



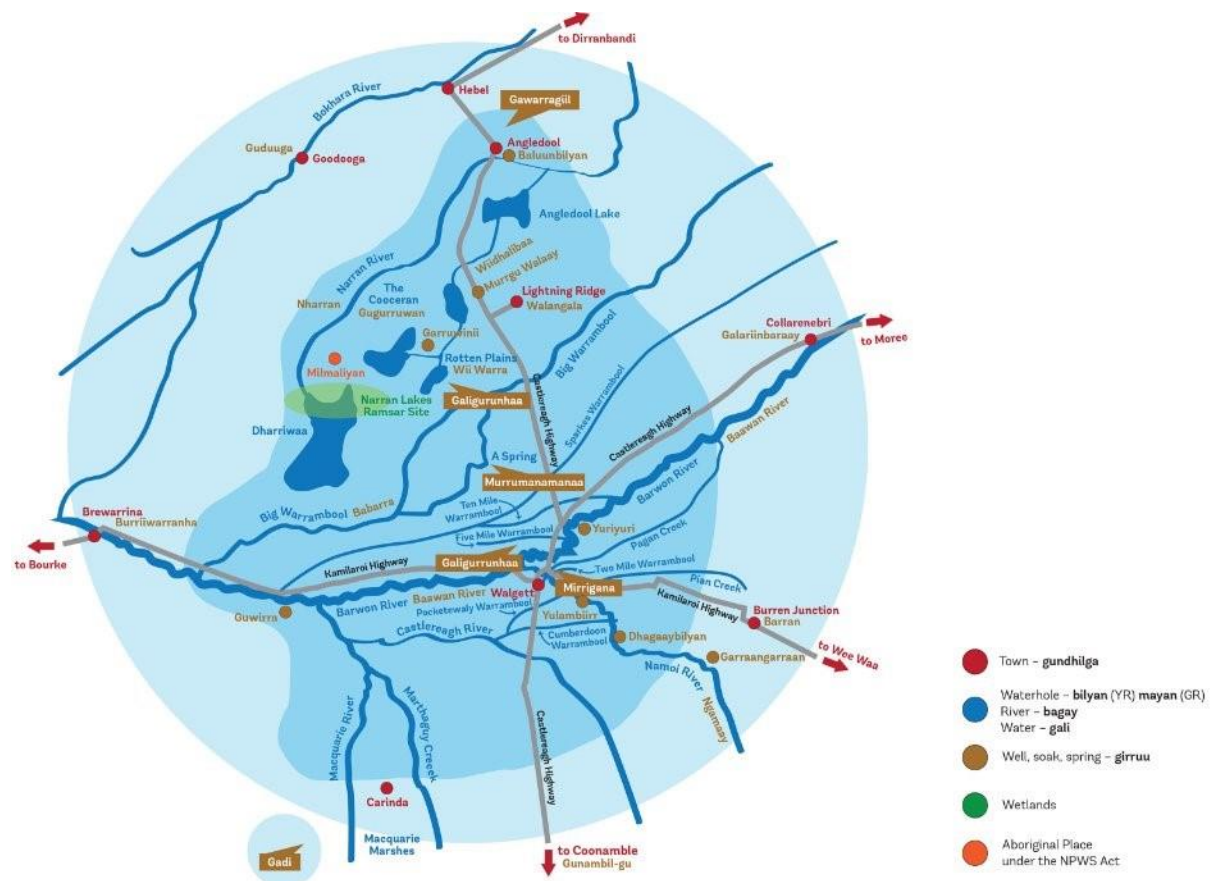
# Weekly River Monitoring Report

03/07/2025

# Introduction

This data was collected on Thursday 3<sup>rd</sup> July between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

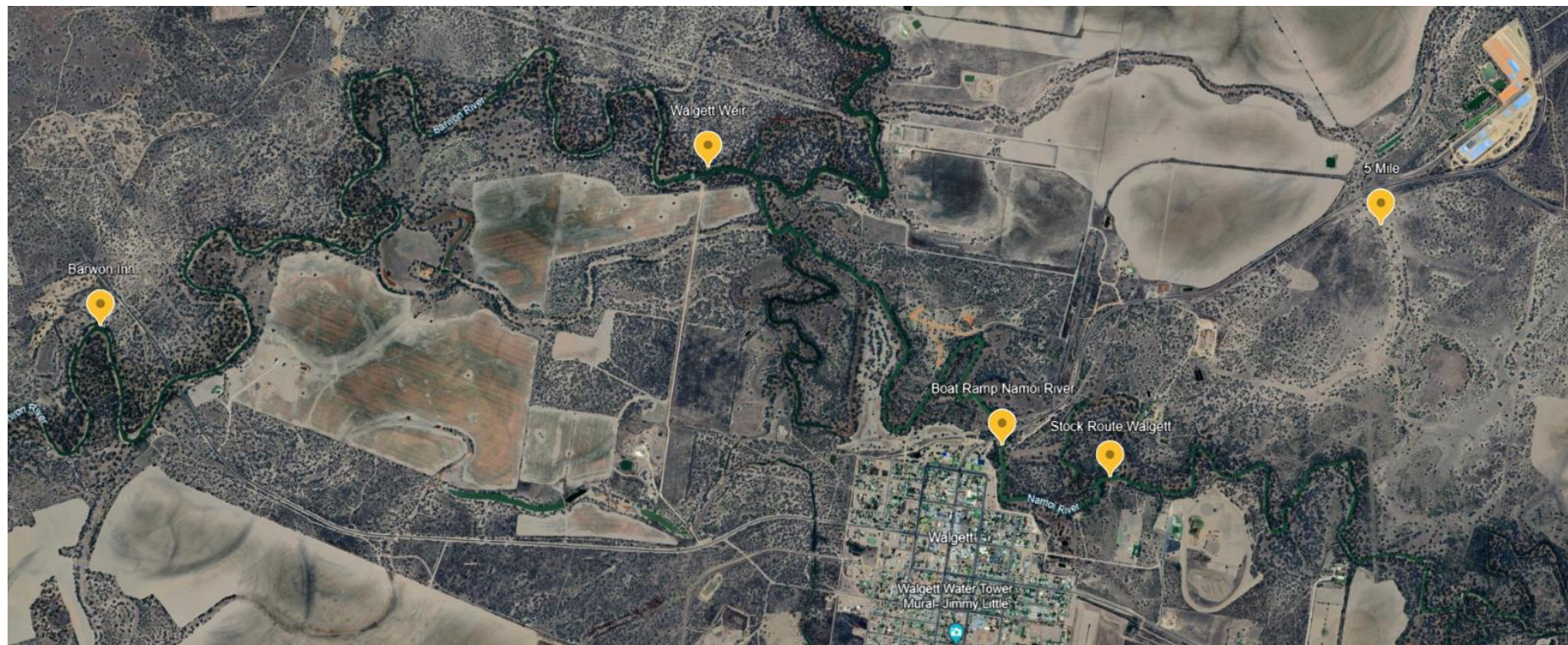
The Dharriwaa Elders Group River Rangers are conducting weekly water quality testing, measuring a range of factors that affect the quality of the river water. Different results affect the health of native animals and plants, and the health of the people that rely on the river for food and water.



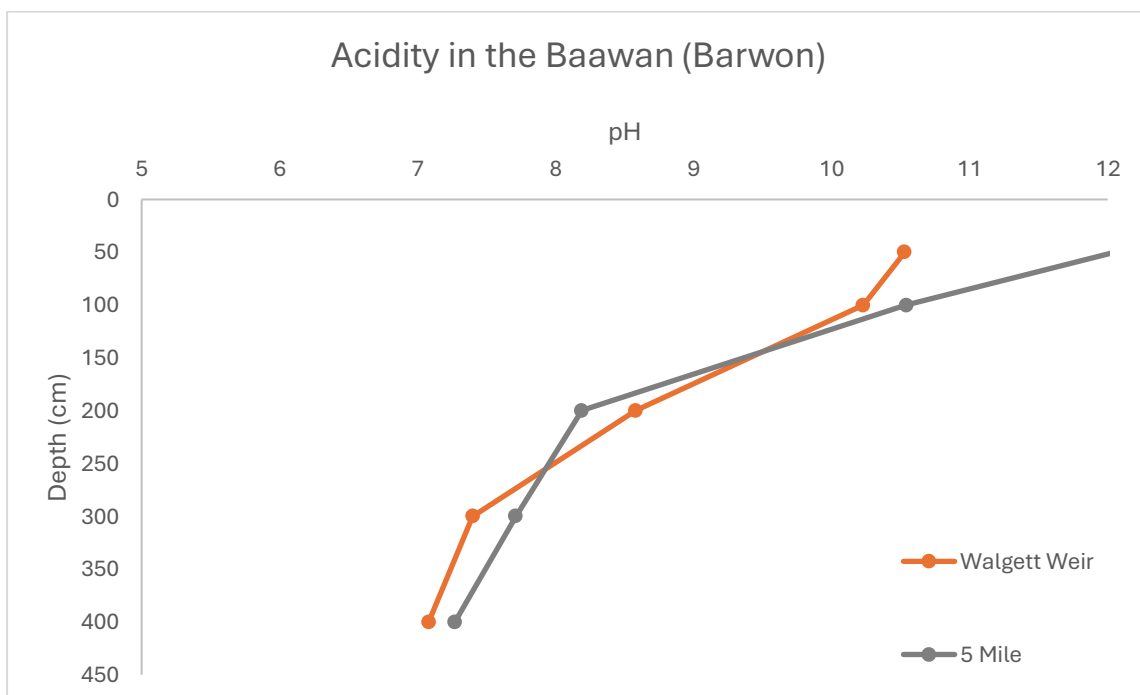
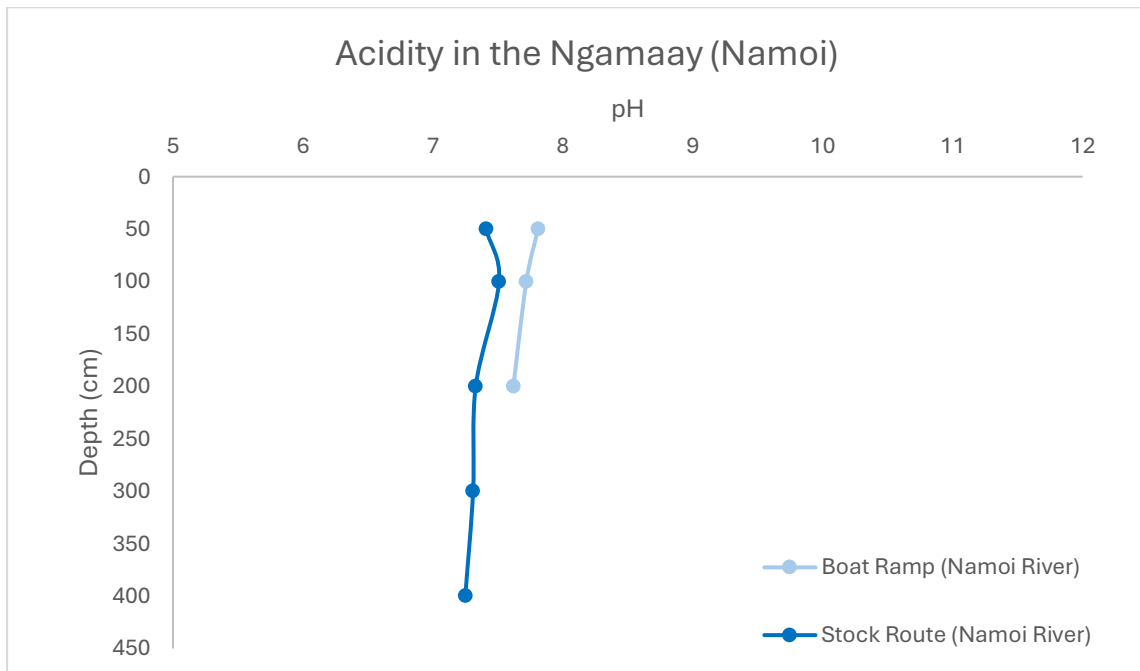
(Picture: Dharriwaa Elders Group area of interest)



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



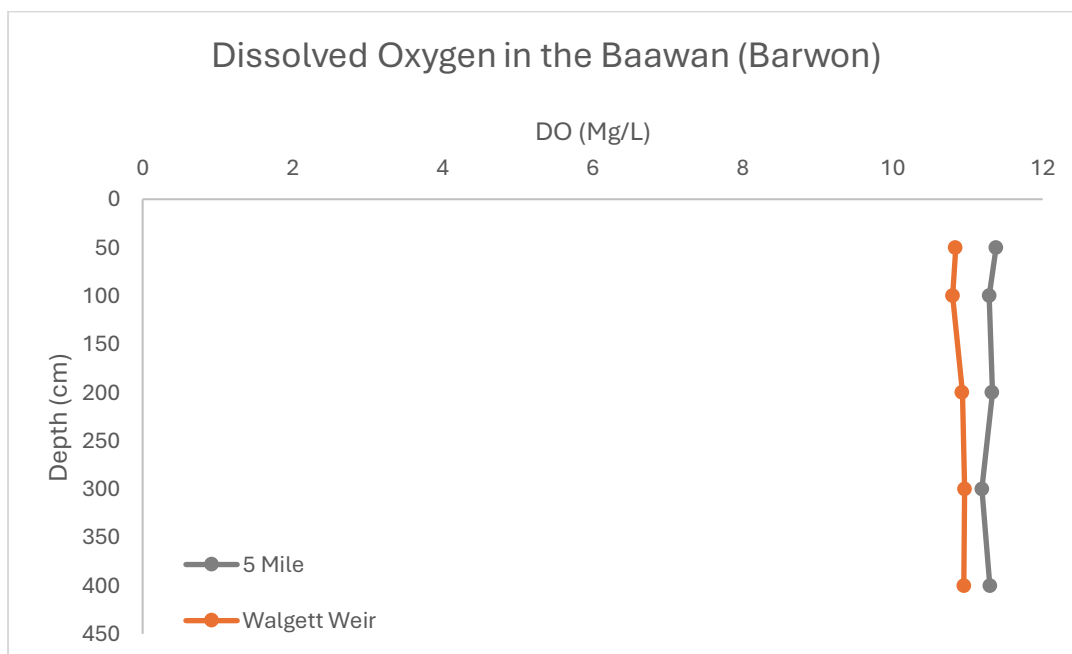
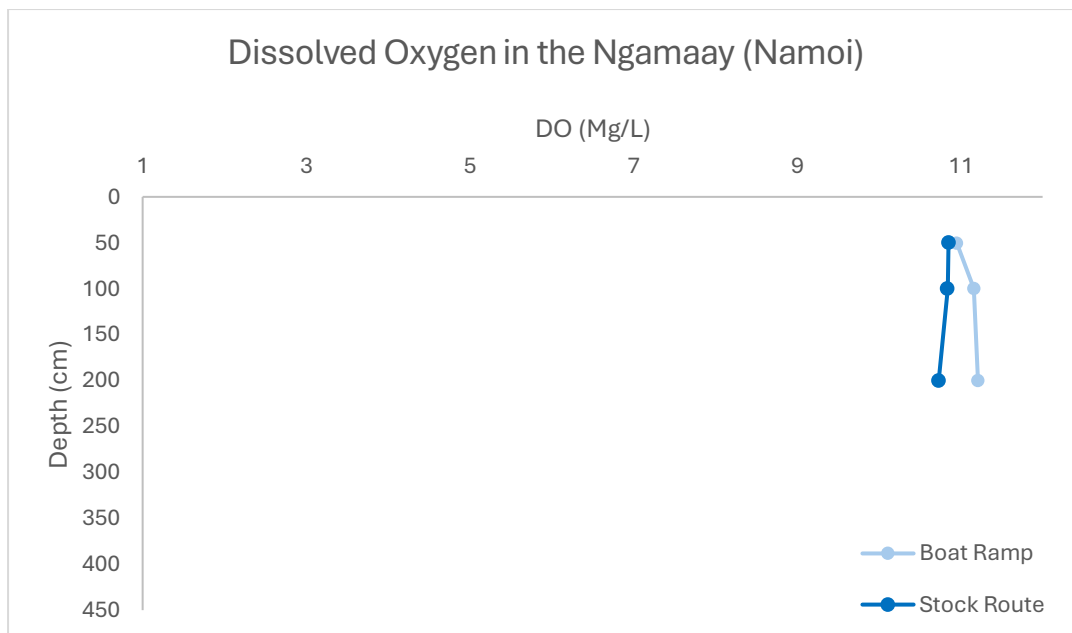
## Acidity in the Ngamaay and Baawan Rivers



In the Baawan River at 5 Mile the pH levels are just within or slightly outside the healthy range, but at Walgett Weir they are too high and are becoming too alkaline. They are just outside the healthy range at Boat Ramp in the Ngamaay. These levels will be monitored next week. The lowest reading is 8.07 and the highest reading is 9.86.

**Healthy range: 6.5 - 8.5 pH**

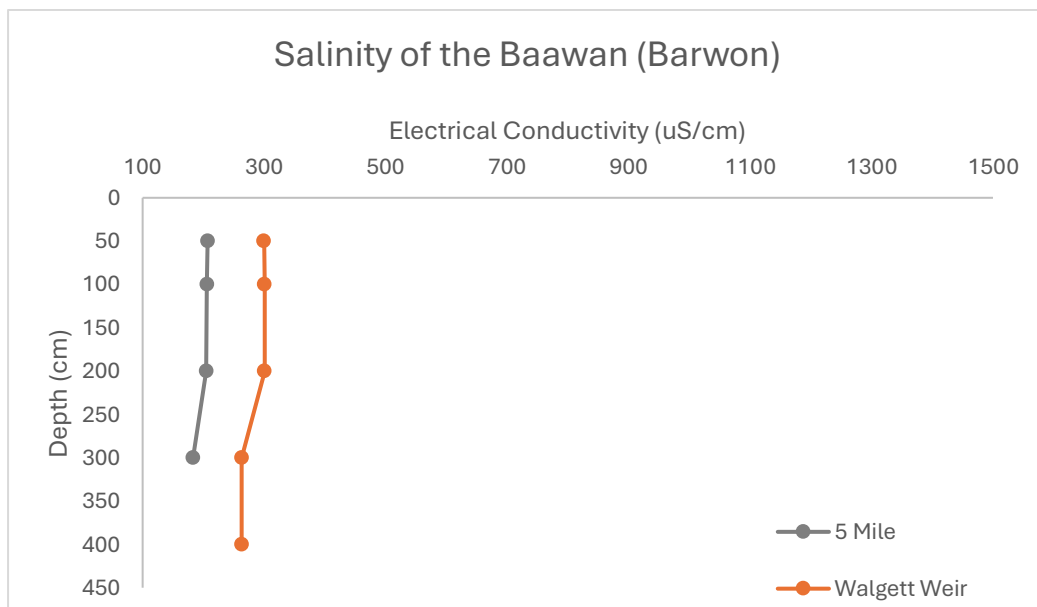
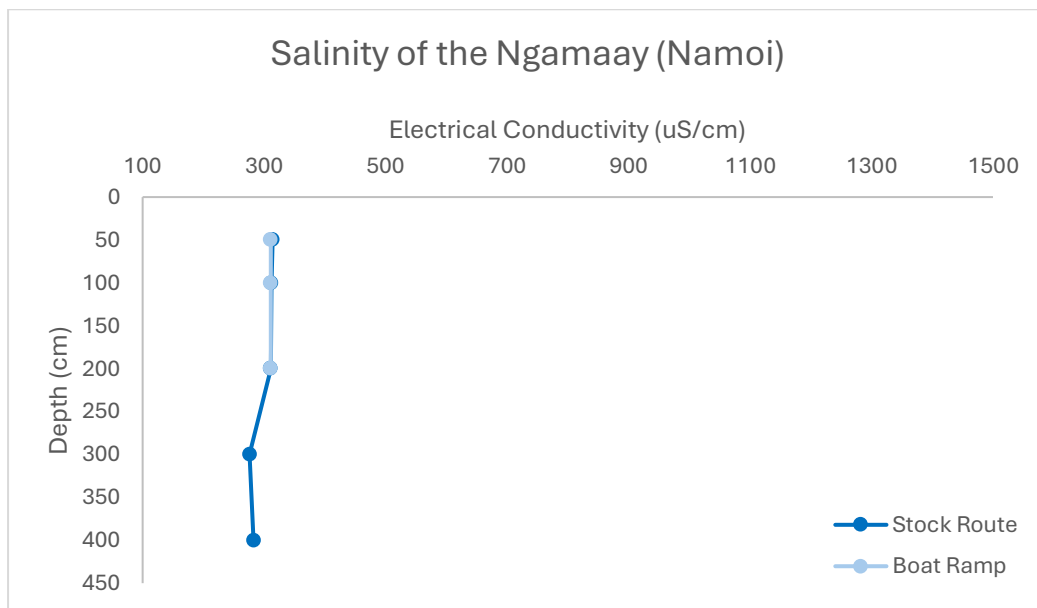
## Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen readings are very high. This can be typical for winter, as cold water generally holds more oxygen than warmer water. These levels are not necessarily of concern but should be monitored. Levels this high paired with high pH readings can be signs of algal blooms. The lowest reading is 10.53 and the highest reading is 11.32.

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

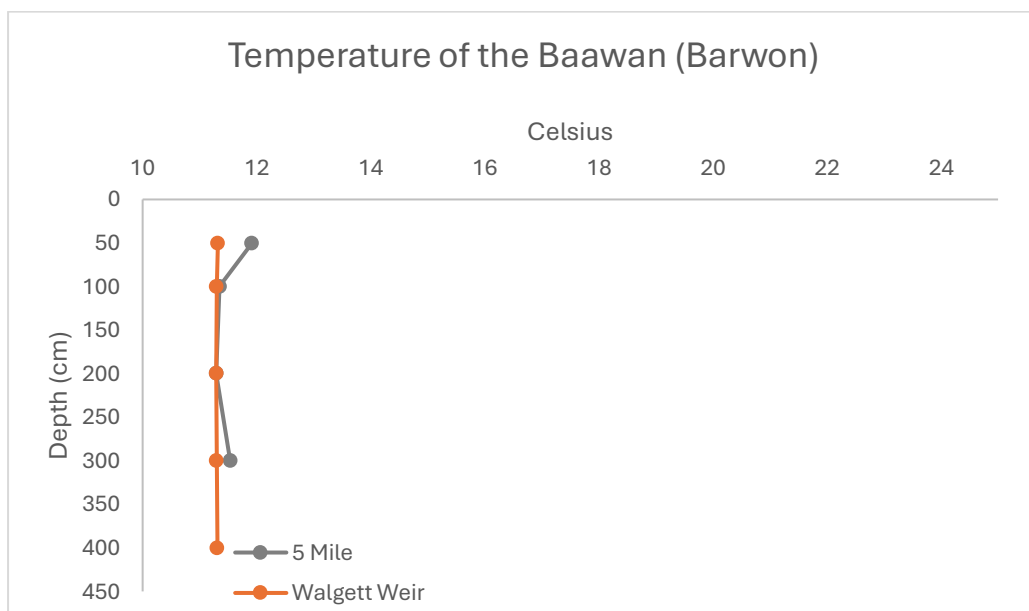
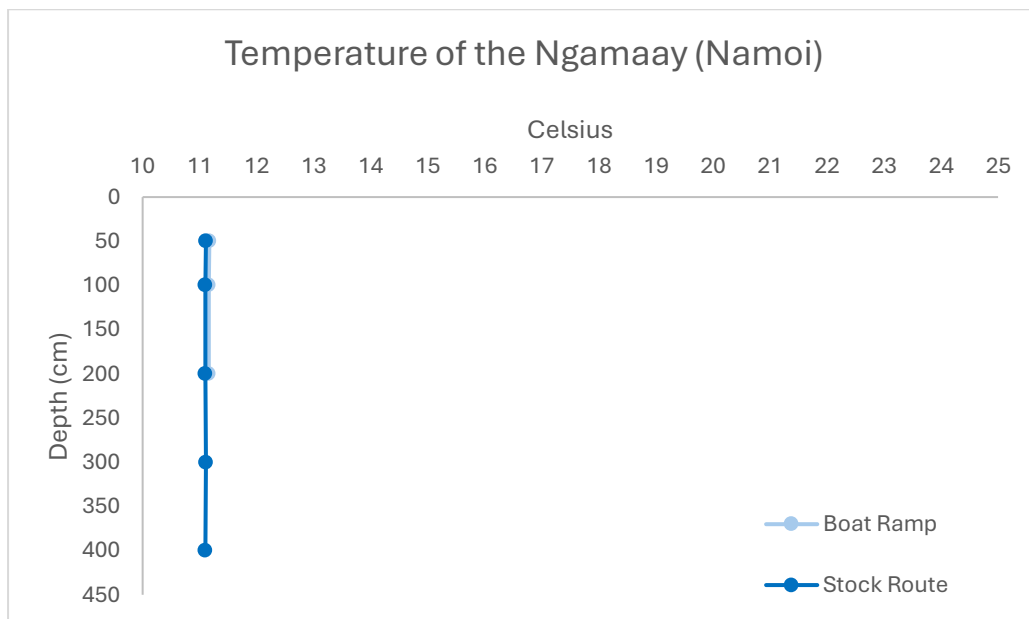
## Salinity in the Ngamaay and Baawan Rivers



The salinity in the Barwon and Ngamaay Rivers is within the healthy range. The lowest reading is 175 and the highest reading is 381.

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

## Temperature in the Ngamaay and Baawan Rivers



The temperature is extremely low in both rivers. This may be a symptom of the time of year and time of day in which the readings were taken, as they were taken in midwinter.

**Healthy Range: 18-28 degrees**

## Conclusion

The pH is quite high for both rivers and should be monitored week to week. As the numbers get higher they get more alkaline which can be bad for fish at high levels. The dissolved oxygen levels are extremely high in both rivers. While this is not necessarily cause for alarm, because dissolved oxygen levels tend to be higher in winter, this should be monitored. High pH levels and high dissolved oxygen levels when paired together can indicate algal blooms. In future the rangers will monitor the visual condition of the rivers to see if algal blooms can be seen.

The salinity levels are healthy in both rivers.

The temperature is very low in both rivers. This may be because of the time of year that these tests were taken. However, the temperatures are still low and should be monitored.