



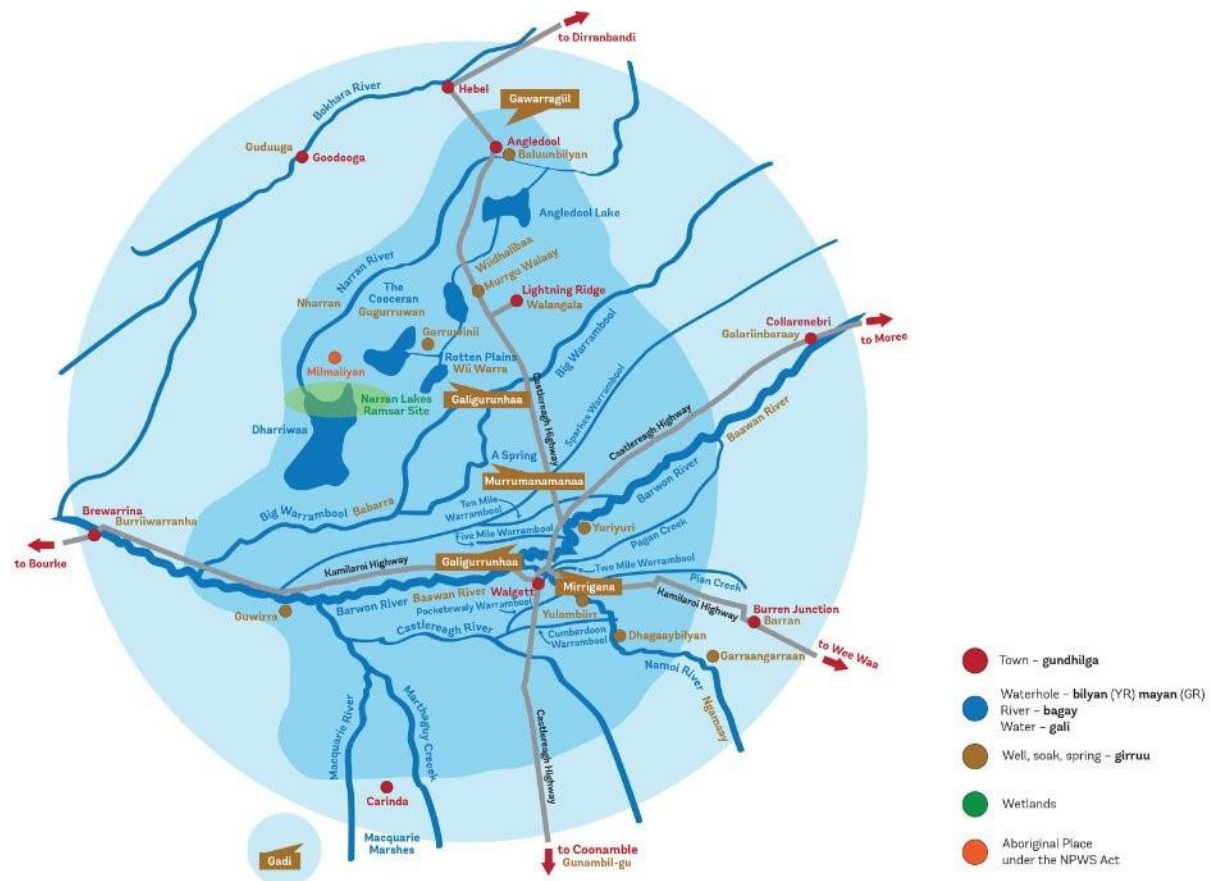
Weekly River Monitoring Report

25th February 2025

Introduction

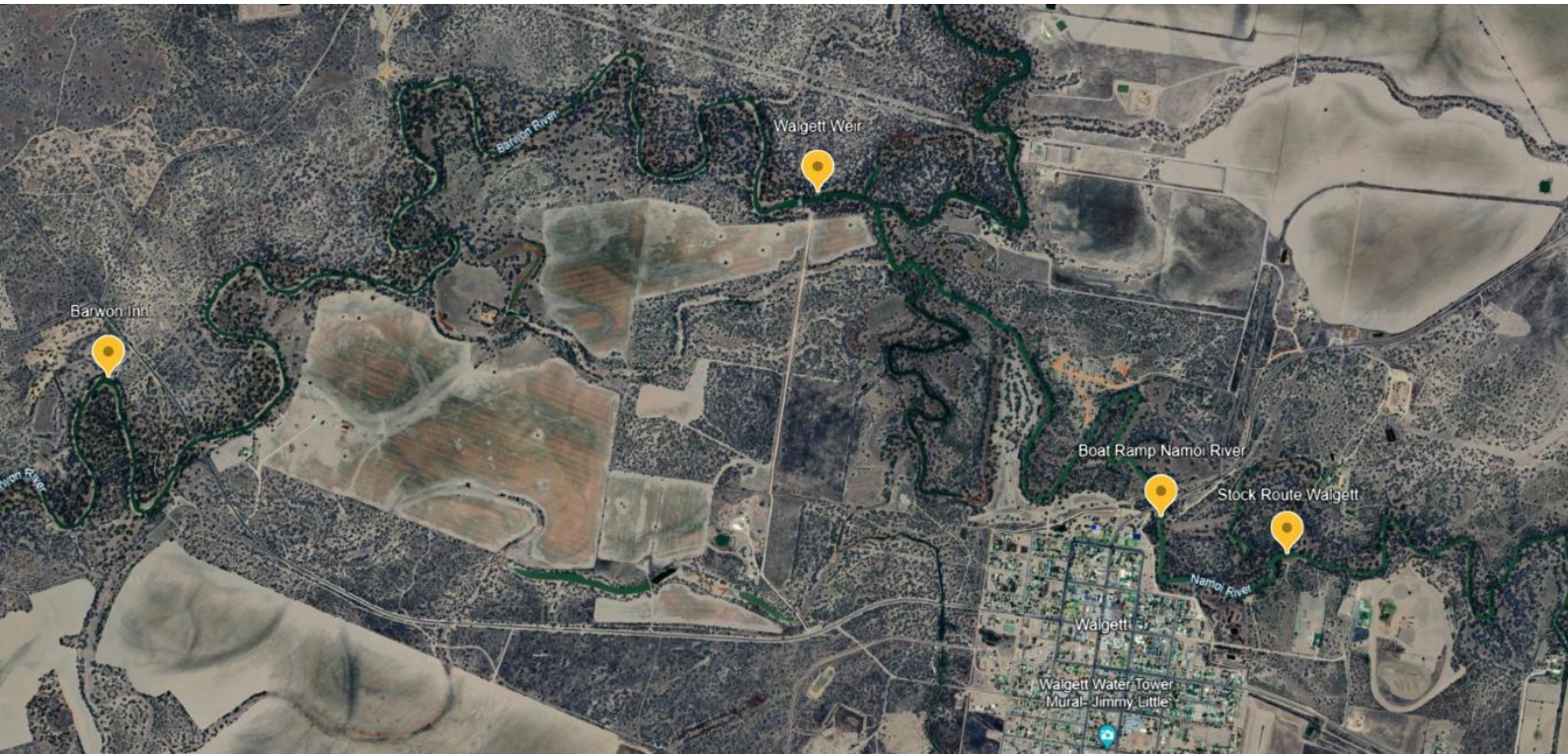
This data was collected on Tuesday 11th February between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

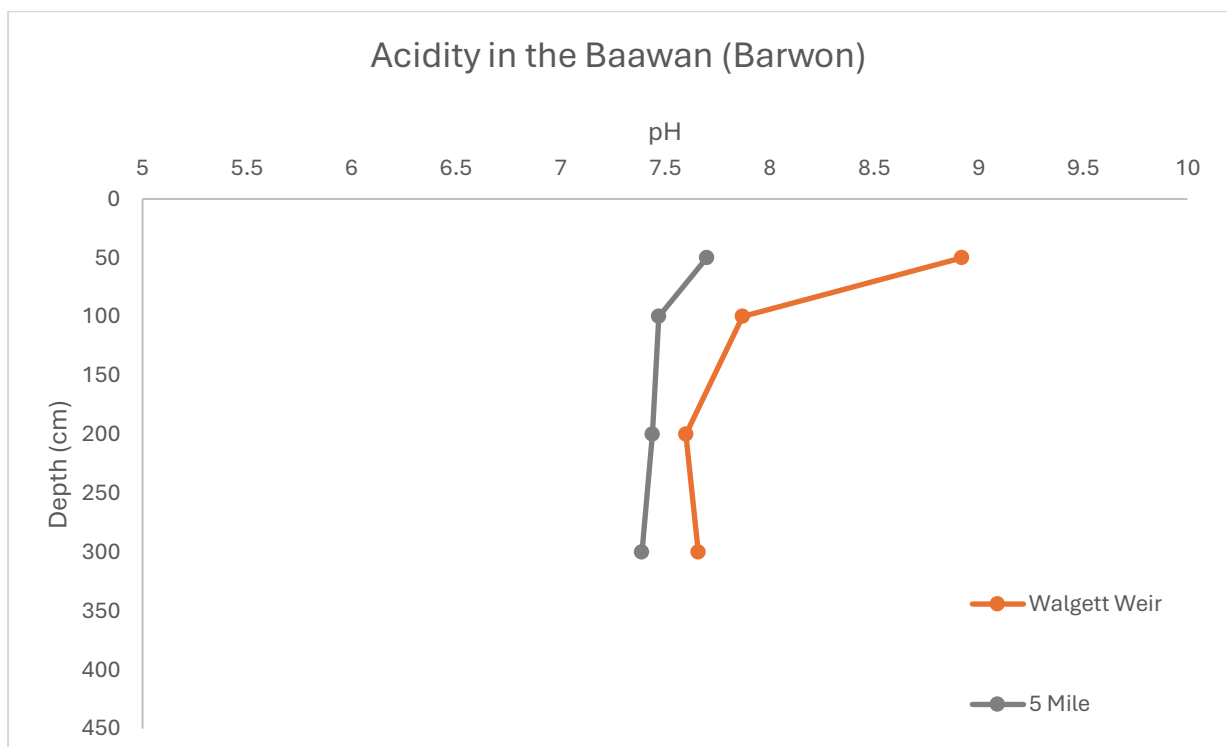
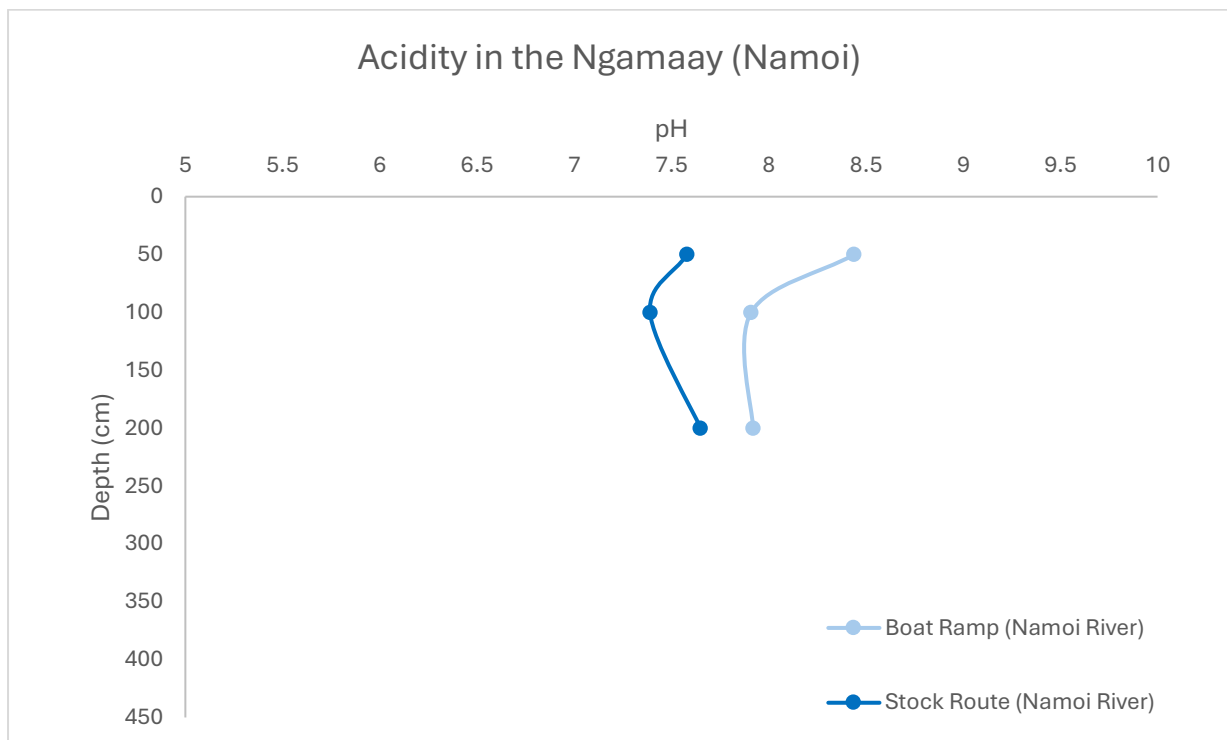


(Picture: Dharriwaa Elders Group area of interest)

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



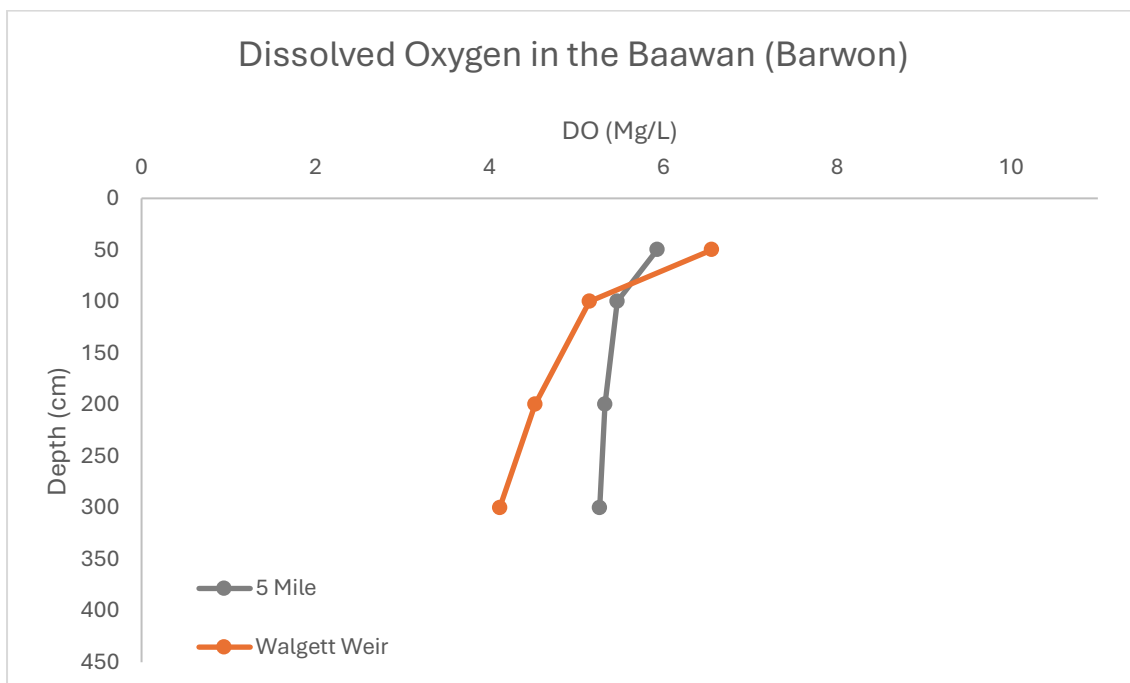
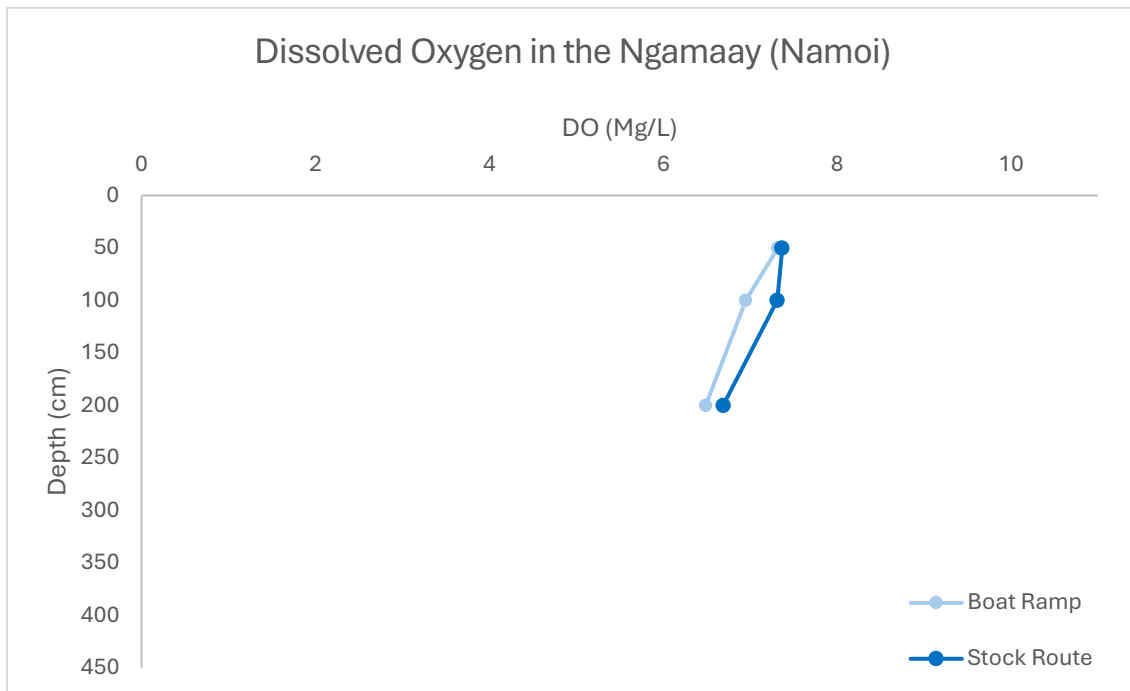
Acidity in the Ngamaay and Baawan Rivers



The pH at all sites and depths is within a healthy range except at the Walgett Weir at 50cm depth, where it is 8.92. This is not cause for alarm as it is not far outside the ideal pH range. The minimum reading is 7.29 and the maximum reading is 8.92.

Healthy range: 6.5 – 8.5 pH

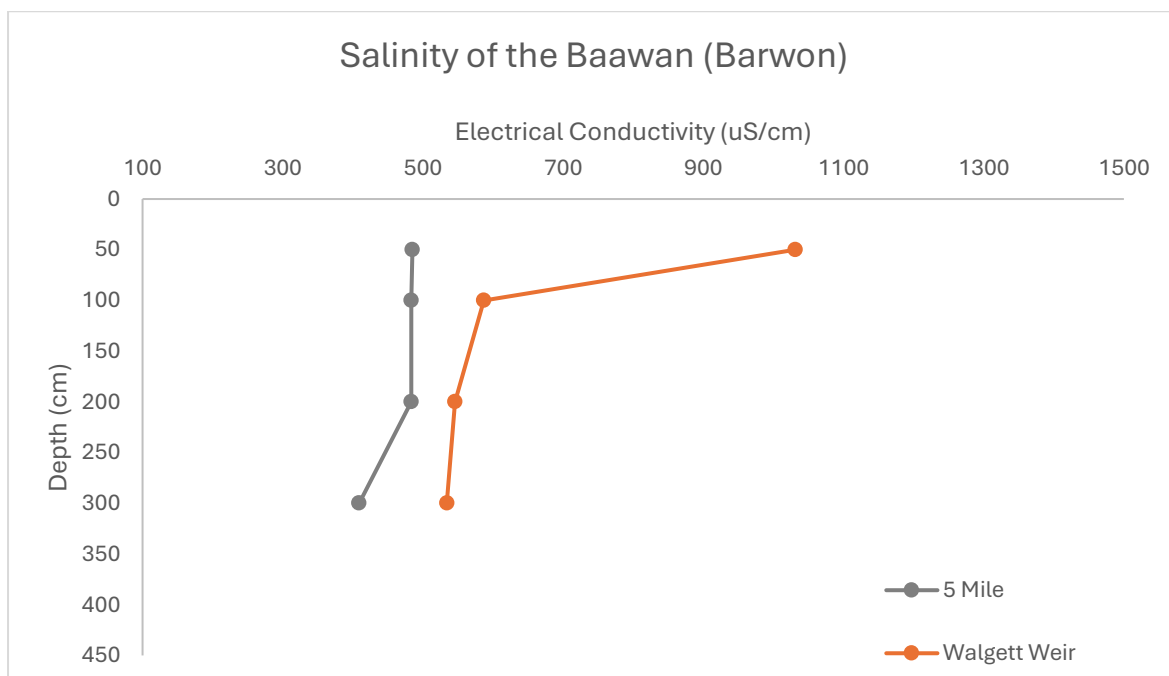
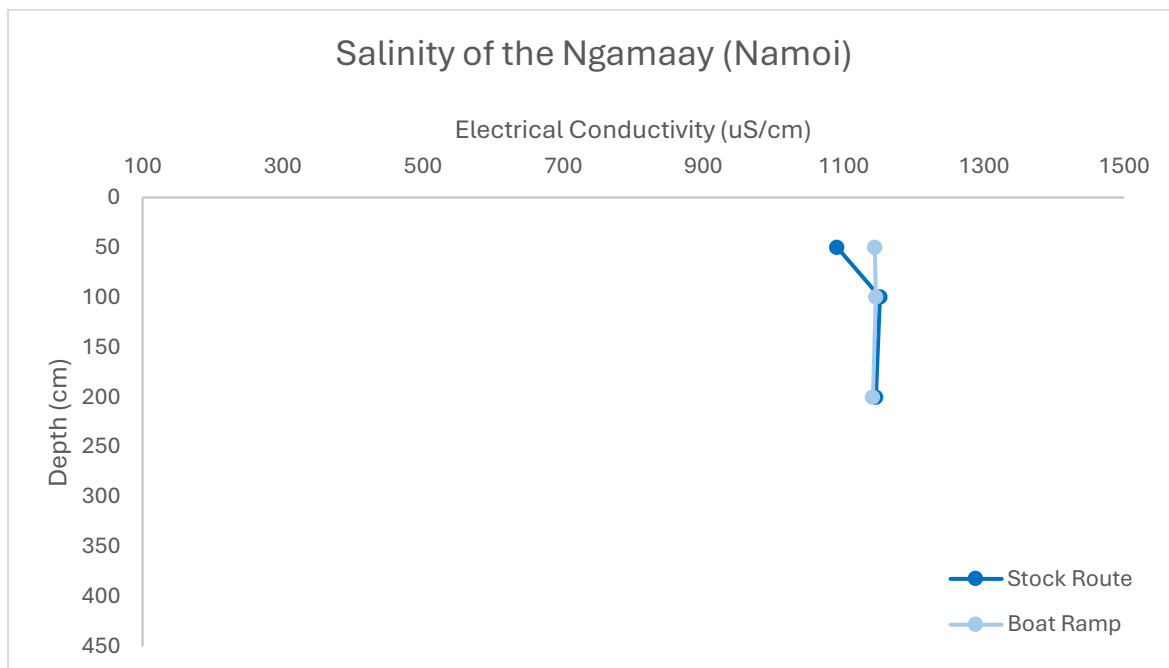
Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen in the Ngamaay River is entirely within the healthy range. This is a strong increase in the dissolved oxygen levels over the past month, which is excellent for freshwater fish. The dissolved oxygen in the Baawan is mostly outside the healthy range but it has risen over the last few weeks, which is good. The minimum reading is 4.12 and the maximum reading is 7.37.

Healthy range: 6-8 Mg/L

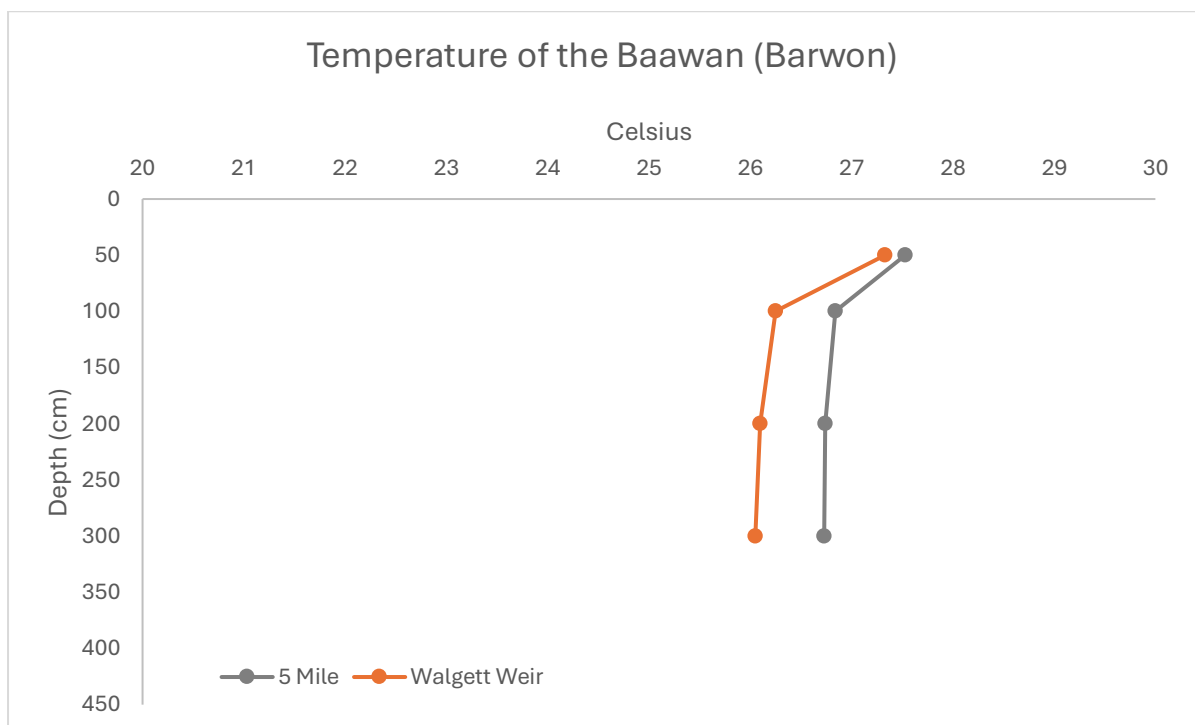
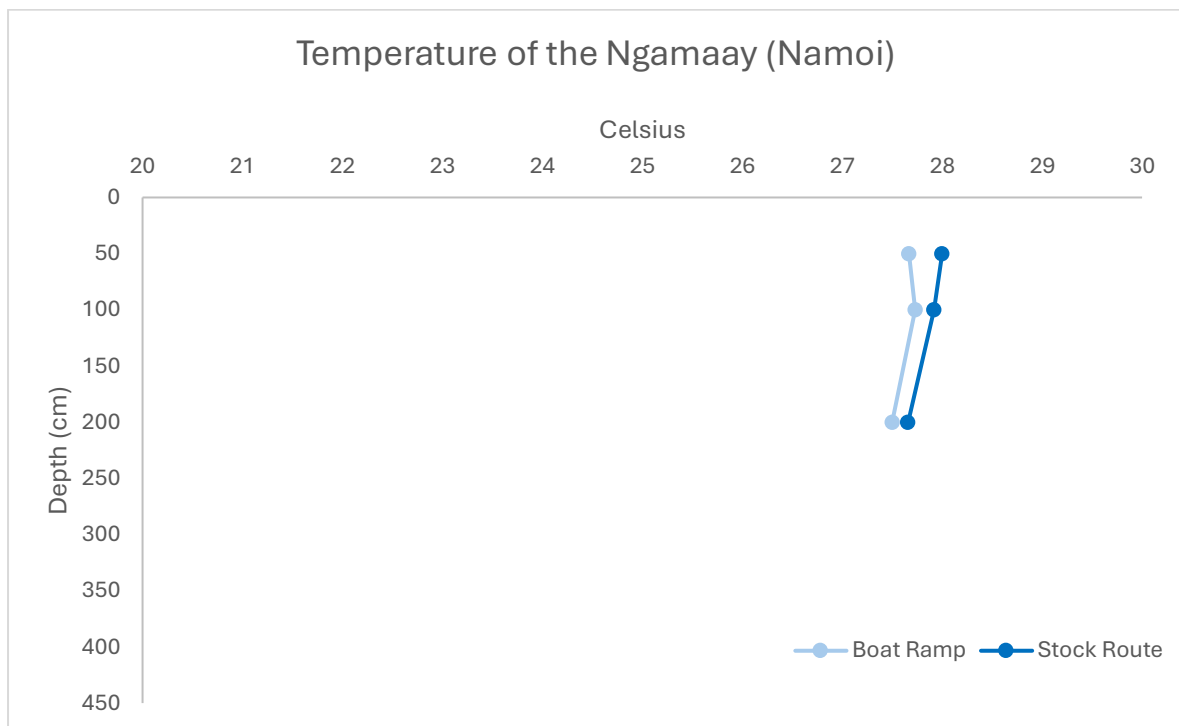
Salinity in the Ngamaay and Baawan Rivers



The salinity in the Ngamaay and Baawan rivers is within the healthy range in both rivers. The minimum reading is 409 and the maximum reading is 1152. This is good for the freshwater fish.

Healthy range: 125-2200 uS/cm

Temperature in the Ngamaay and Baawan Rivers



The temperature in both rivers is within the healthy range. The temperatures in the Ngamaay reach the upper limit of the healthy range but as the external temperatures are quite high during summer it is normal for the water to be warmer than usual. The minimum temperature is 26.05 and the maximum level is 28.

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH is at a healthy level at almost all sites and depths except at 50cm depth on the Baawan River at Walgett Weir. This environment is good for the fish in the river.

The dissolved oxygen levels have recovered significantly over the last month on both rivers. The DO is still outside the healthy range at most depths on the Baawan, but it is no longer within the range that is dangerous for freshwater fish. The levels are almost all within the healthy range in the Ngamaay.

The salinity levels are at healthy levels on both the Baawan and Ngamaay Rivers.

The temperature in both rivers is within the healthy range. It is quite warm, but this is typical for summer and not concerning.