



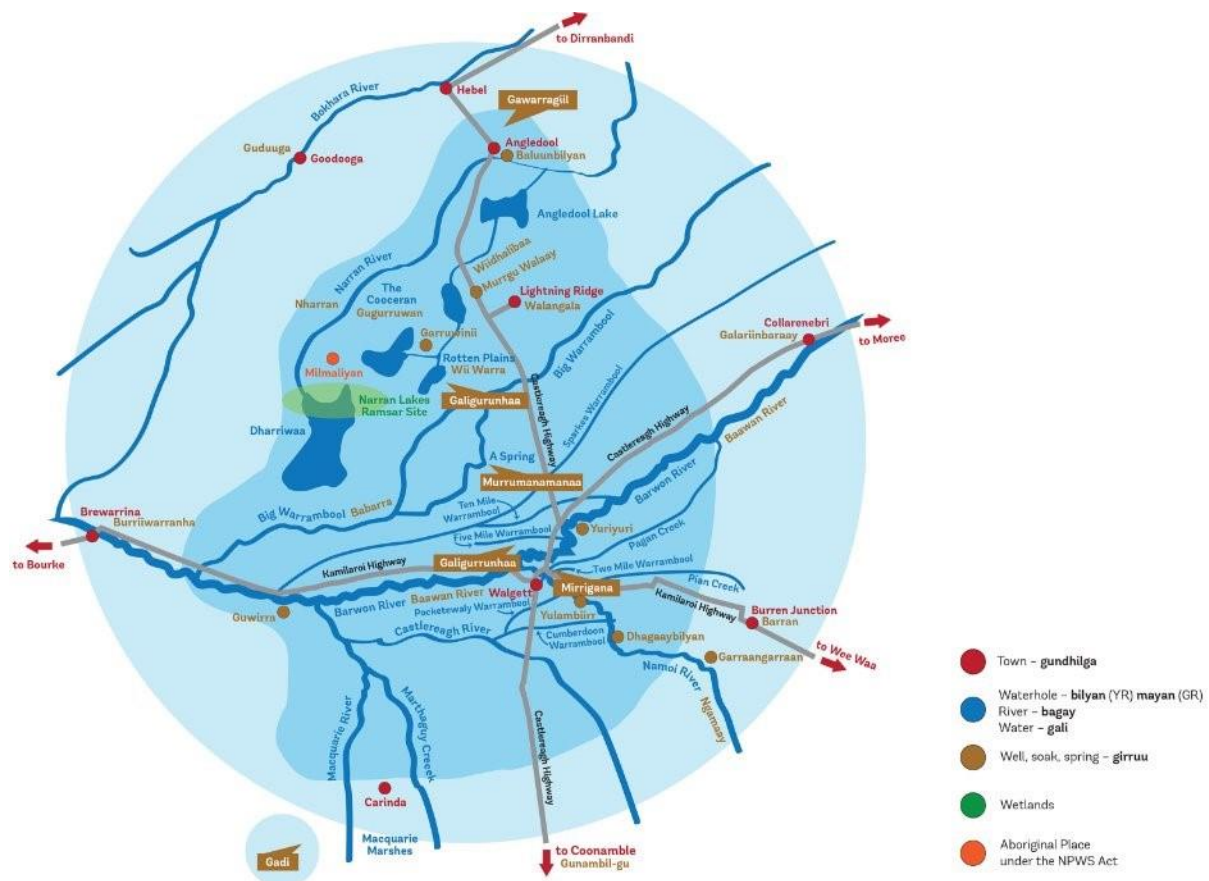
Weekly River Monitoring Report

28th May 2024

Introduction

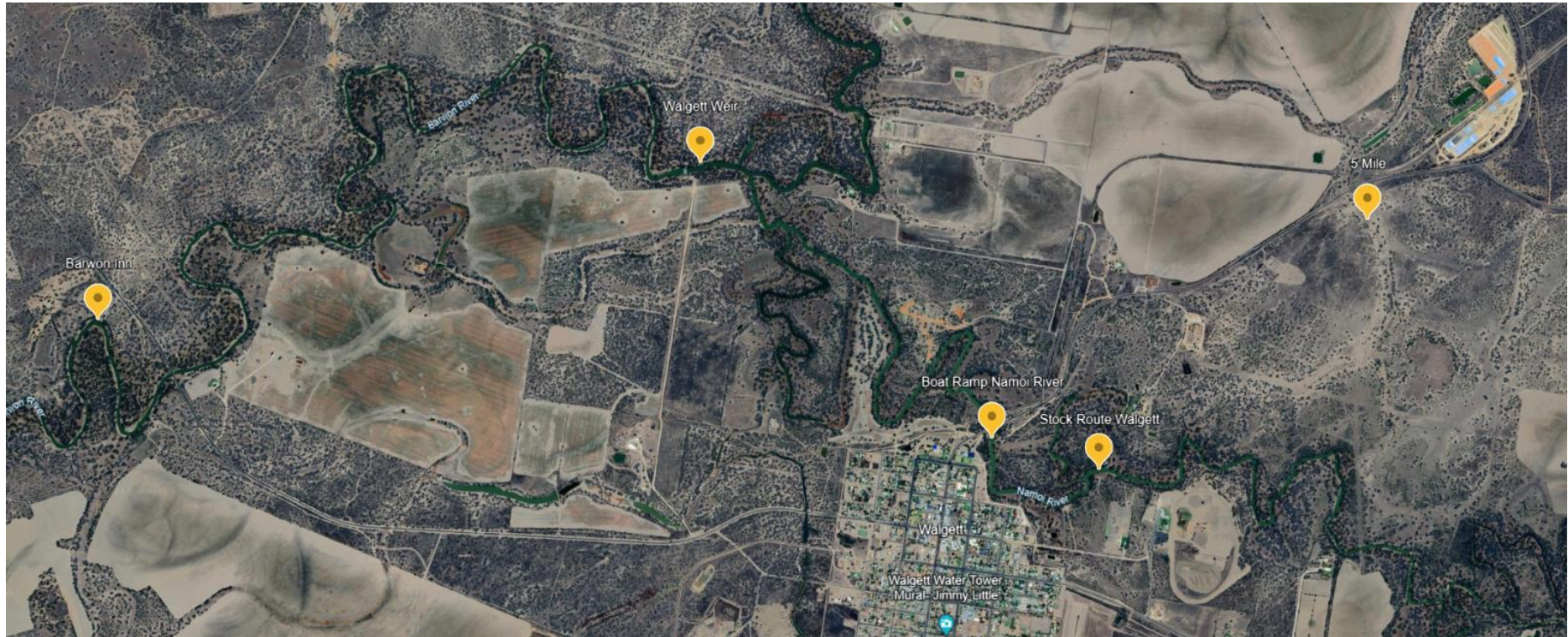
This data was collected on Tuesday 28th May 2024 between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

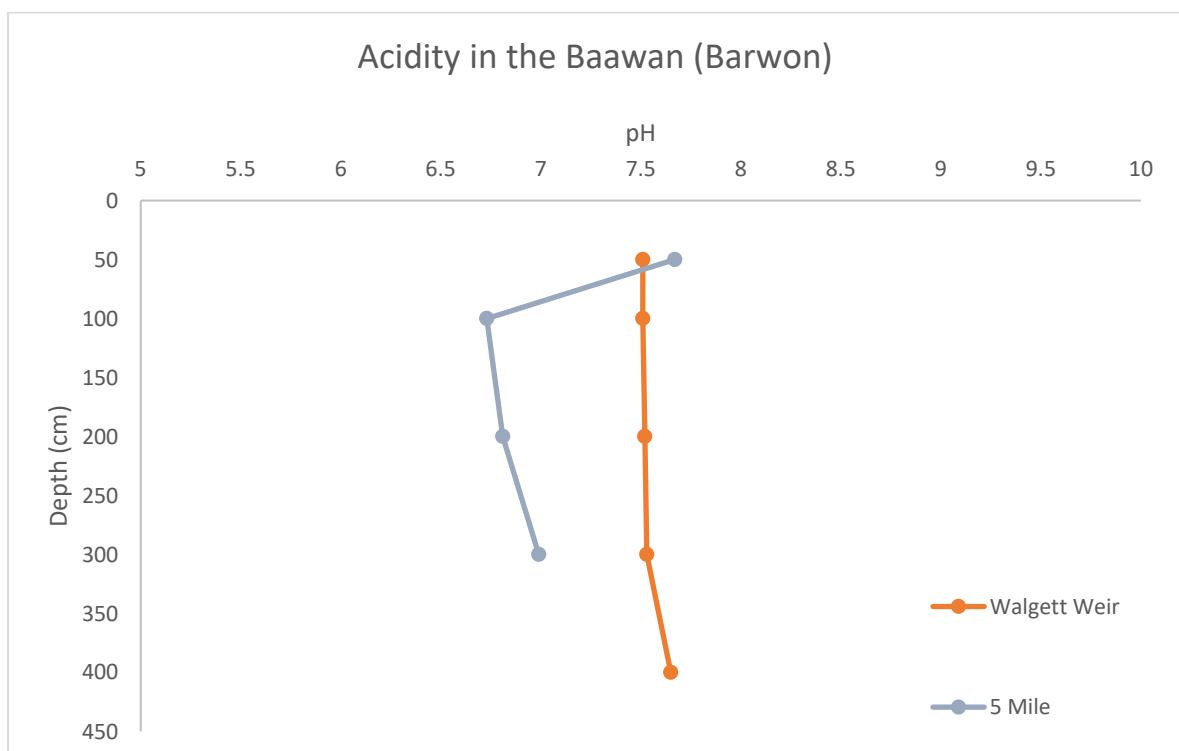
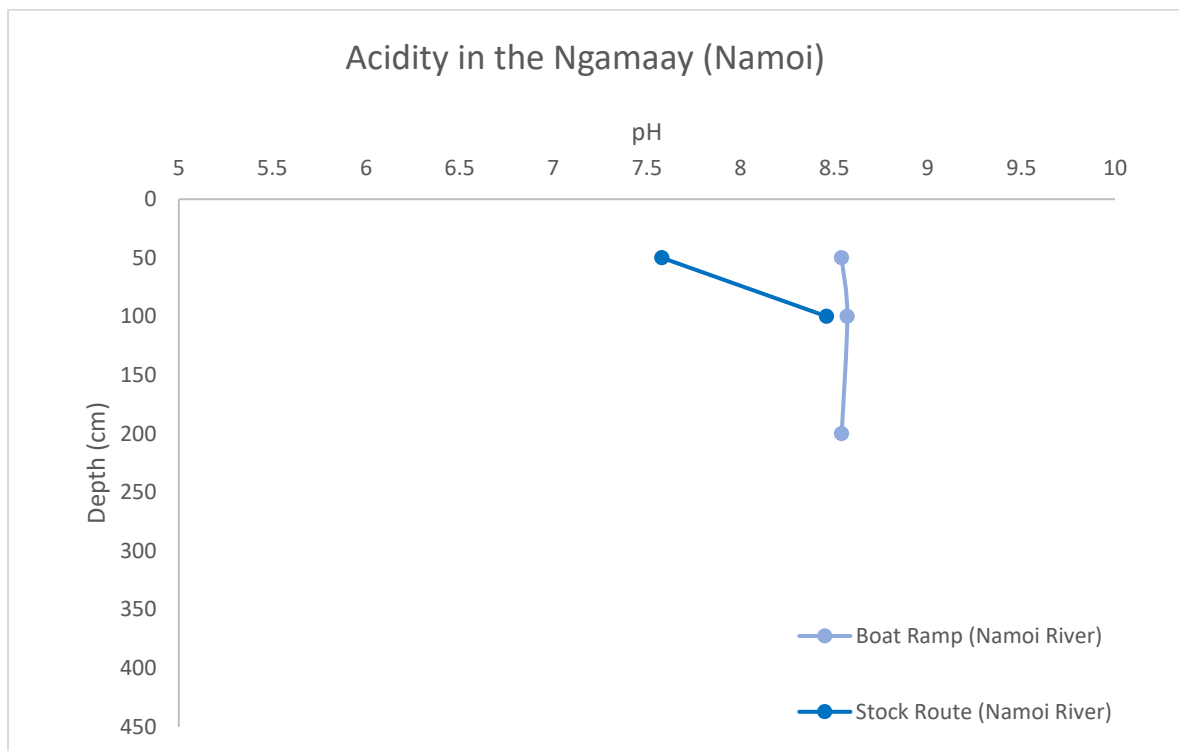


(Picture: Dharriwaa Elders Group area of interest)

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



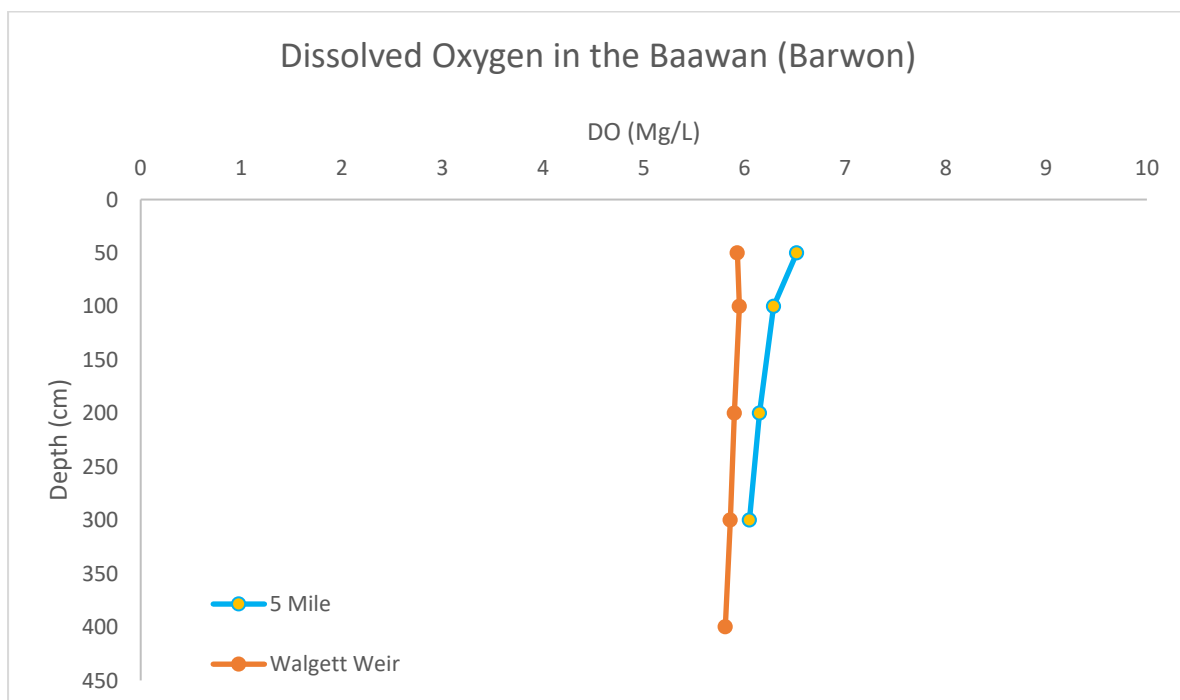
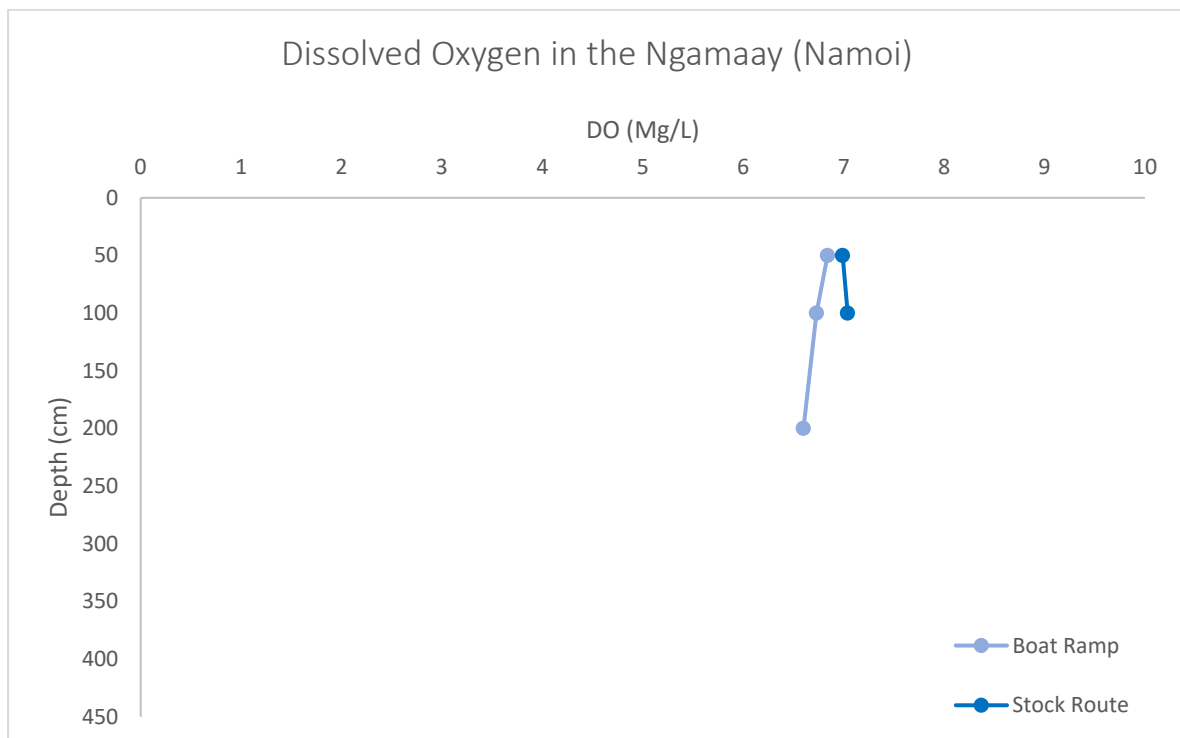
Acidity in the Ngamaay and Baawan Rivers



The pH measured at the Stock Route on the Ngamaay River is within a healthy range at all depths. The pH measured at the Boat Ramp on the Ngamaay River is outside the healthy range. The pH in the Baawan is within the healthy range. The minimum reading was 7.58 and the maximum is 8.57.

Healthy range: 6.5 - 8.5 pH

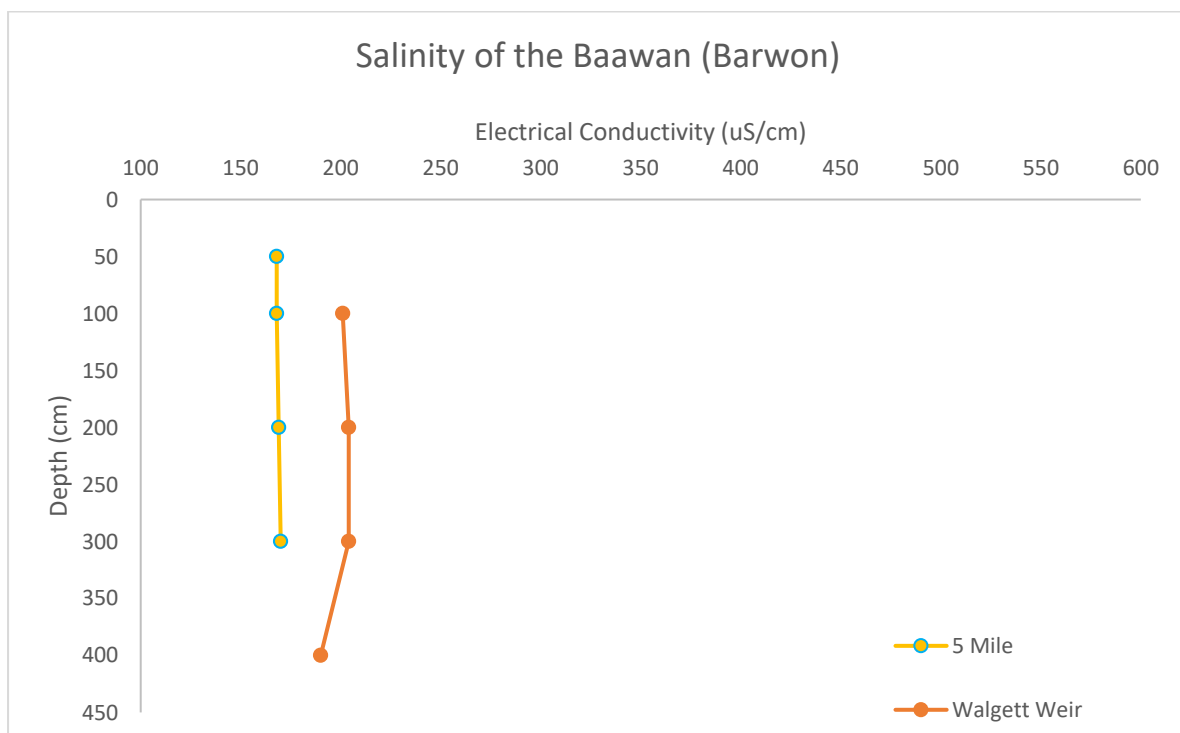
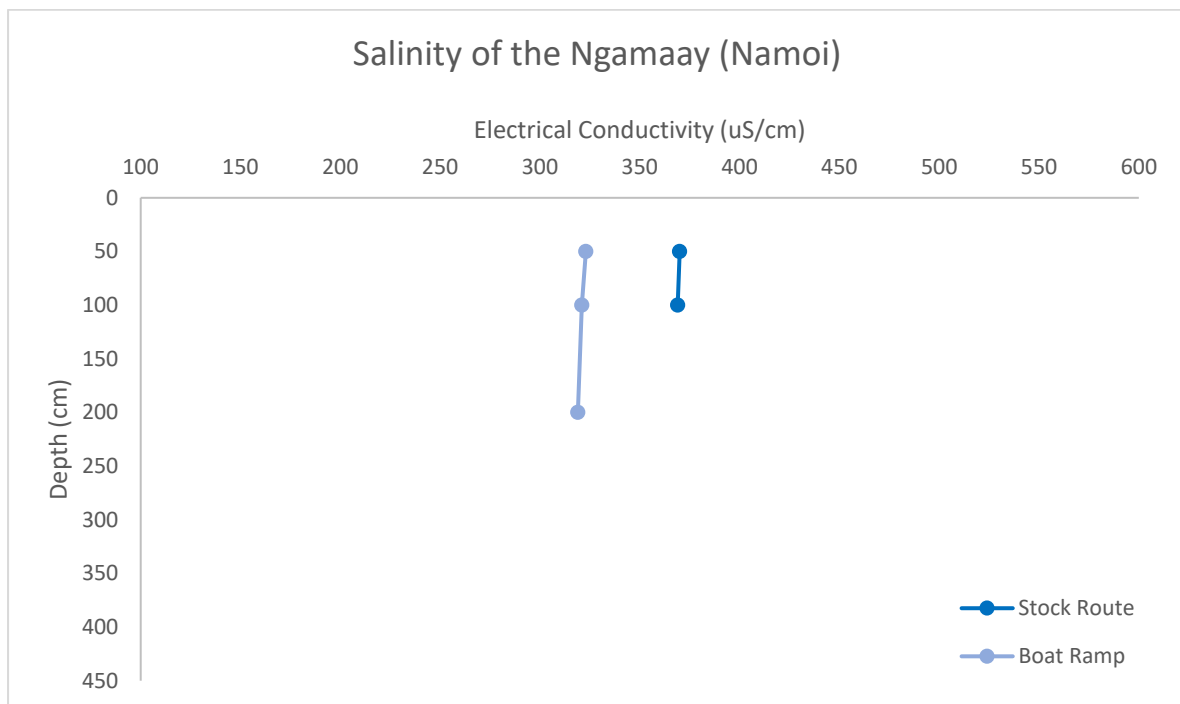
Dissolved Oxygen in the Ngamaay and Baawan Rivers



The dissolved oxygen measured on the Ngamaay River is within a healthy range. The dissolved oxygen measured at the Walgett Weir on the Baawan River are outside the healthy range. It's at an okay level. The dissolved oxygen measured at the 5 Mile on the Baawan River is within a healthy range. The minimum reading is 5.81 and the maximum reading is 7.04.

Healthy Range: 6 - 8 (Mg/L)

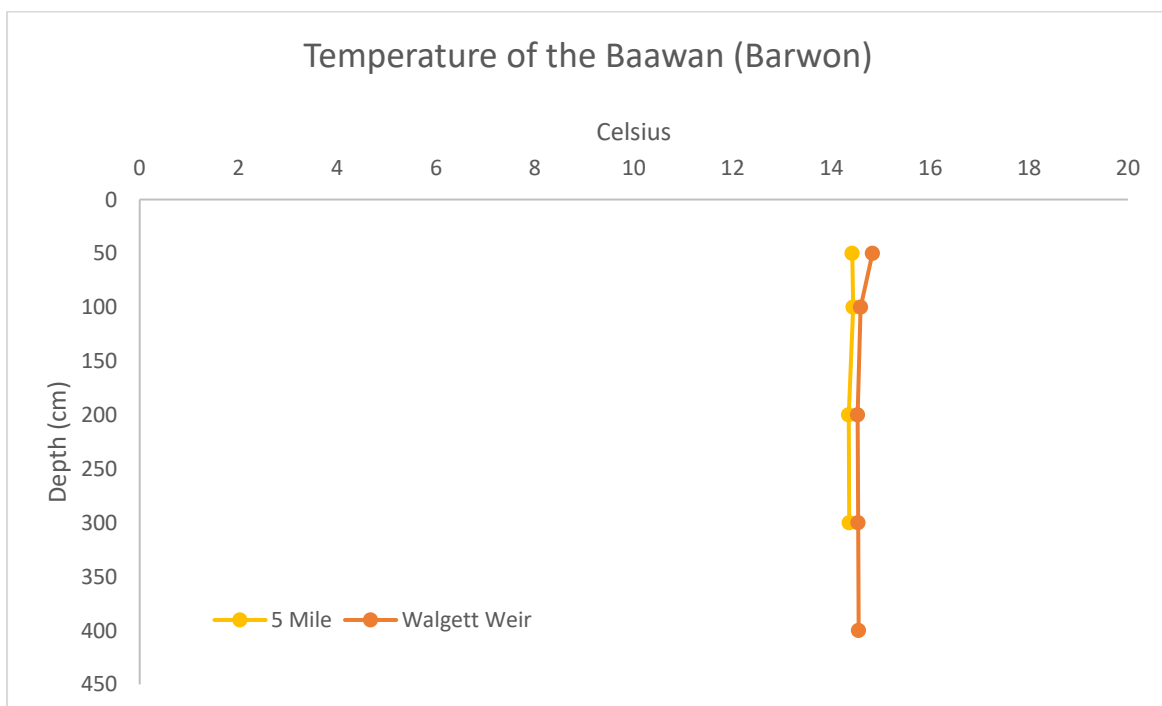
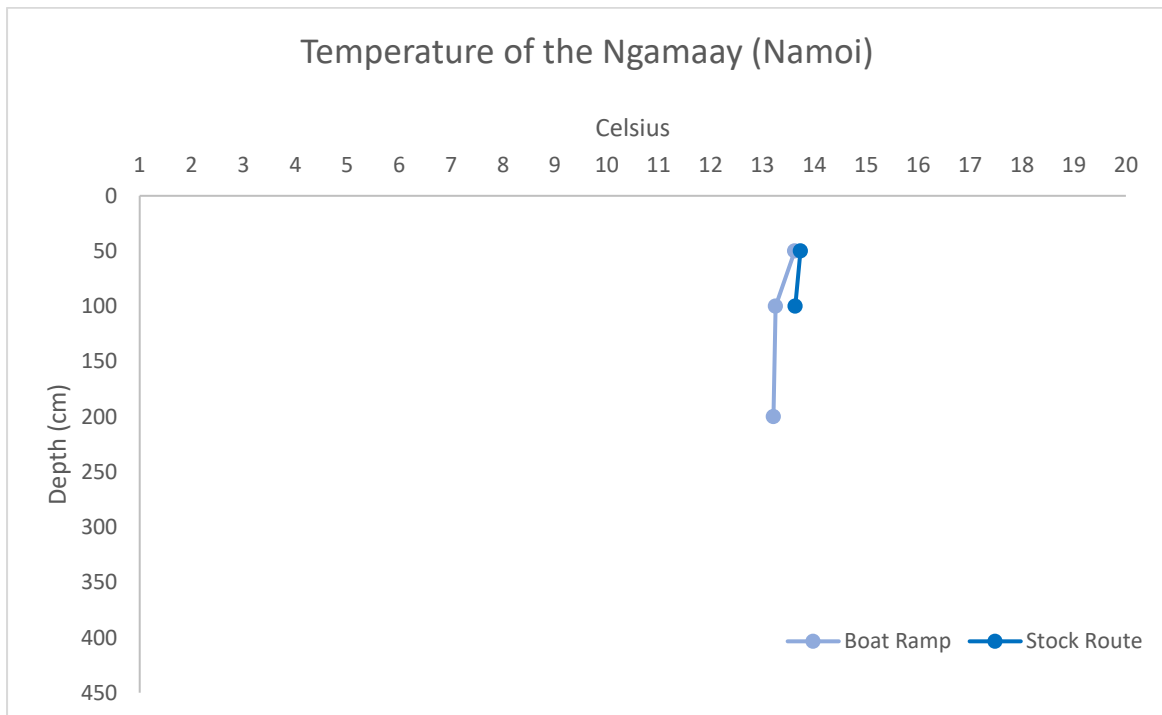
Salinity in the Ngamaay and Baawan Rivers



The salinity in the Baawan and Ngamaay Rivers are within the healthy range. The minimum reading is 168 and the maximum reading is 370.

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Ngamaay and Baawan Rivers



The temperature measured in both the Ngamaay and Baawan Rivers is outside the healthy range. The minimum reading is 13.21 degrees and the maximum reading is 14.83 degrees.

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH measured at the 5 Mile, Walgett Weir (Baawan River) and Stock Route (Ngamaay River) are all within a healthy range at all depths. The pH measured at the Boat Ramp (Ngamaay River) is outside the healthy range.

The dissolved oxygen at the Boat Ramp, Stock Route (Ngamaay River) and 5 Mile are within a healthy range. The dissolved oxygen measured at the Walgett Weir (Baawan River) is outside the healthy range but is at an okay level.

The salinity measured at both the Baawan and Ngamaay Rivers are within a healthy range. This is good for freshwater fish.

The temperature measured at both the Baawan and Ngamaay Rivers at all depths is very low and is outside the healthy range. The fish are in no danger of dying because of the temperatures.