



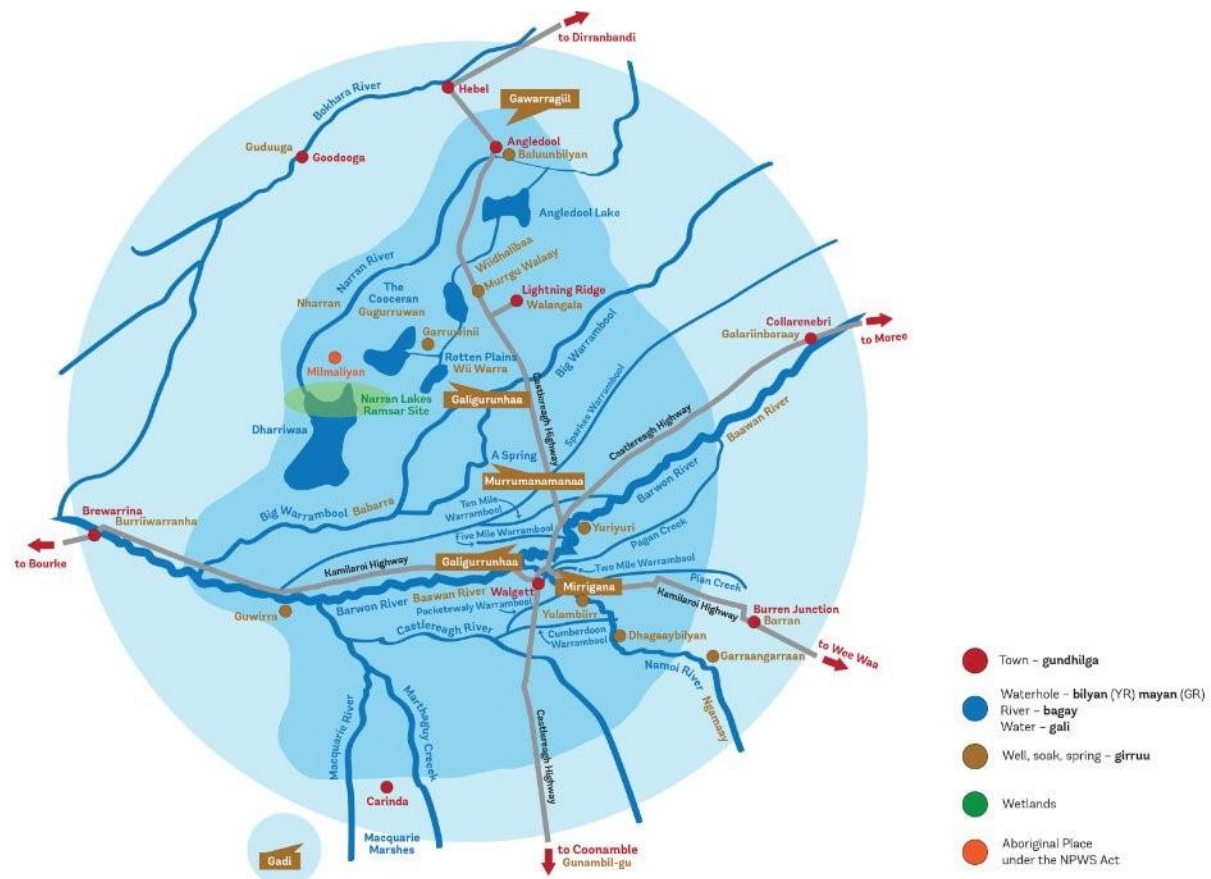
Weekly River Monitoring Report

18th February 2025

Introduction

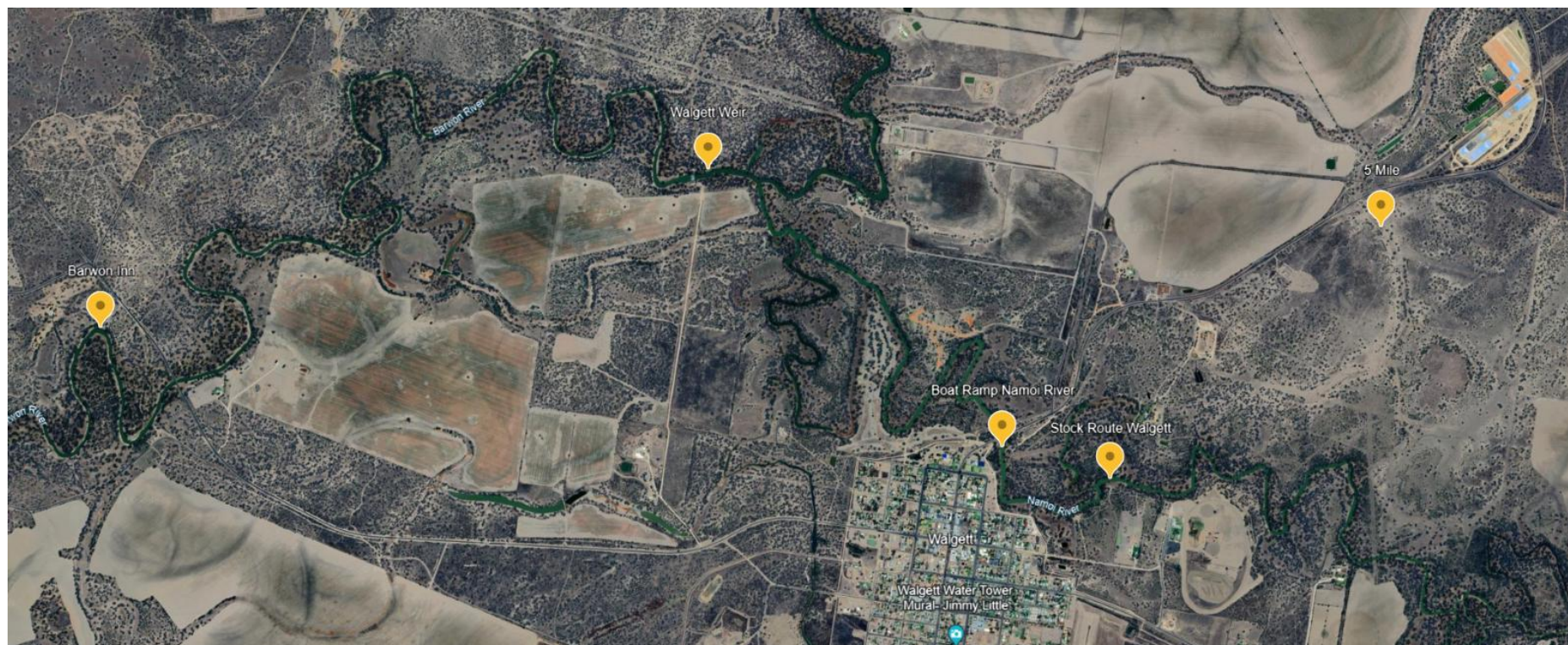
This data was collected on Tuesday 18th February between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

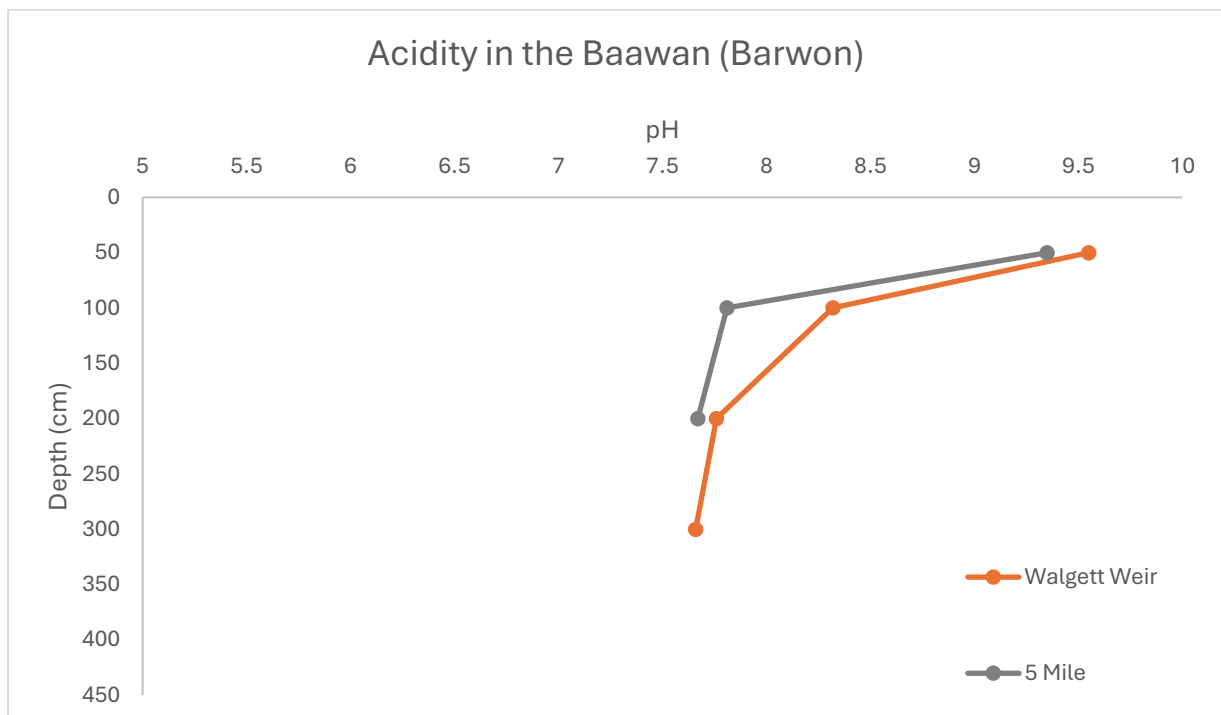
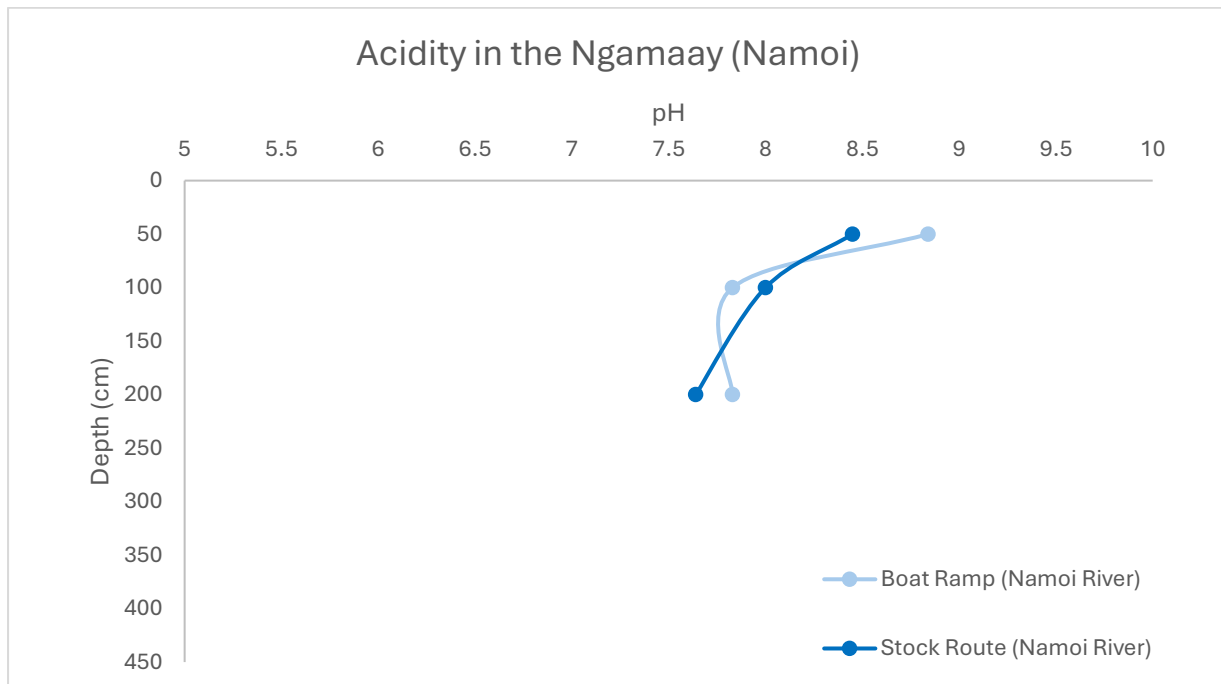


(Picture: Dharriwaa Elders Group area of interest)

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



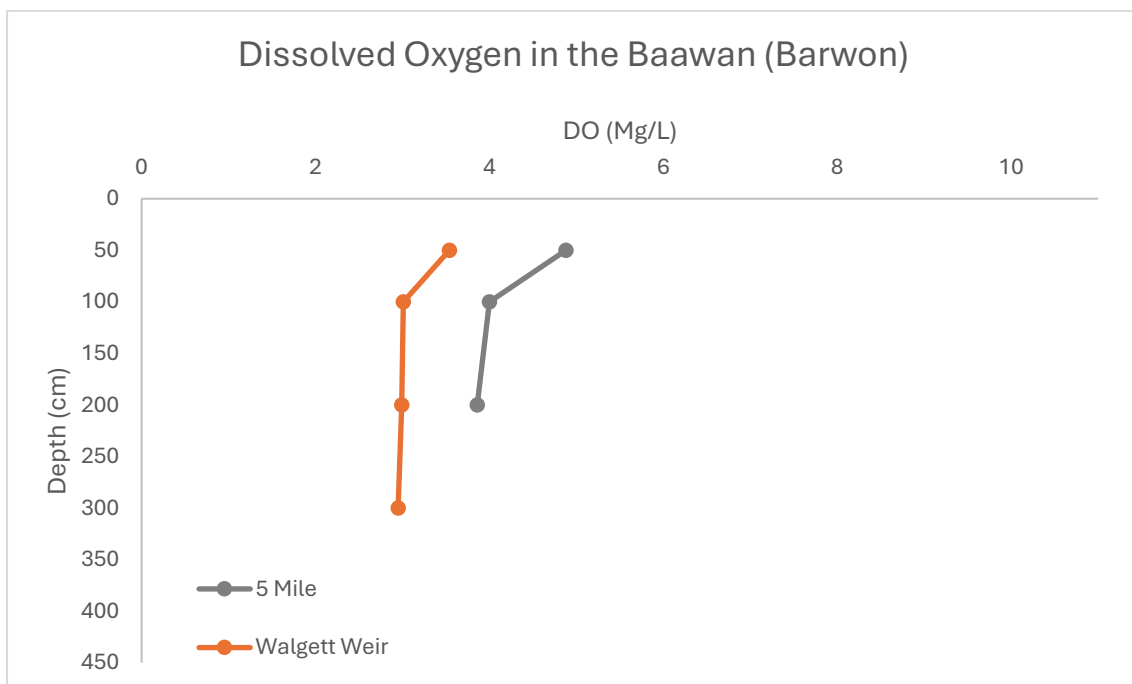
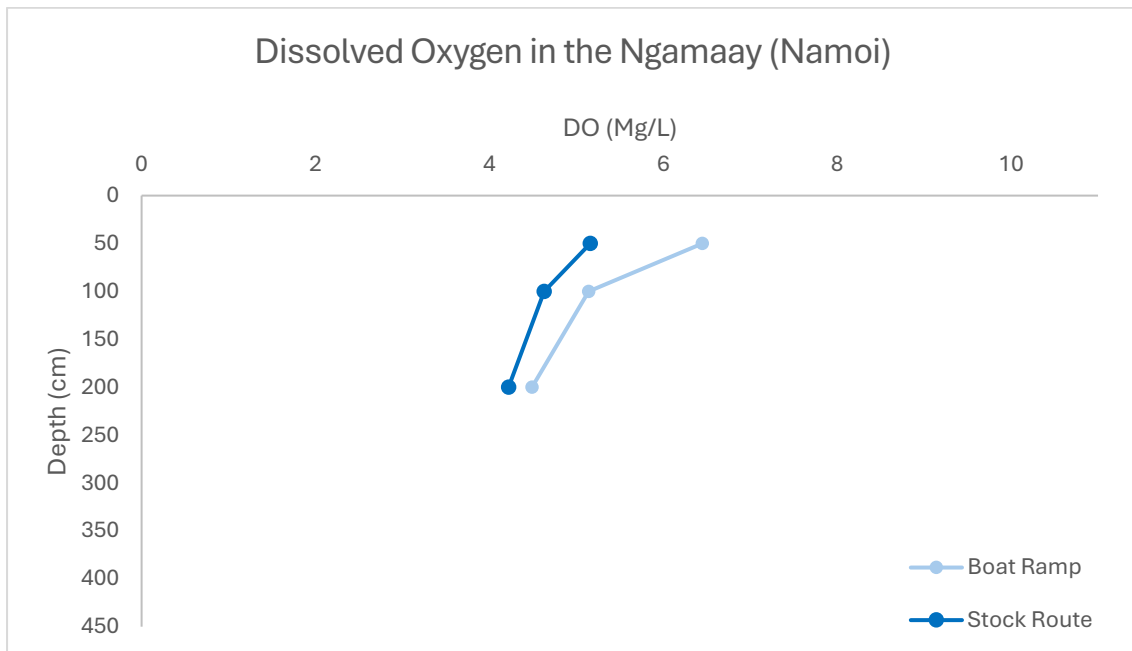
Acidity in the Ngamaay and Baawan Rivers



The pH of the Baawan and Ngamaay Rivers is mostly within a healthy range, except at 50cm in both rivers. The river is on the acidic side of the scale, and should be monitored, but will not cause any immediate concern as the rest of the values are within the healthy range. The minimum reading is 7.64 and the maximum reading is 9.55.

Healthy range: 6.5 - 8.5 pH

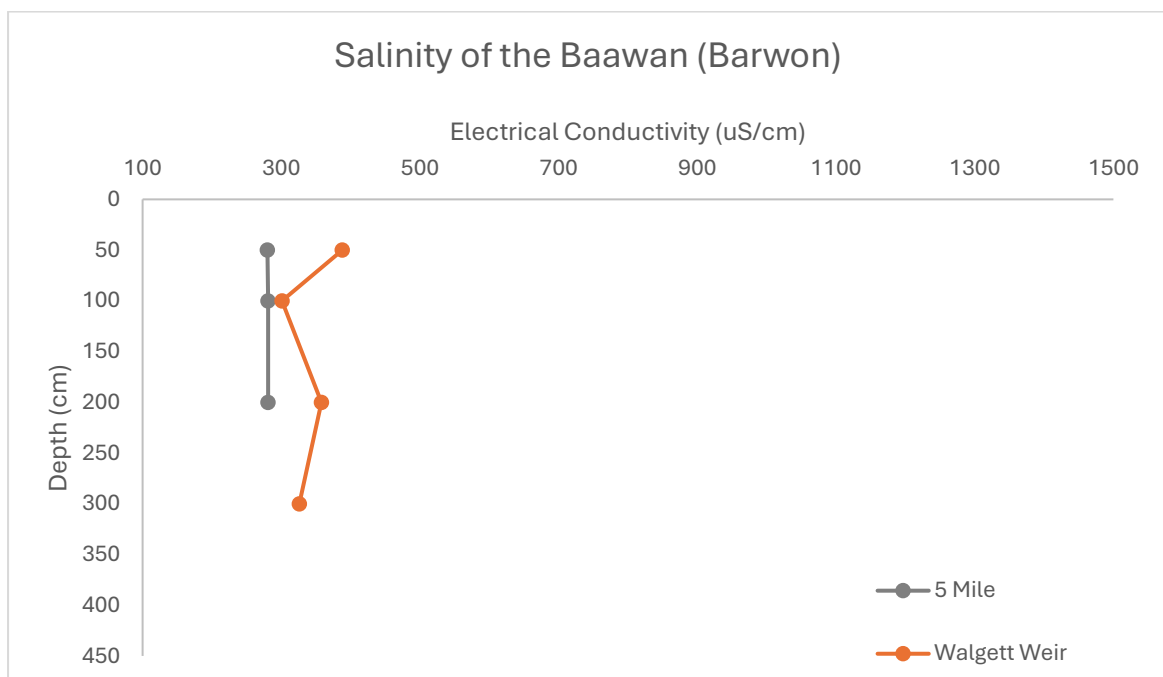
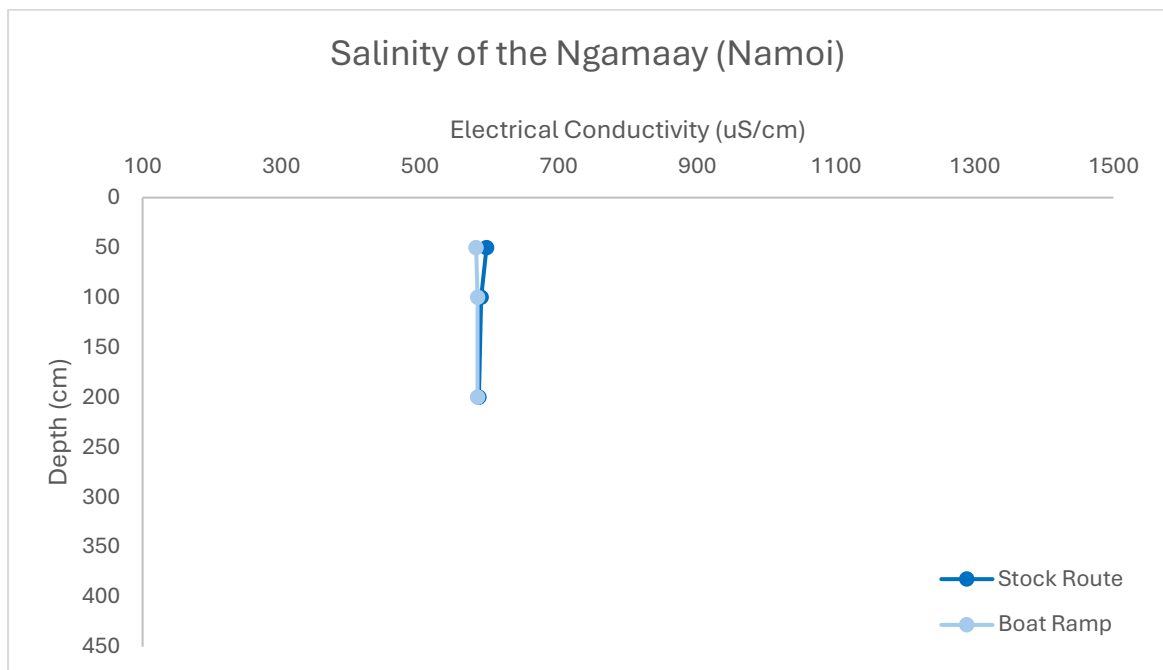
Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen levels are outside the healthy range in both rivers except in the Ngamaay at 50cm at the Boat Ramp. The levels at Walgett Weir on the Baawan are below 4Mg, which means that fish would be struggling to get oxygen at that depth. These levels should be monitored. The minimum reading is 2.95 and the maximum reading is 6.45.

Healthy Range: 6 - 8 (Mg/L)

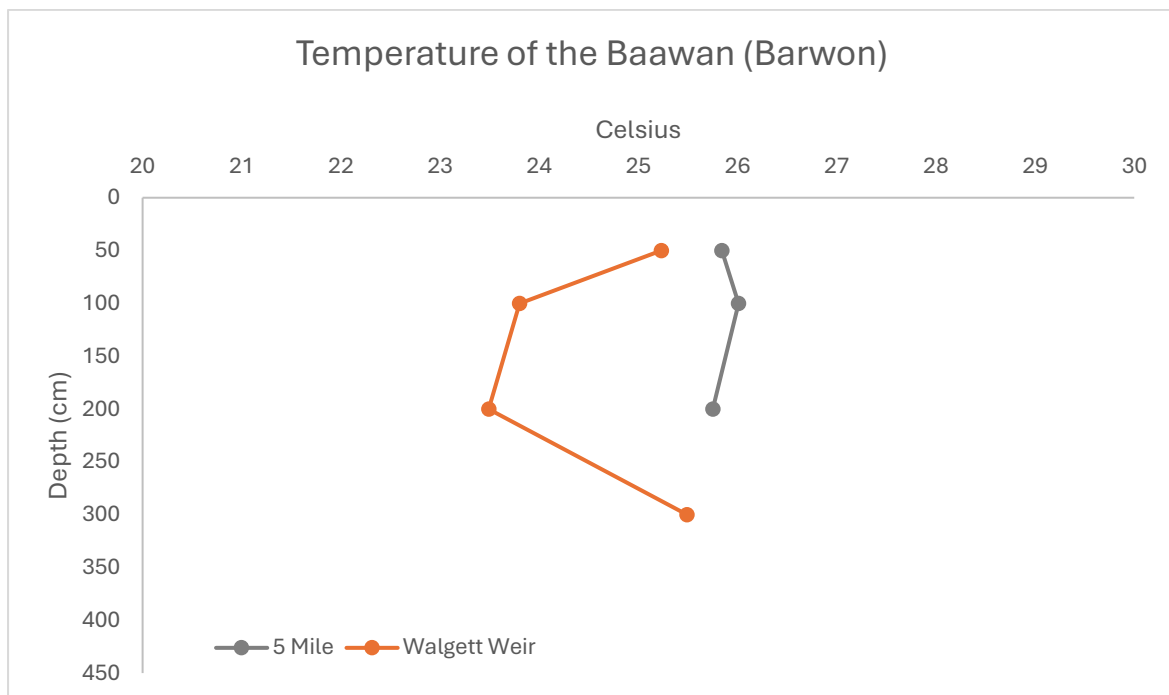
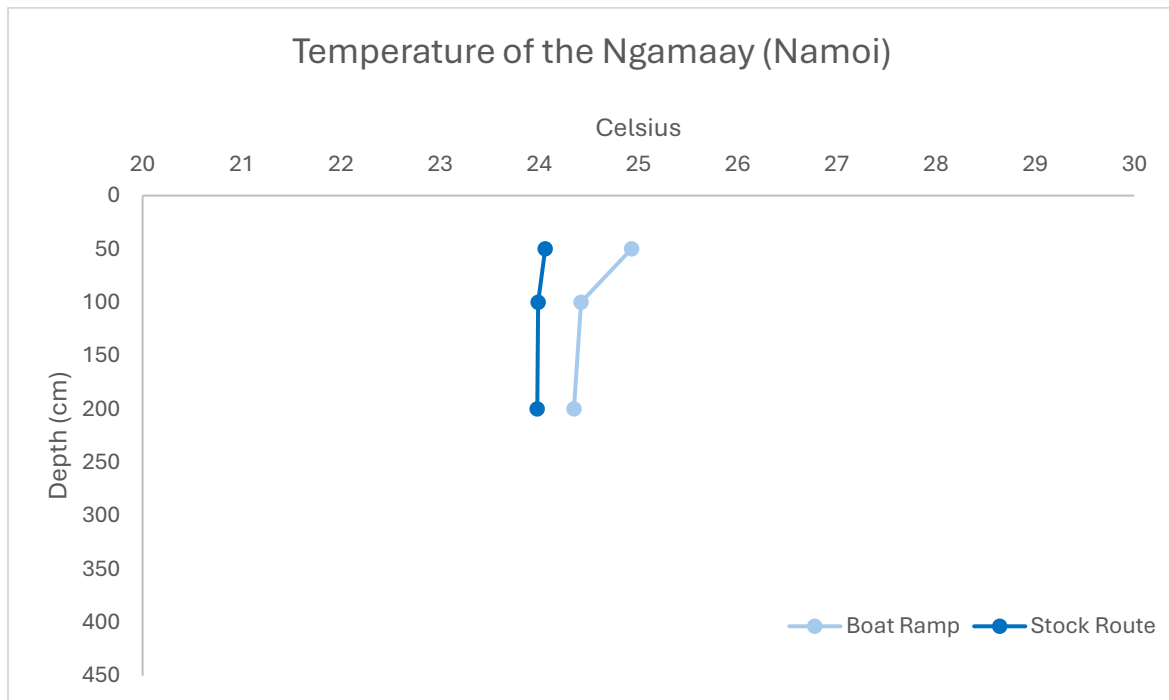
Salinity in the Ngamaay and Baawan Rivers



The salinity in both rivers is within the healthy range. This is good for freshwater fish. The minimum reading is 280 and the maximum reading is 596.

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Ngamaay and Baawan Rivers



The temperature at all sites and depths is within the healthy range. The temperatures in rivers usually reflect the temperature of the air outside, so warm readings in summer are not unusual. The minimum reading is 23.49 and the maximum reading is 26.01.

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH is at a healthy level in all depths in both rivers except for 50cm in both the Ngamaay and the Baawan. This is higher than usual and should be monitored but will likely go down over the coming weeks. As the other readings at deeper levels are within the healthy range, the fish are not in danger.

The dissolved oxygen levels are below the healthy range at all levels except in the Ngamaay at the Boat Ramp at 50cm. The oxygen levels in the Baawan are particularly low and should be monitored.

The salinity levels in both rivers are within a healthy range.

The temperature in both rivers is in the healthy range. The temperature in the river reflects the temperature in the air outside, which is why temperatures have been higher during summer and are starting to lower now.