



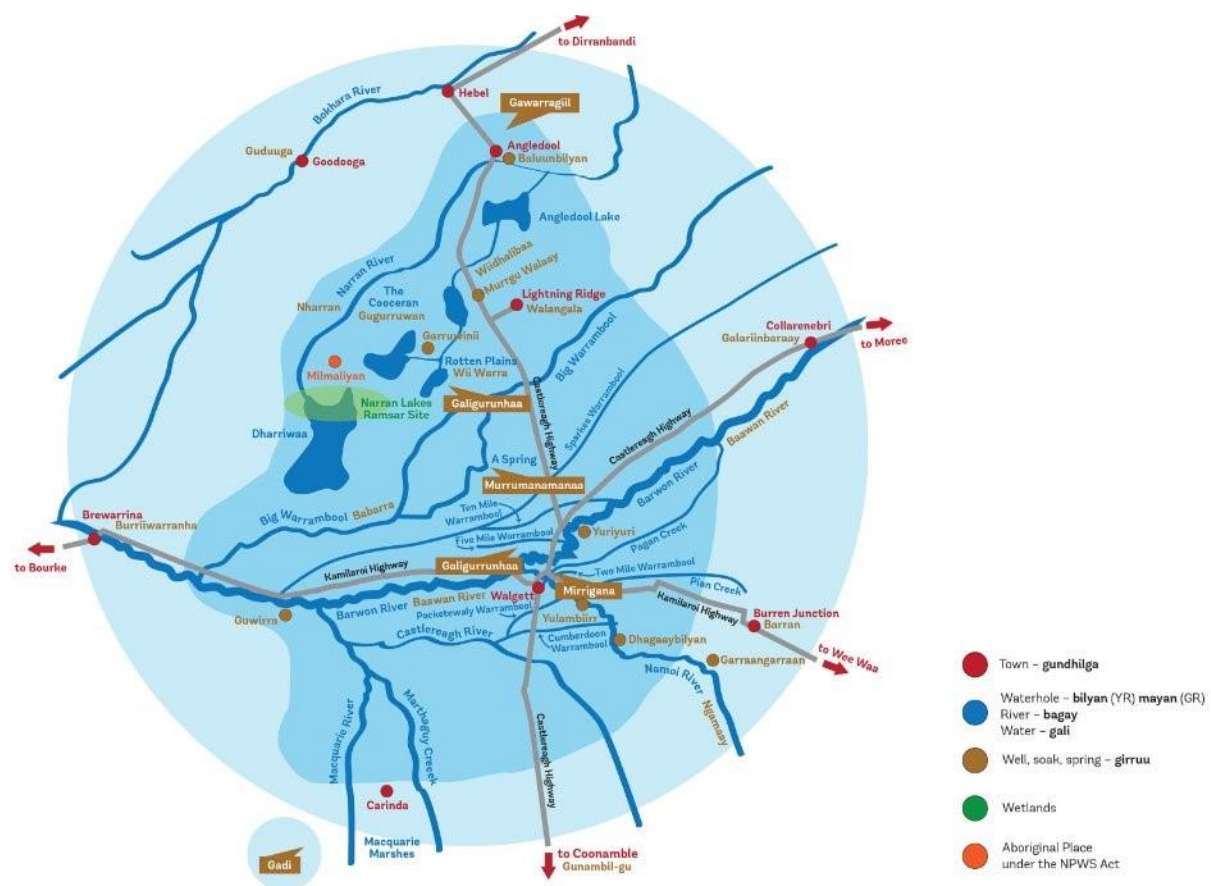
# Weekly Water Monitoring Report

26th November 2024

## Introduction

This data was collected on Tuesday 26<sup>th</sup> November between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

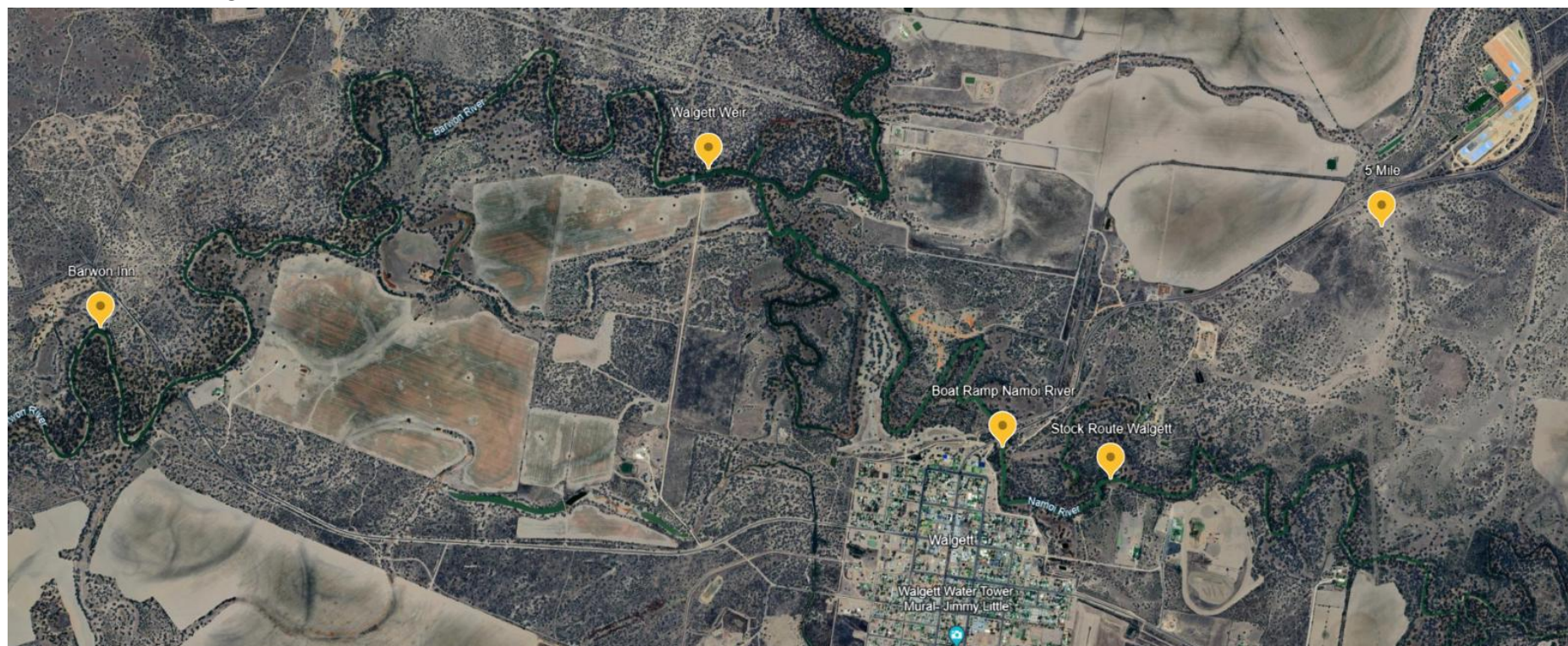
The Dharriwaa Elders Group River Rangers are conducting weekly water quality testing, measuring a range of factors that affect the quality of the river water. Different results affect the health of native animals and plants, and the health of the people that rely on the river for food and water.



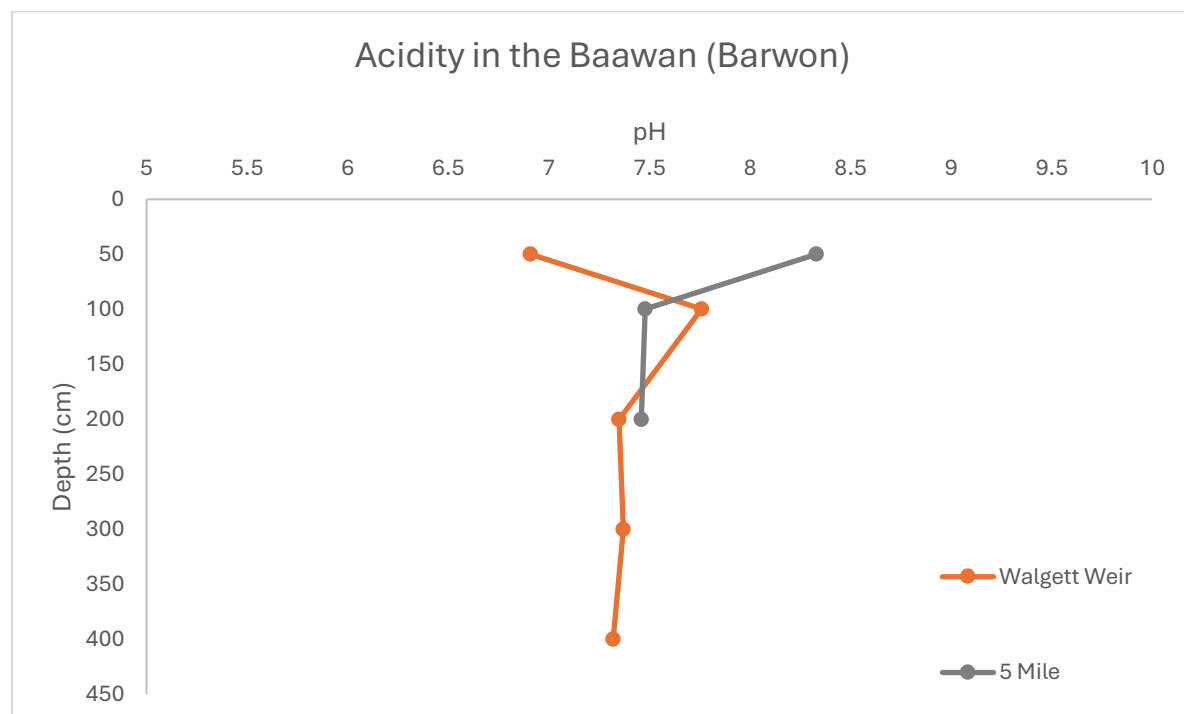
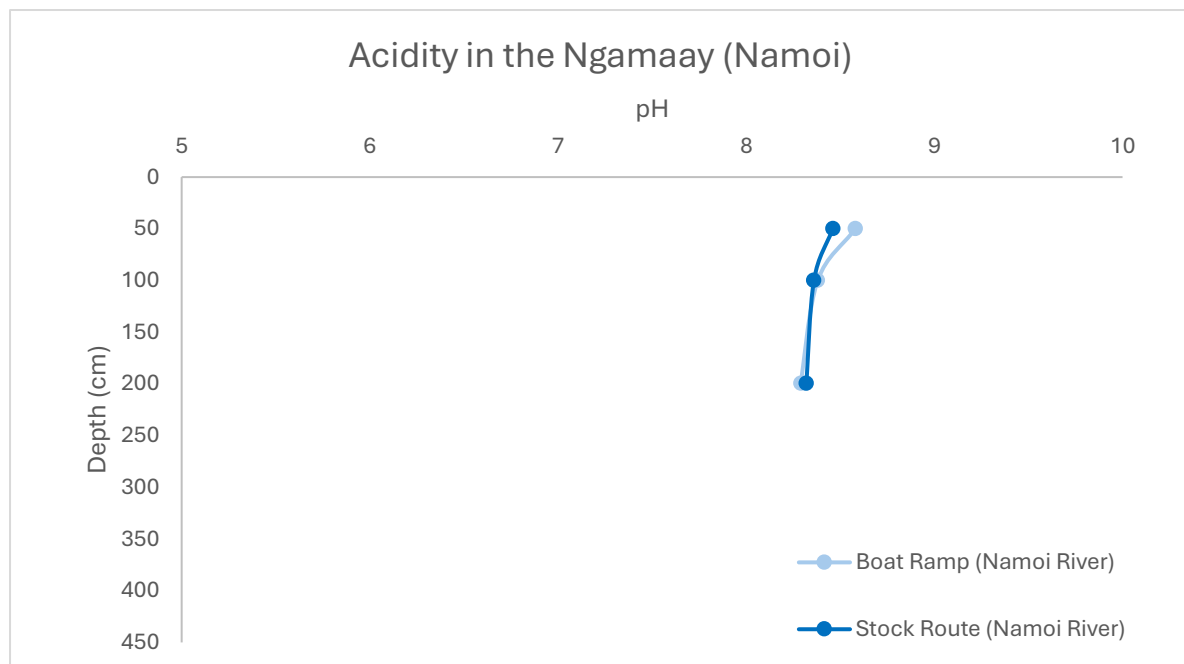
(Picture: Dharriwaa Elders Group area of interest)



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



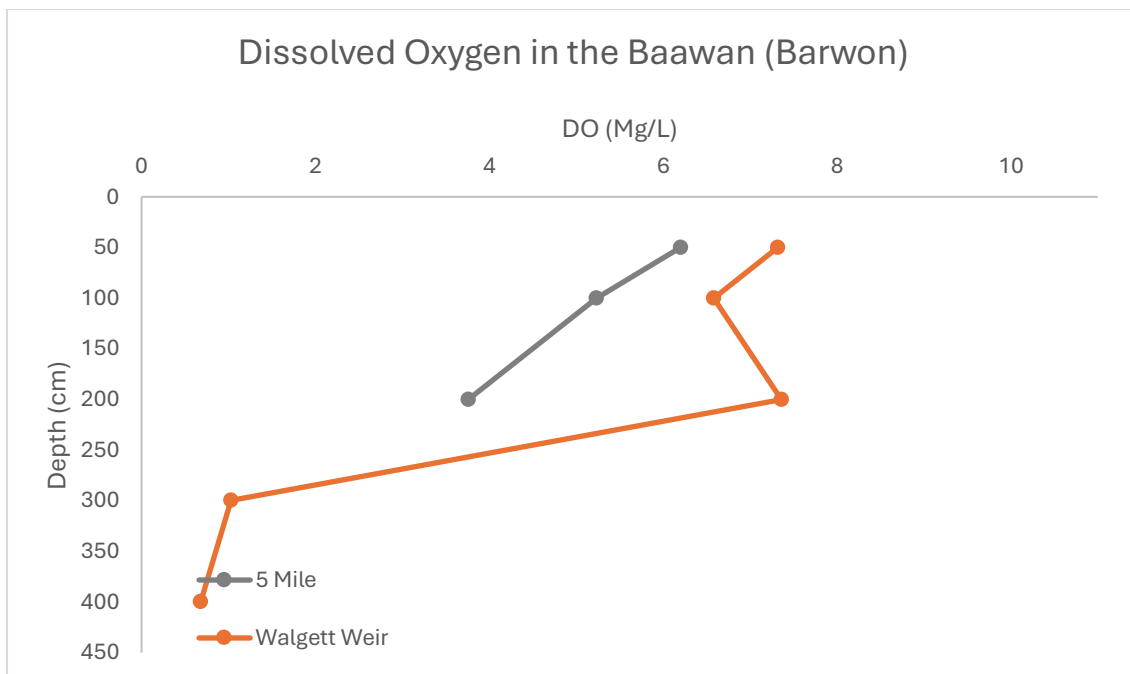
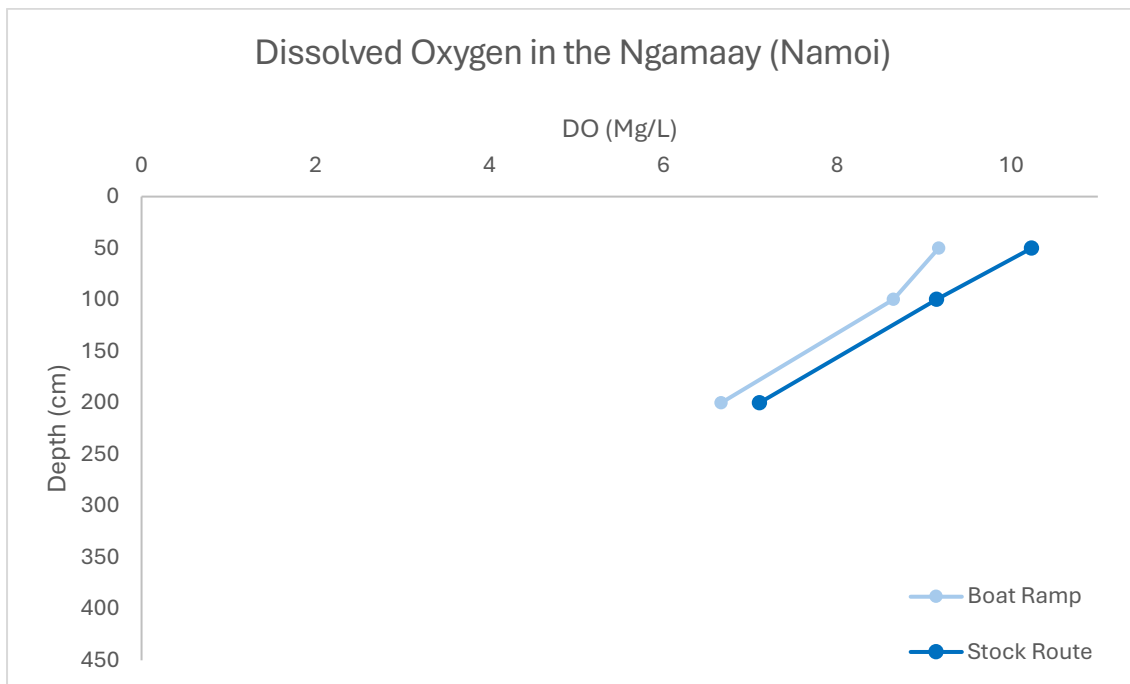
## Acidity in the Ngamaay and Baawan River



The pH measured at all sites on the Baawan and almost all sites on the Ngamaay is within a healthy range. The pH at 50cm on the Boat Ramp site on the Ngamaay is slightly outside the healthy range, but it is not high enough to be of concern. The lowest reading is 6.91 and the highest reading is 8.58.

**Healthy range: 6.5 - 8.5 pH**

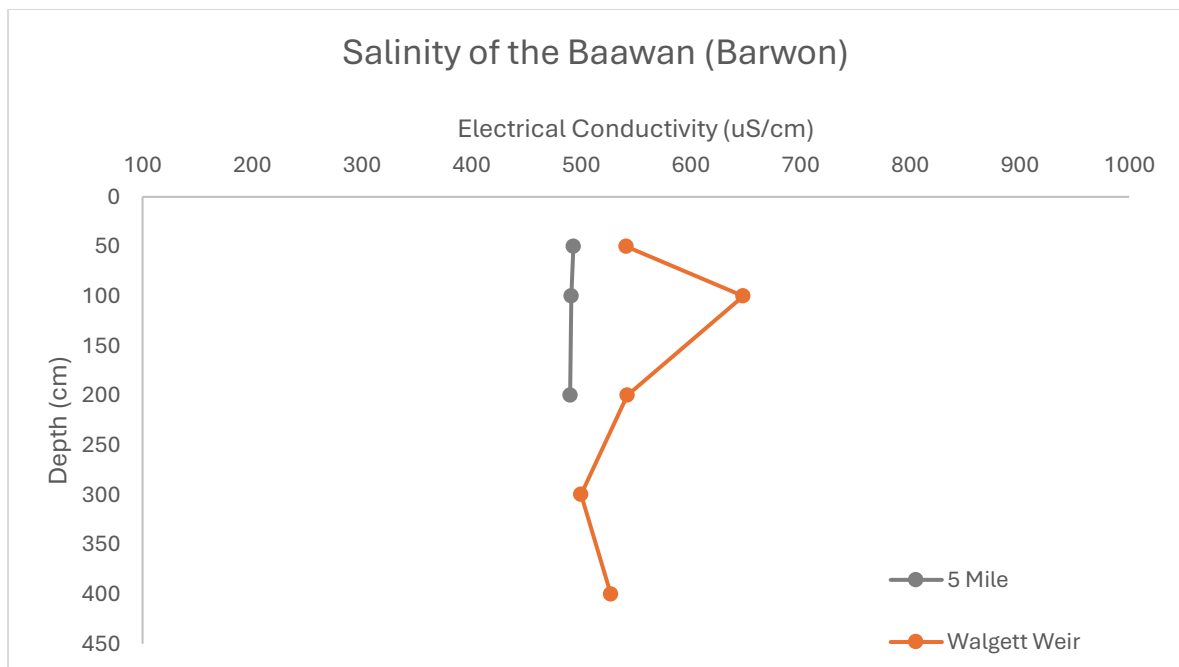
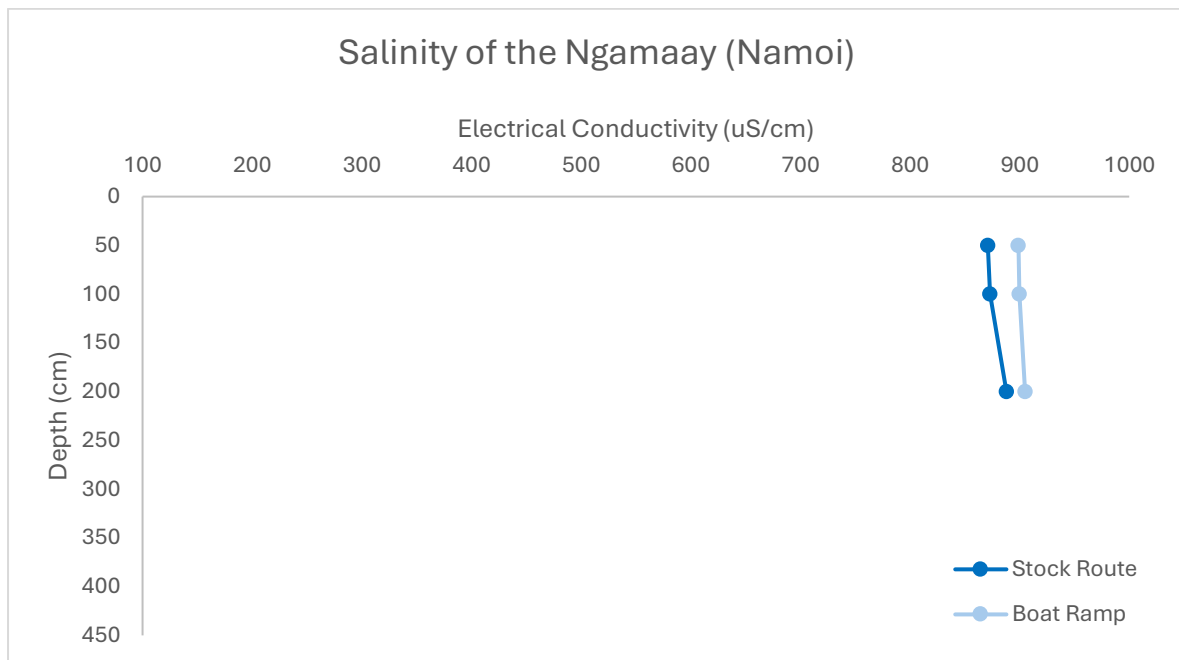
## Dissolved Oxygen in the Ngamaay and Baawan River



The dissolved oxygen (mg/L) measured at the Ngamaay are within the healthy range at 2 metres but are above the healthy range at 1 metre and 50 centimetres. The dissolved oxygen in the Baawan is in the healthy range at Walgett Weir above 1 metre and at the 5 Mile site at 50 centimetres. The values are too low at 5 Mile at 2 metres and at Walgett Weir from 3 metres and lower. The minimum reading is 0.68 and the maximum reading is 10.24.

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

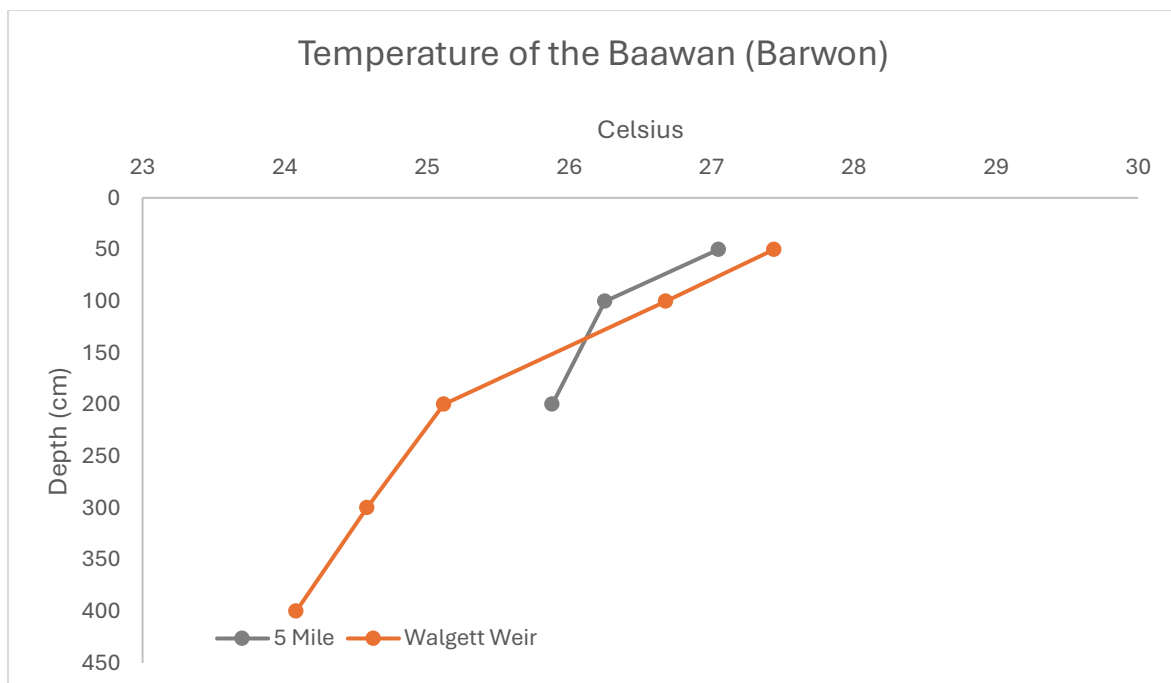
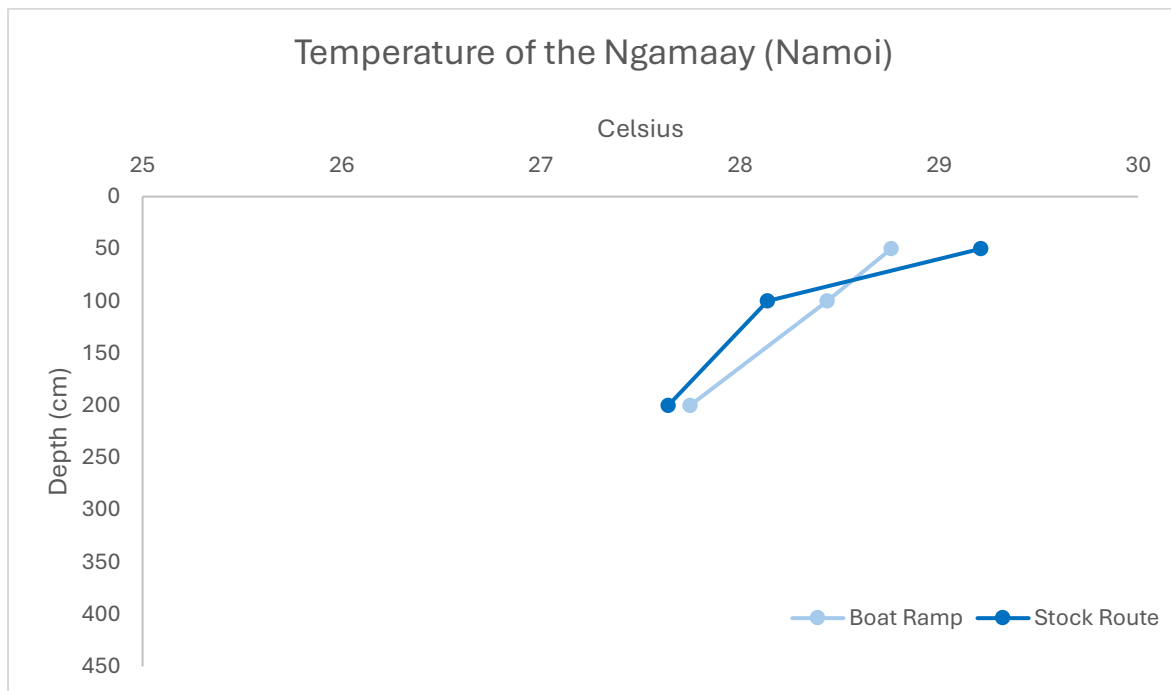
## Salinity in the Ngamaay and Baawan River



The electrical conductivity (EC) is the measurement of the salinity (salt) in the water. The EC measured at all sites at all depths are within a healthy range. This good for freshwater fish. The minimum reading is 490 and the maximum reading is 905.

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

## Temperature in Ngamaay and Baawan River



The temperature measured at the 5 Mile, Walgett Weir and the Boat Ramp are all within a healthy range. The temperature measured at the Stock Route on the Ngamaay River is outside the healthy range at 50 centimetres and the Boat Ramp at 1 metre and above but there is no danger to the fish within the river. The minimum reading is 24.08 and the maximum reading is 29.21. The temperatures are consistent across testing sites and depths which will not cause stress for fish.

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

## **Conclusion**

The pH at the Baawan sites and at almost all sites on the Ngamaay is within the healthy range. Only one site on the Ngaamay has a slightly high pH but it does not pose a risk to freshwater fish.

The dissolved oxygen at the Ngaamay is too high at 1 metre and above and are too low below 3 metres on the Ngamaay. These sites should be monitored but there are depths at each site in which the dissolved oxygen is a healthy level so there is minimal danger.

The salinity is at a healthy range at all sites and depths on the Baawan and Ngamaay.

The temperature is slightly high at the higher depths of the Ngamaay testing sites but at a healthy range deeper in the river. The temperatures on the Baawan are all within the healthy range.