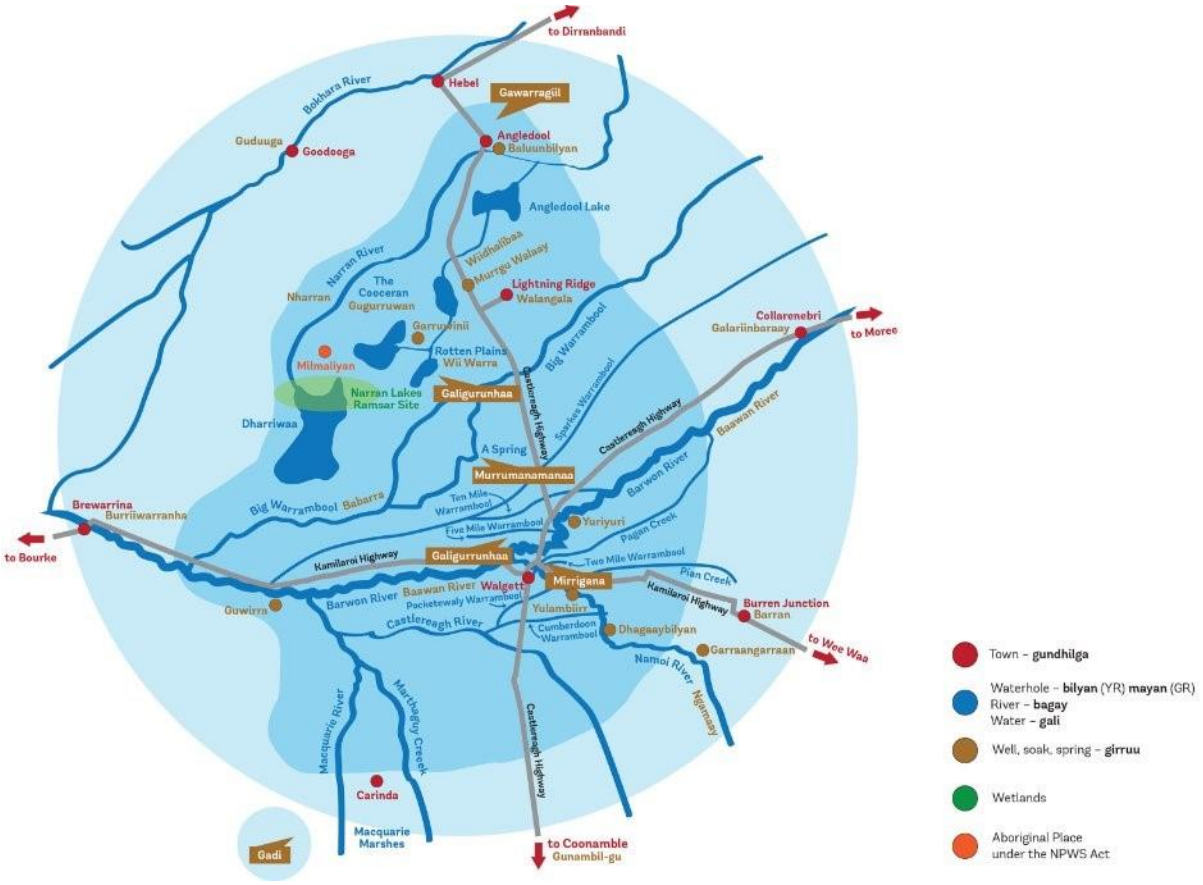
Water Quality Monitoring Report

20th May 2026

Introduction

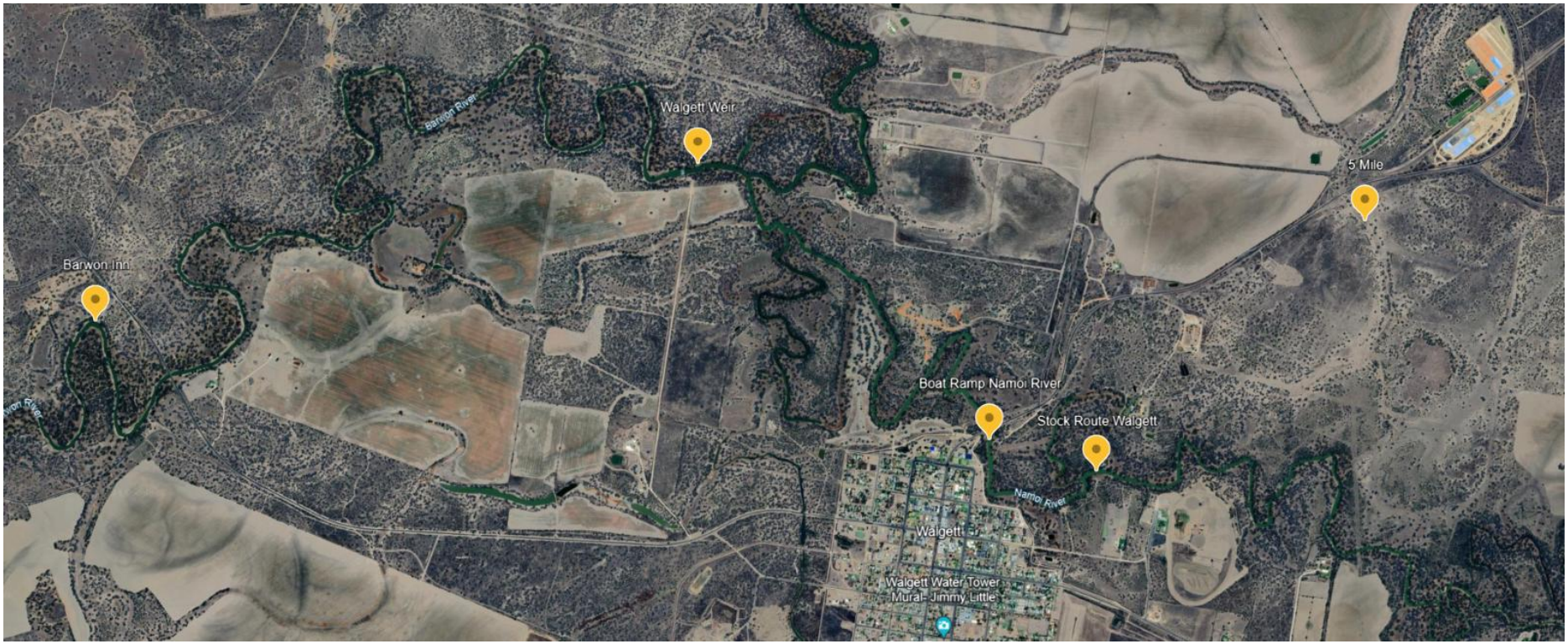
This data was collected on Wednesday 20th May 2026 between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

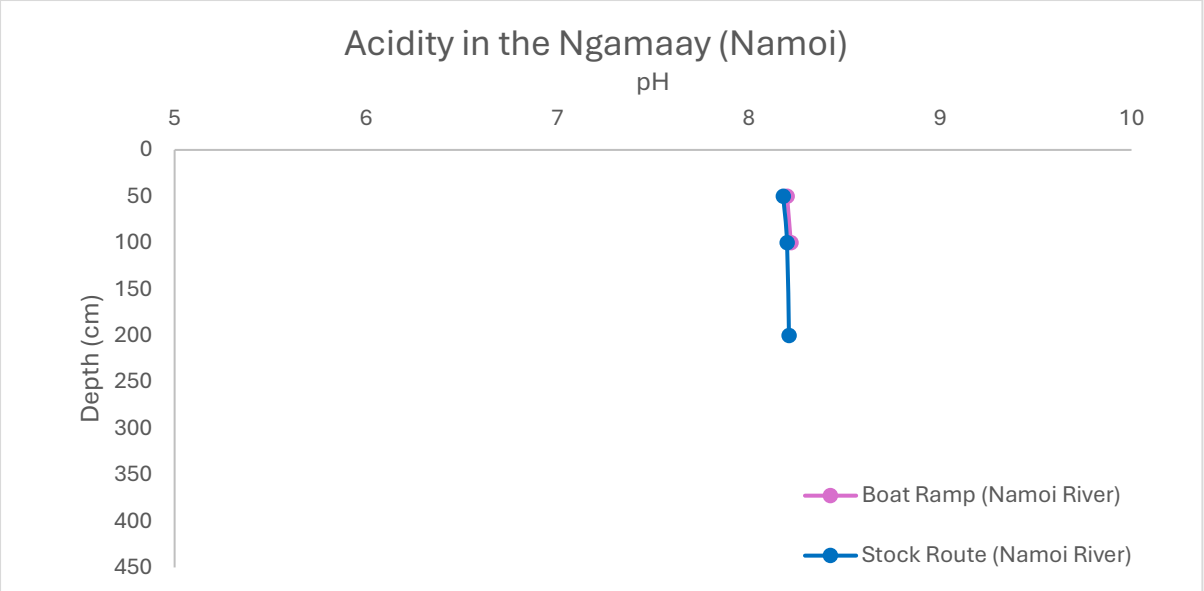


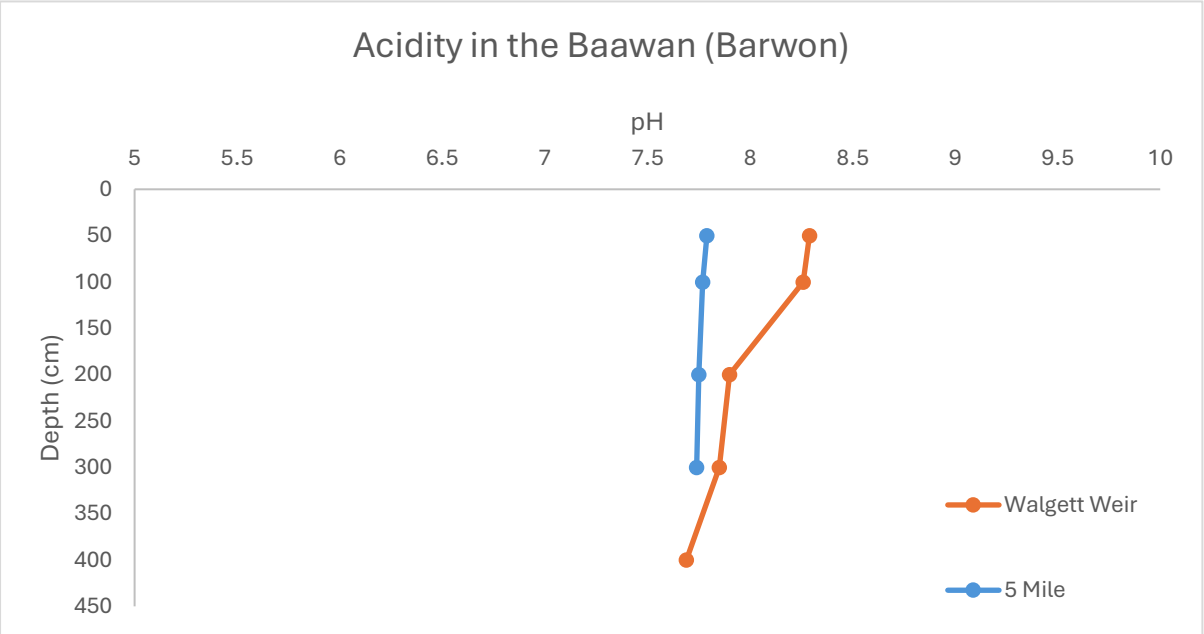
(Picture: Dharriwaa Elders Group area of interest)

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

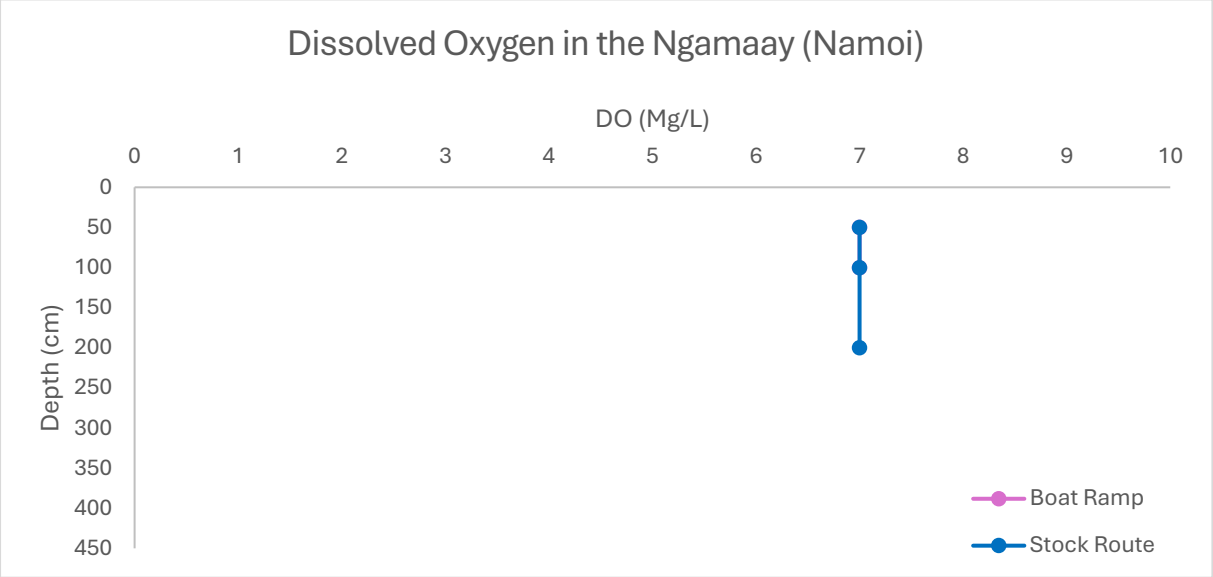


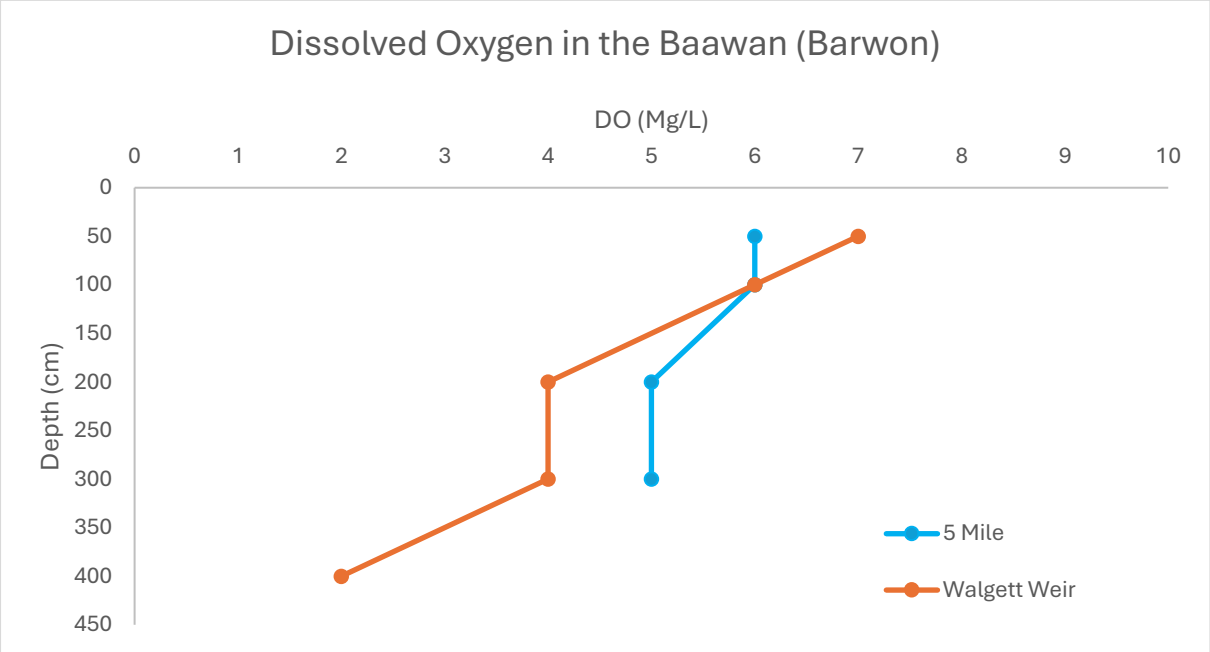


The pH at all sites on both the Ngamaay and Baawan Rivers are within the healthy range. The lowest reading is 7.74 which was at the 5 Mile on the Baawan River, and the highest reading is 8.29 at the Walgett Weir which is also in the Baawan River.

Healthy range: 6.5 - 8.5 pH

Dissolved Oxygen in the Ngamaay and Baawan Rivers

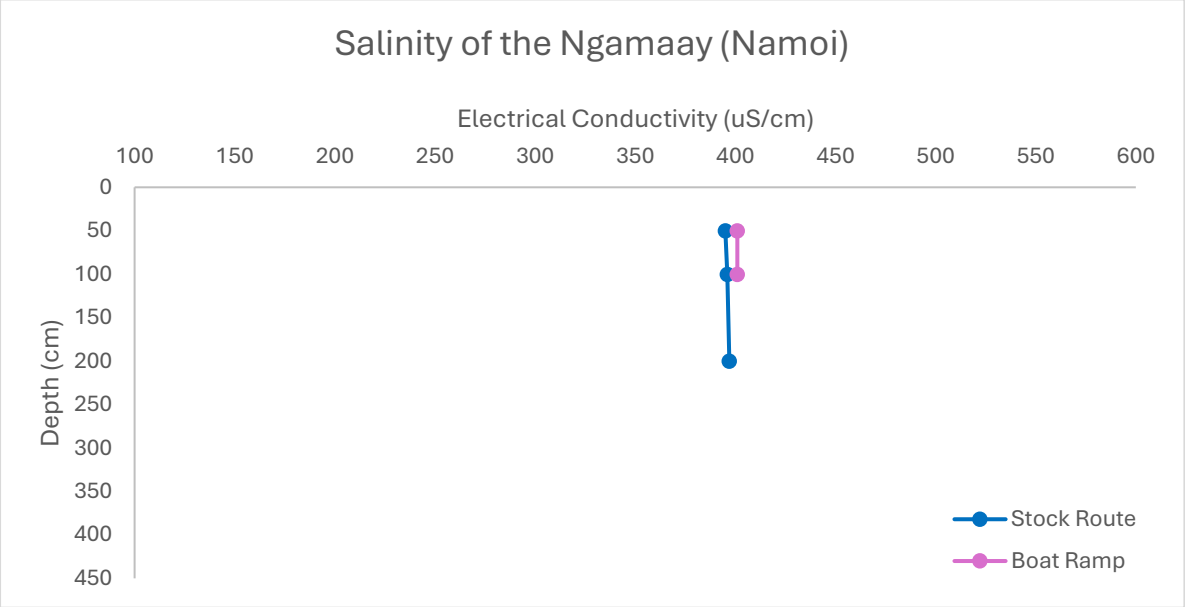


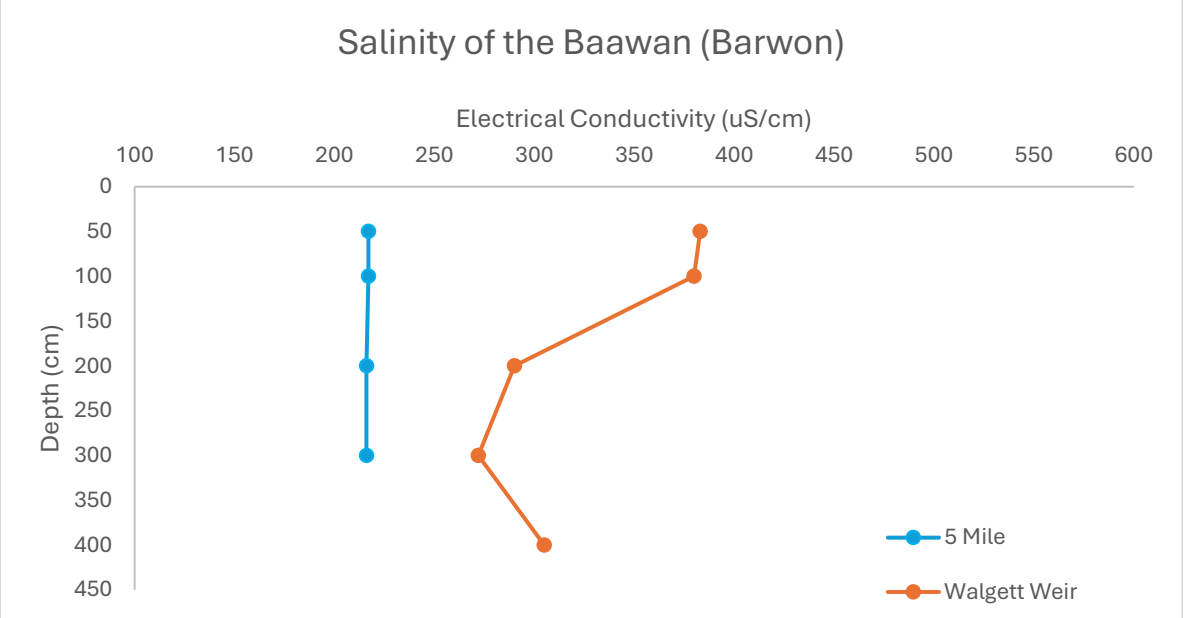


The dissolved oxygen in the Ngamaay River is within the healthy range. The first two readings at the Walgett Weir (Baawan River) is within the healthy range but the following three readings three readings are outside the healthy range. At the 5 Mile (Baawan River) the first two readings are within the healthy range, but the last two readings are outside the healthy range. The highest reading is 7 which is at the stock Route, Boat Ramp (Ngamaay River and the 5 Mile (Baawan River). The lowest reading is 2 which is at the Walgett Weir in the Baawan River.

Healthy Range: 6 - 8 (Mg/L)

Salinity in the Ngamaay and Baawan Rivers

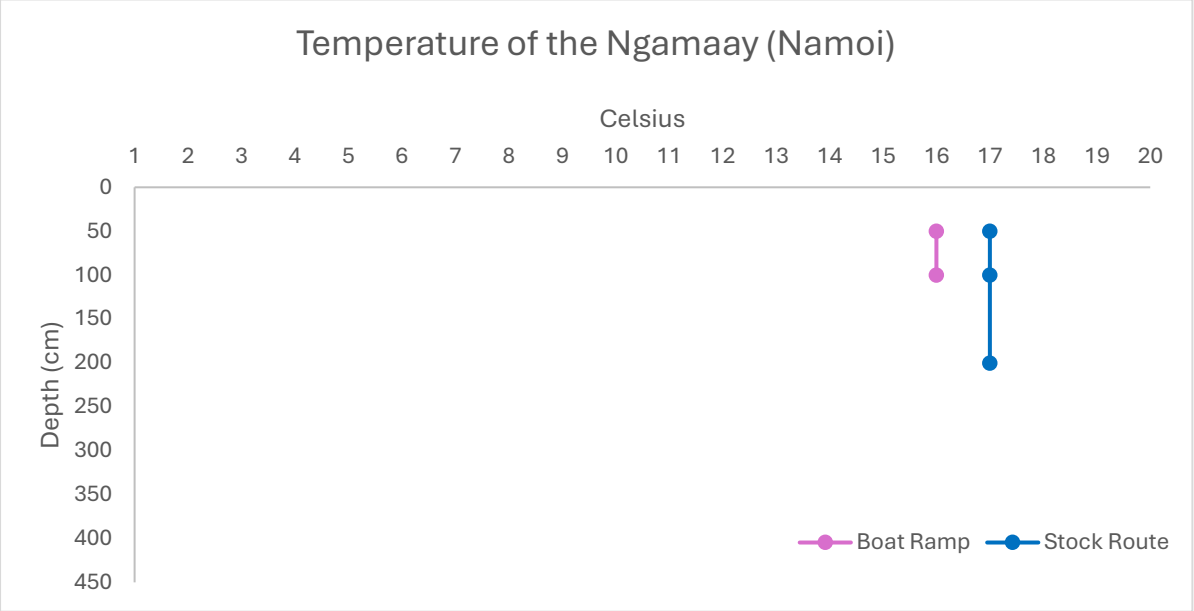


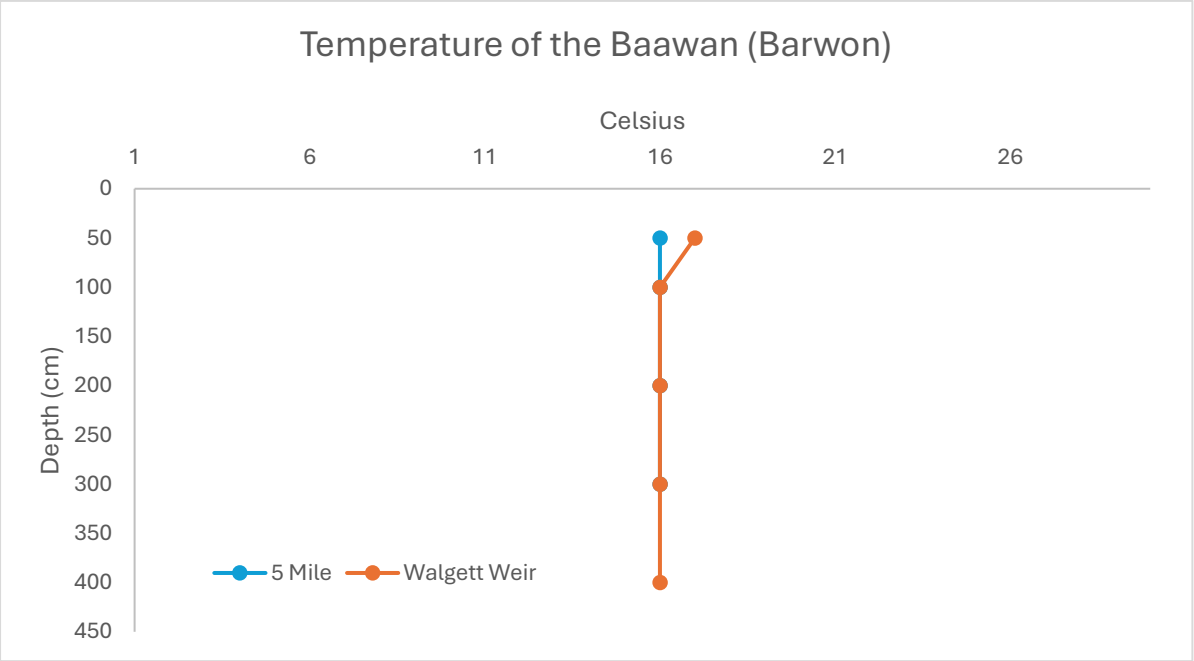


The salinity at all sites in the Ngamaay and Baawan Rivers are within the healthy range. The highest reading is 401 which is at the Stock Route in the Ngamaay River, and the lowest reading is 216 which is at the 5 Mile in the Baawan River.

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Ngamaay and Baawan Rivers





The temperature at all sites in both the Ngamaay and Baawan Rivers are outside the healthy range. The highest reading is 17 which is at the Boat Ramp (Ngamaay River) and the Walgett Weir (Baawan River). The lowest reading is 16 which is at the Walgett Weir, 5 Mile (Baawan River) and the Stock Route (Ngamaay River).

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH is within the healthy range for both rivers which means that the water is not too acidic or too alkaline. The salinity is also with the healthy range in both rivers. This is good for freshwater aquatic life.

The temperature is outside the healthy range in both rivers, but this is not a huge concern as we are now getting into the cooler moths therefore the water in the rivers will be getting cooler as well.

At the Walgett Wier at the 4m reading the dissolved oxygen reading is dangerously low. Below 3 (mg/l) is when fish kills happen, this is our only concerning site for dissolved oxygen for this week reading.