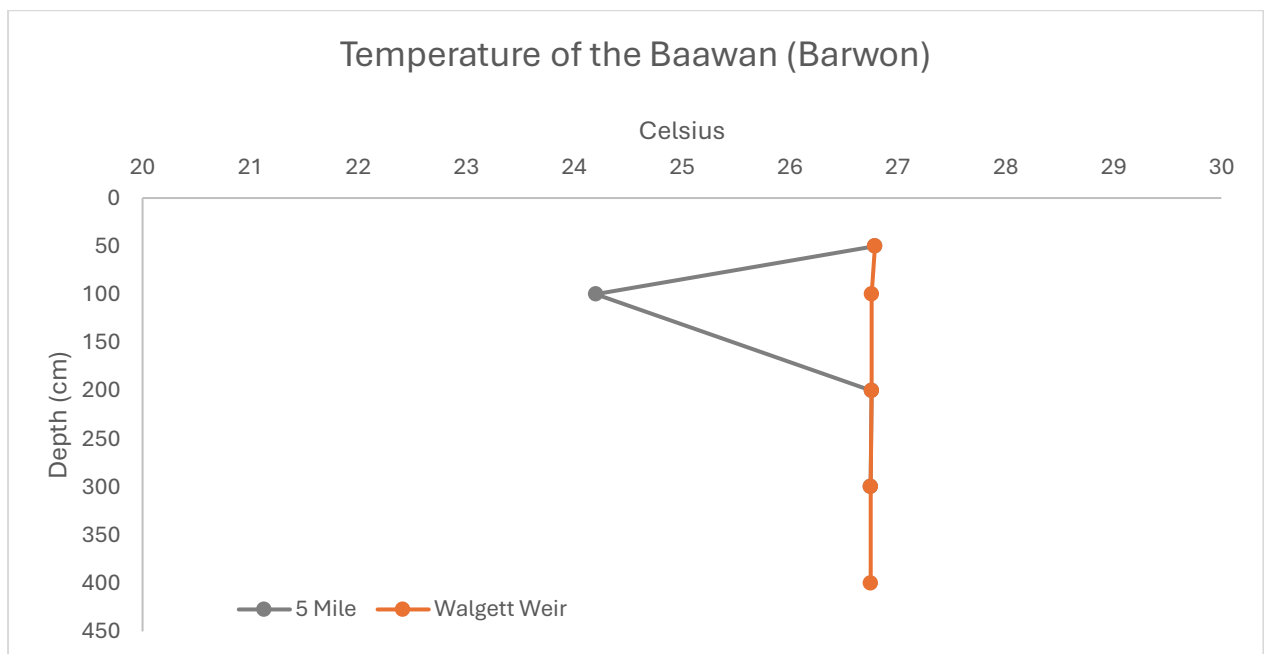
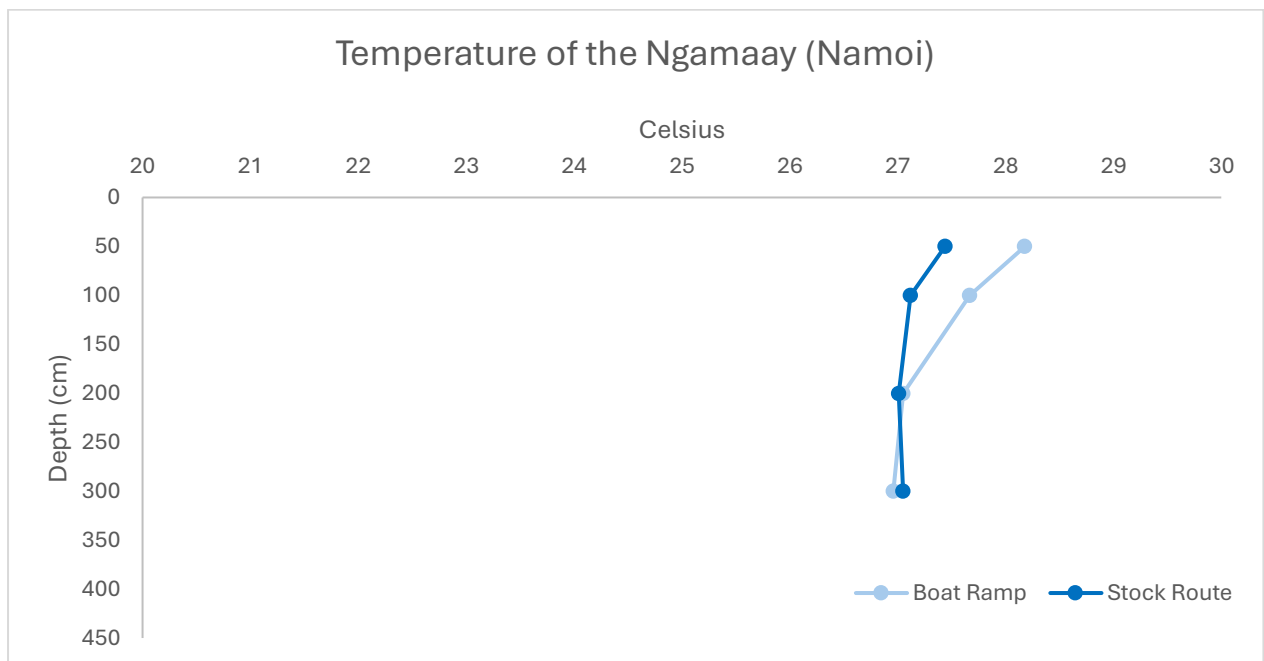
## Salinity in the Ngamaay and Baawan Rivers



The salinity levels at all sites and depths are within the healthy range. The minimum reading is 456 and the maximum reading is 577.

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

## Temperature in Ngamaay and Baawan River



The temperature at all depths and sites is within the healthy range except for 50cm at Boat Ramp where it is slightly outside the healthy range. The temperatures are mostly within a healthy range though, which means there is no cause for concern. The minimum reading is 24.2 and the maximum reading is 28.18.

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

## **Conclusion**

The pH at all sites is within a healthy level except at Stock Route at 50cm. There is little variation between sites and depths which is good for freshwater fish.

The dissolved oxygen levels are within the healthy range at shallow depths at all sites but drop outside the healthy range as the water gets deeper. This is not an unusual phenomenon but should be monitored as the lowest reading is 4.58.

The salinity at all sites and depths is within a healthy range.

The temperature at all sites is within a healthy level except Boat Ramp where it is slightly high. However, this is normal for the time of year when the external temperatures are quite high. The rest of the readings are within the healthy range which is good for freshwater fish.