



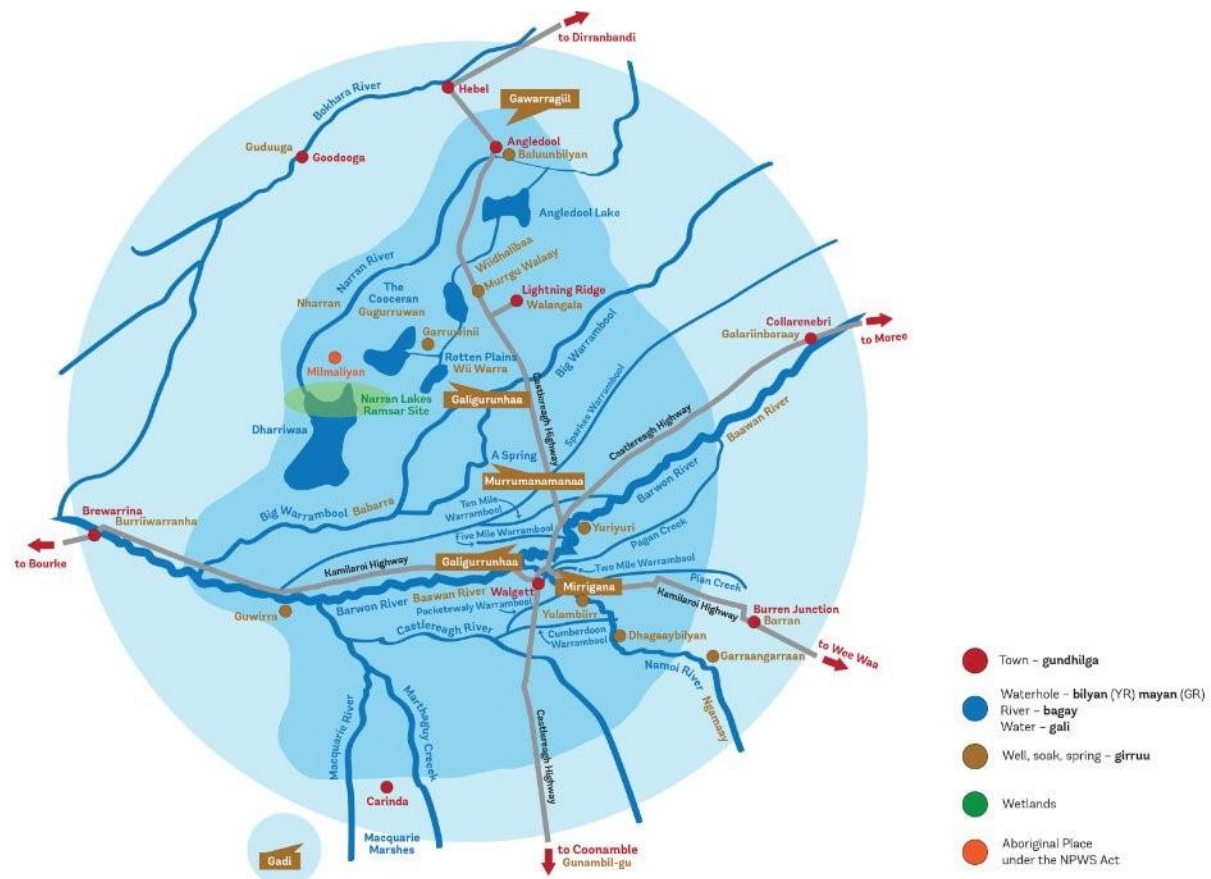
Weekly River Monitoring Report

11th February 2025

Introduction

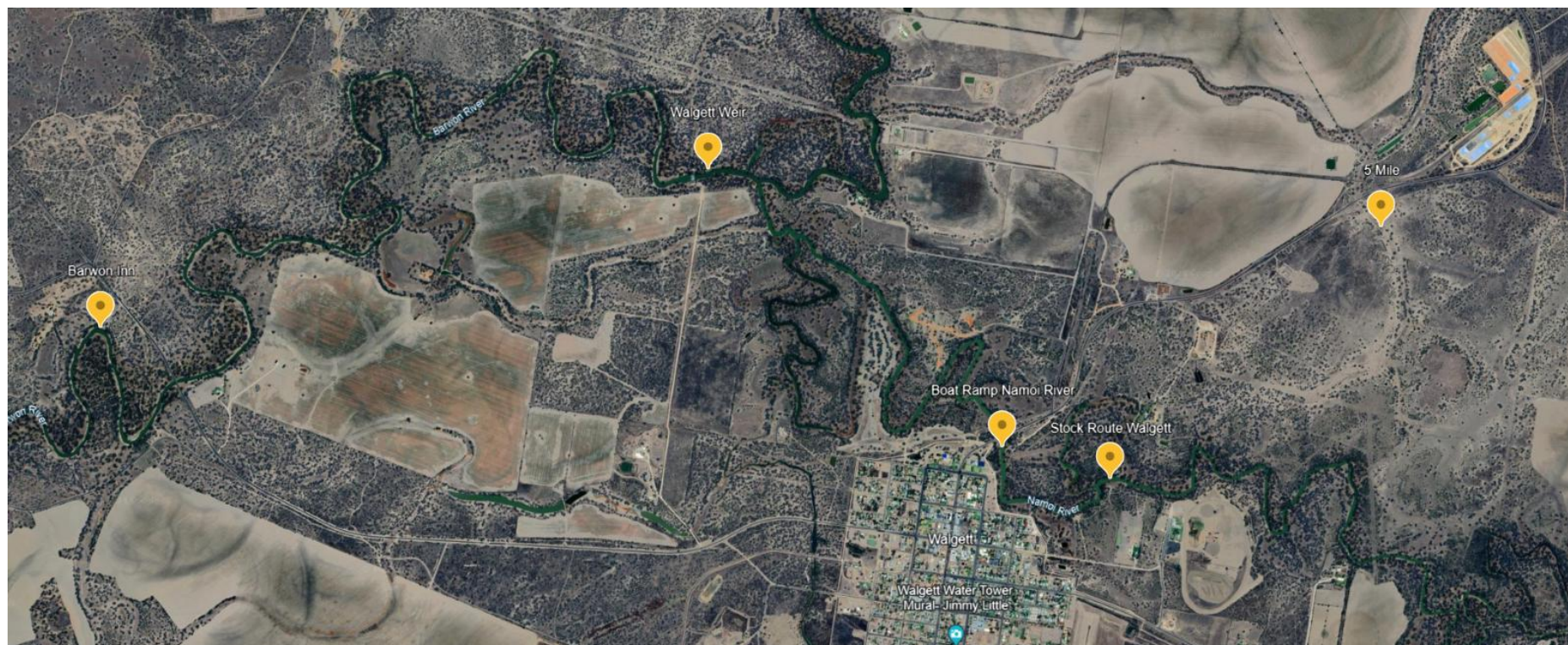
This data was collected on Tuesday 11th February between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

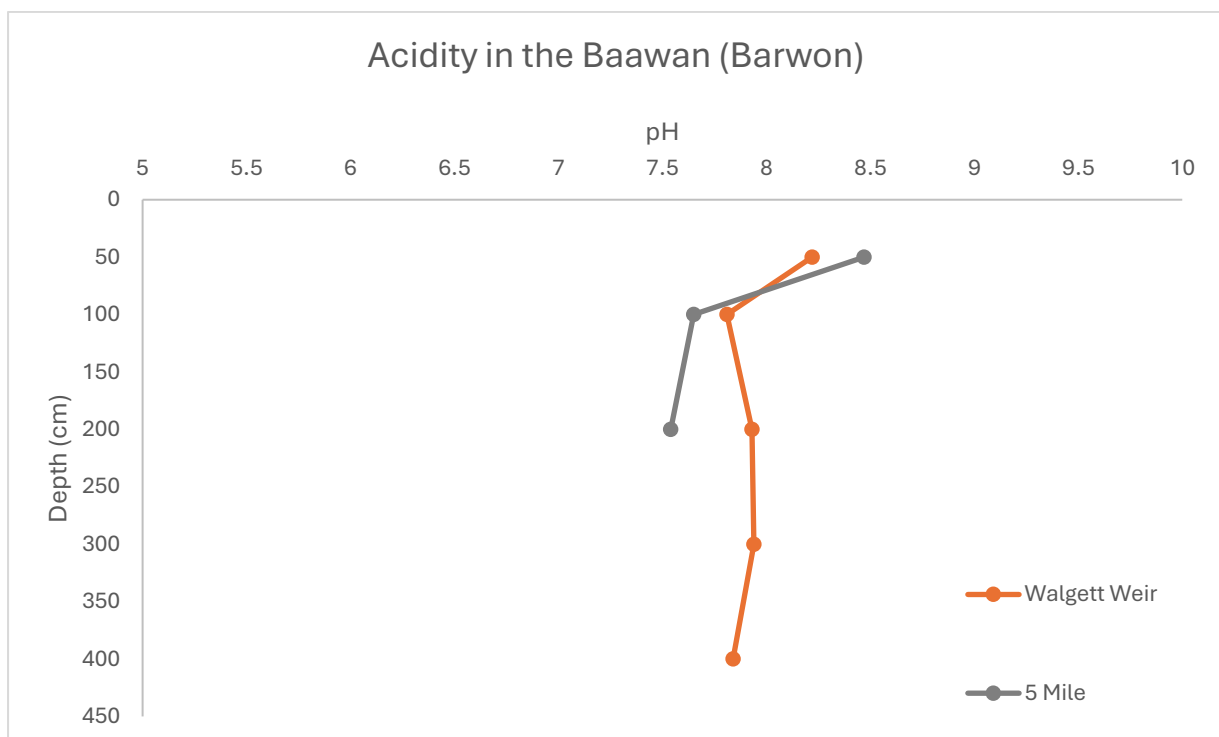
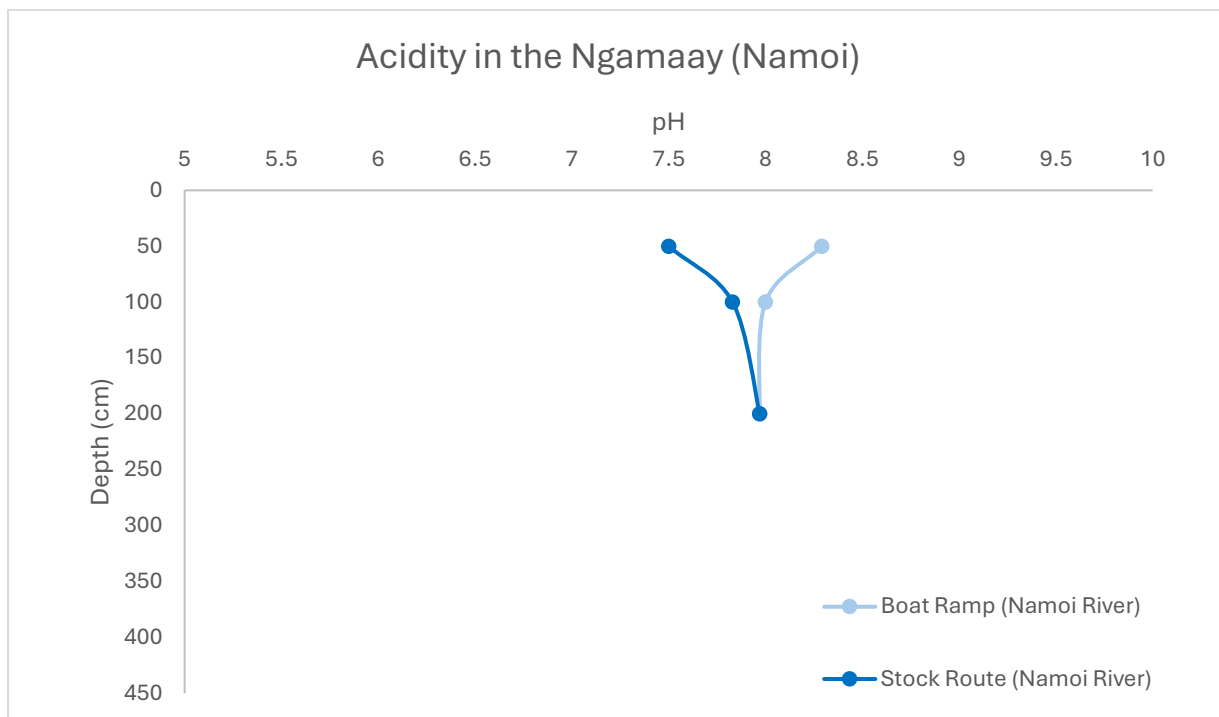


(Picture: Dharriwaa Elders Group area of interest)

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



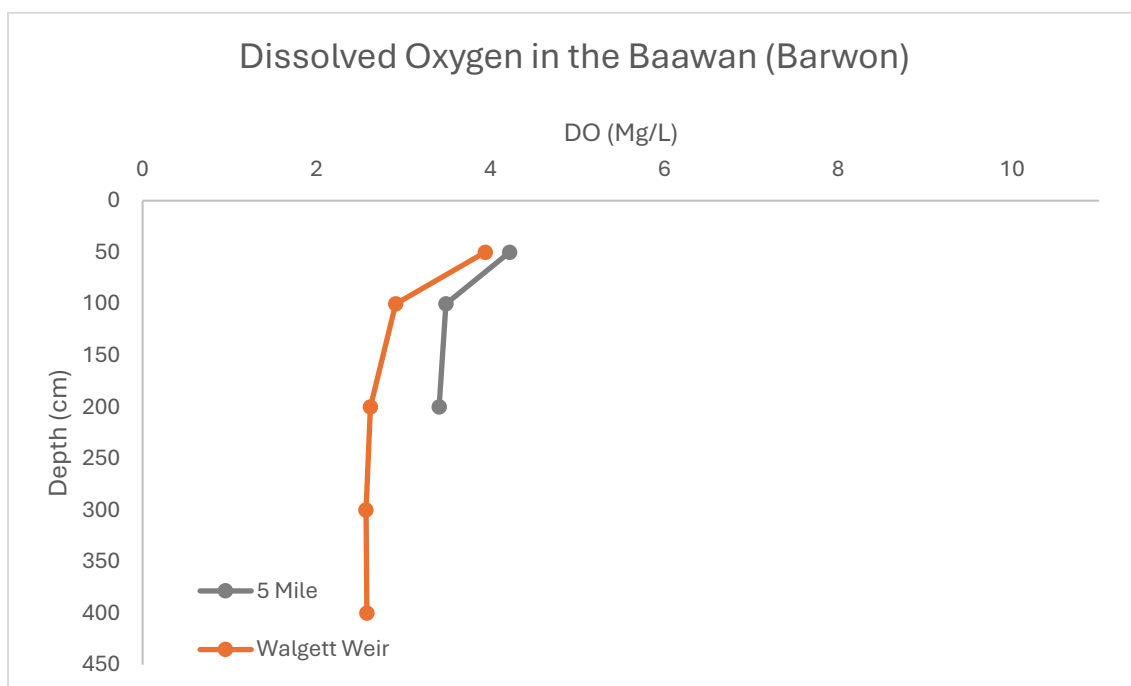
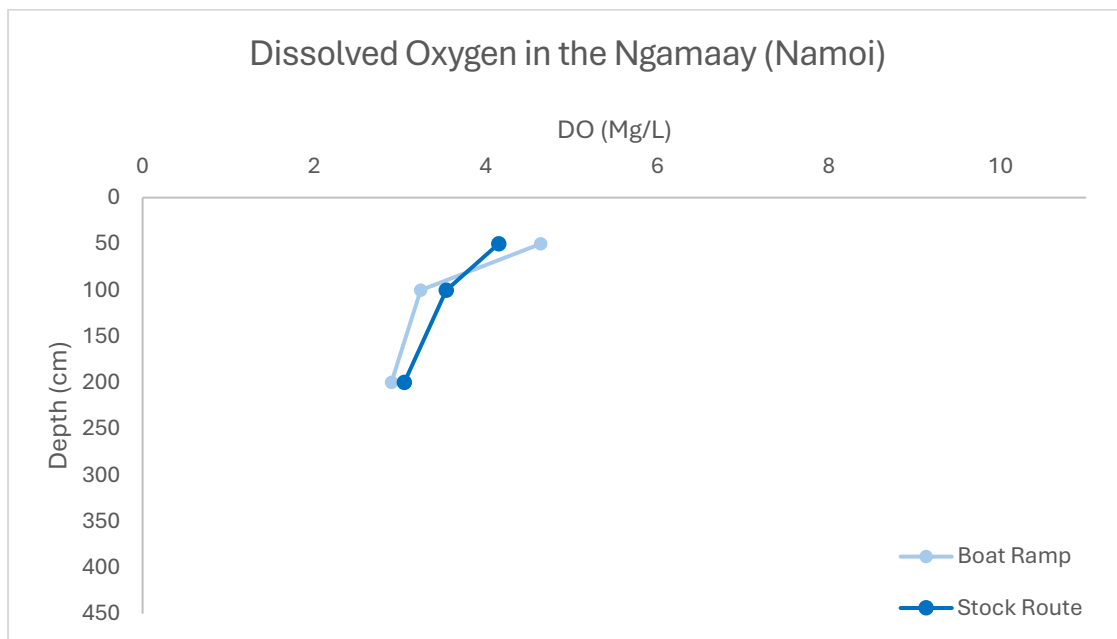
Acidity in the Ngamaay and Baawan Rivers



The pH in the Ngamaay and Baawan at all sites is within the healthy range. The minimum reading is 7.5 and the maximum is 8.47.

Healthy range: 6.5 - 8.5 pH

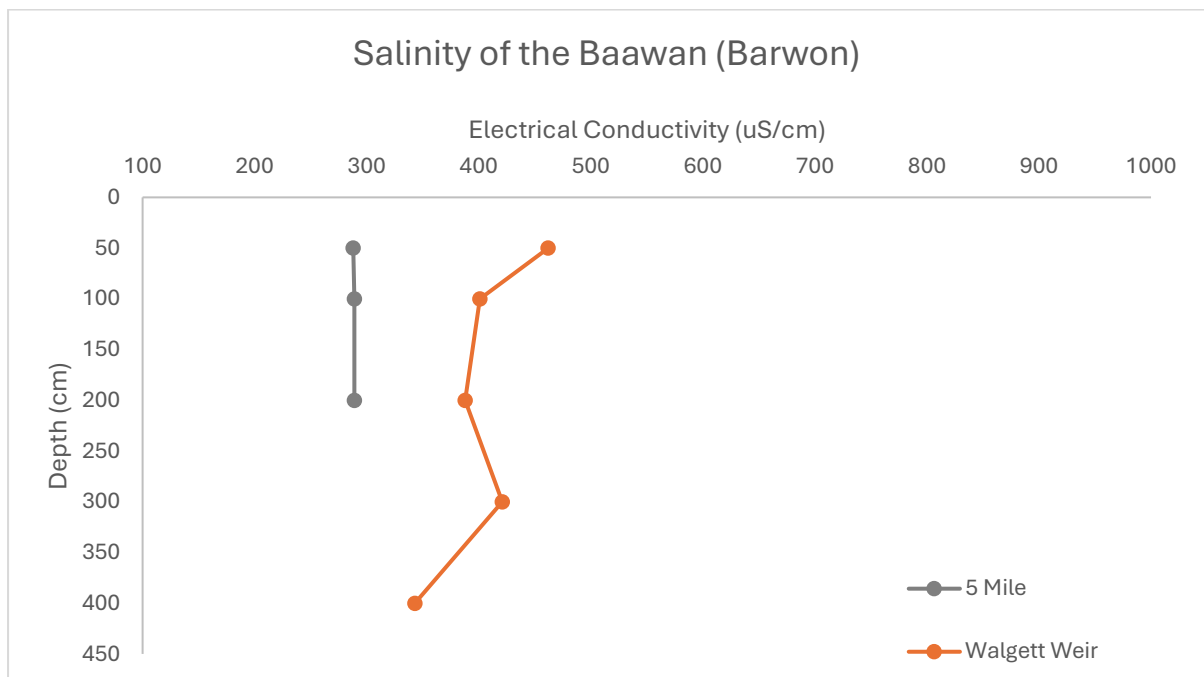
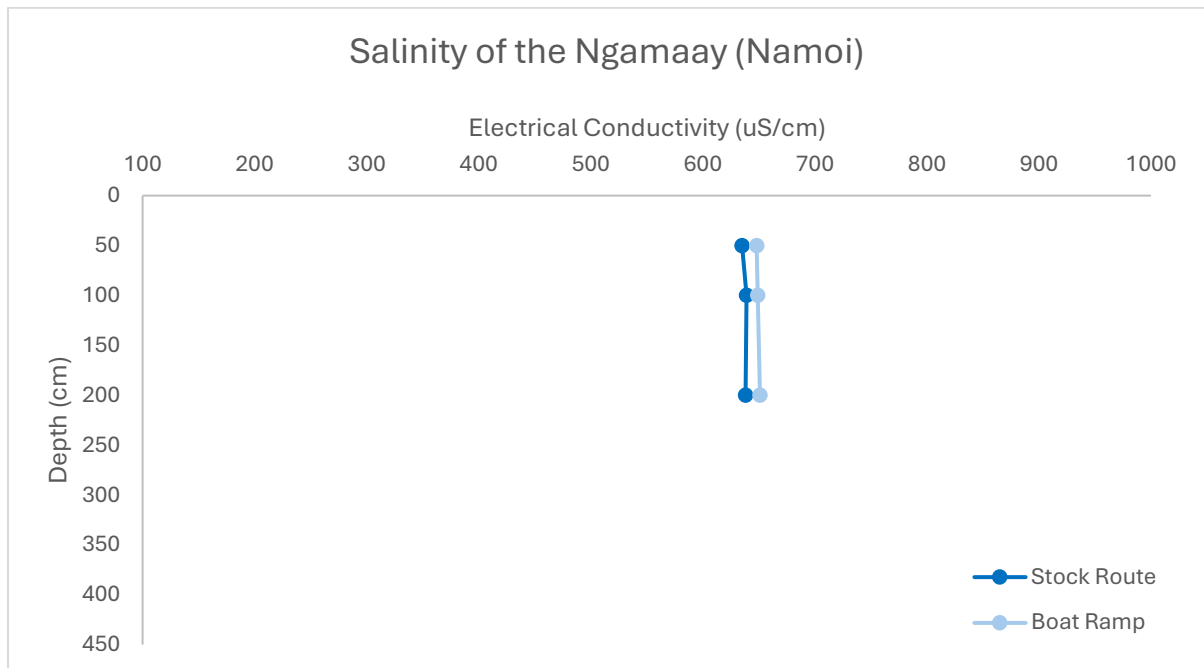
Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen readings are at dangerous levels at all sites and depths in the Ngamaay and Baawan. There are multiple sites that have readings below 3, which can cause fish kills as fish struggle to get oxygen at these levels. This situation will be closely monitored. The minimum reading is 2.57 and the maximum reading is 4.64.

Healthy Range: 6 - 8 (Mg/L)

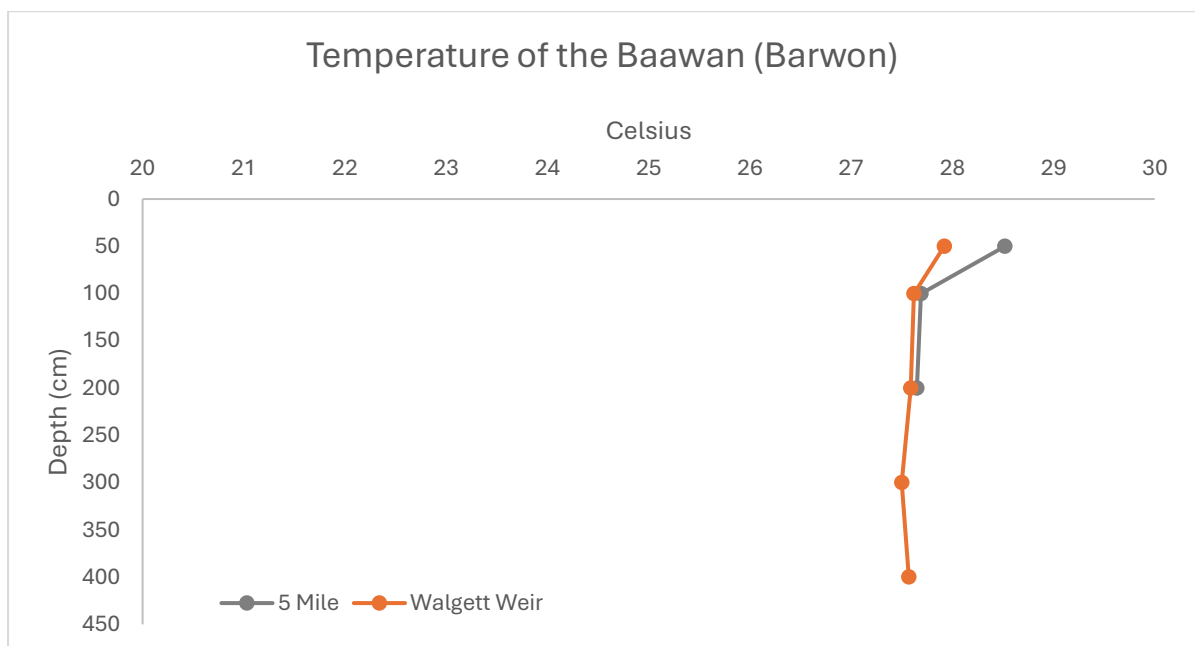
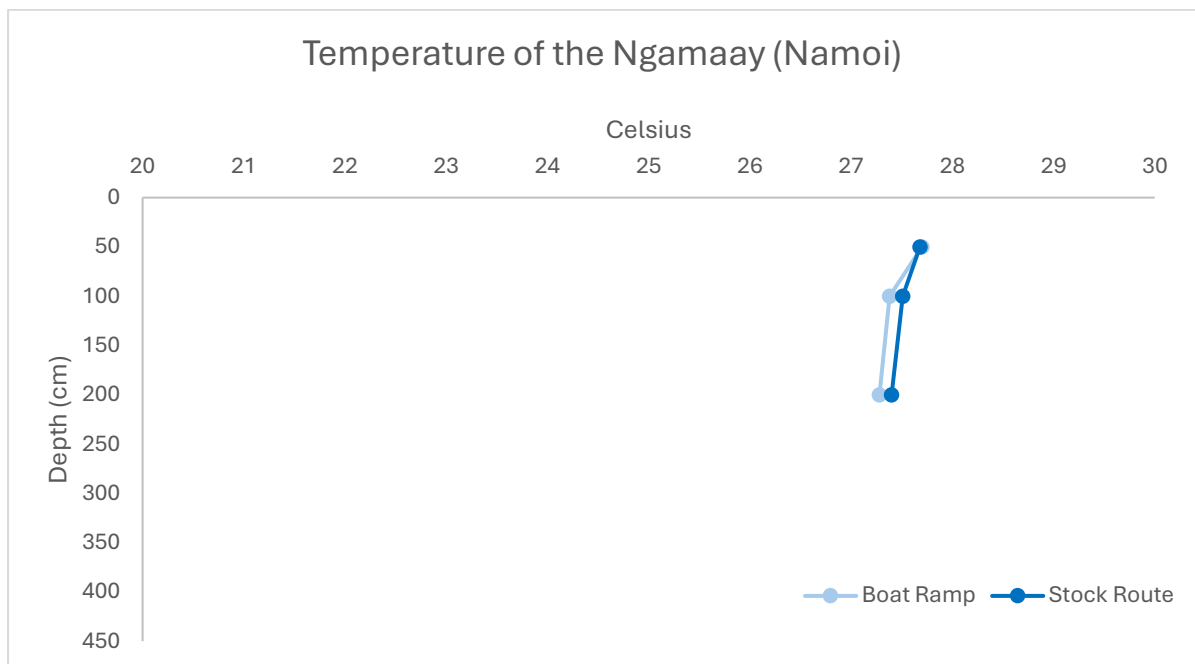
Salinity in the Ngamaay and Baawan Rivers



The salinity at all sites and depths is within a healthy range for both rivers. This is good for freshwater fish. The minimum reading is 288 and the maximum reading is 651.

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Ngamaay and Baawan Rivers



The temperature in both rivers is at a healthy range at all sites except for the Walgett Weir on the Baawan, which is 28.52 degrees. The temperatures are relatively warm but this is to be expected during summer, and it will not be causing stress to riverine plants and animals. The minimum temperature is 27.28 and the maximum temperature is 28.52.

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH is at a healthy level in both rivers and at all sites and depths. This means that the river is not too acidic or alkaline, which is good for native fish.

The dissolved oxygen readings are extremely low in both the Ngamaay and the Baawan and are at levels that could cause fish kills. This situation needs to be monitored.

The salinity in both rivers is at a healthy range.

The temperature of both rivers is also at a healthy level. The temperatures are at the higher end of the range, but outside temperatures can affect the temperature of the water, and this is expected during summer.