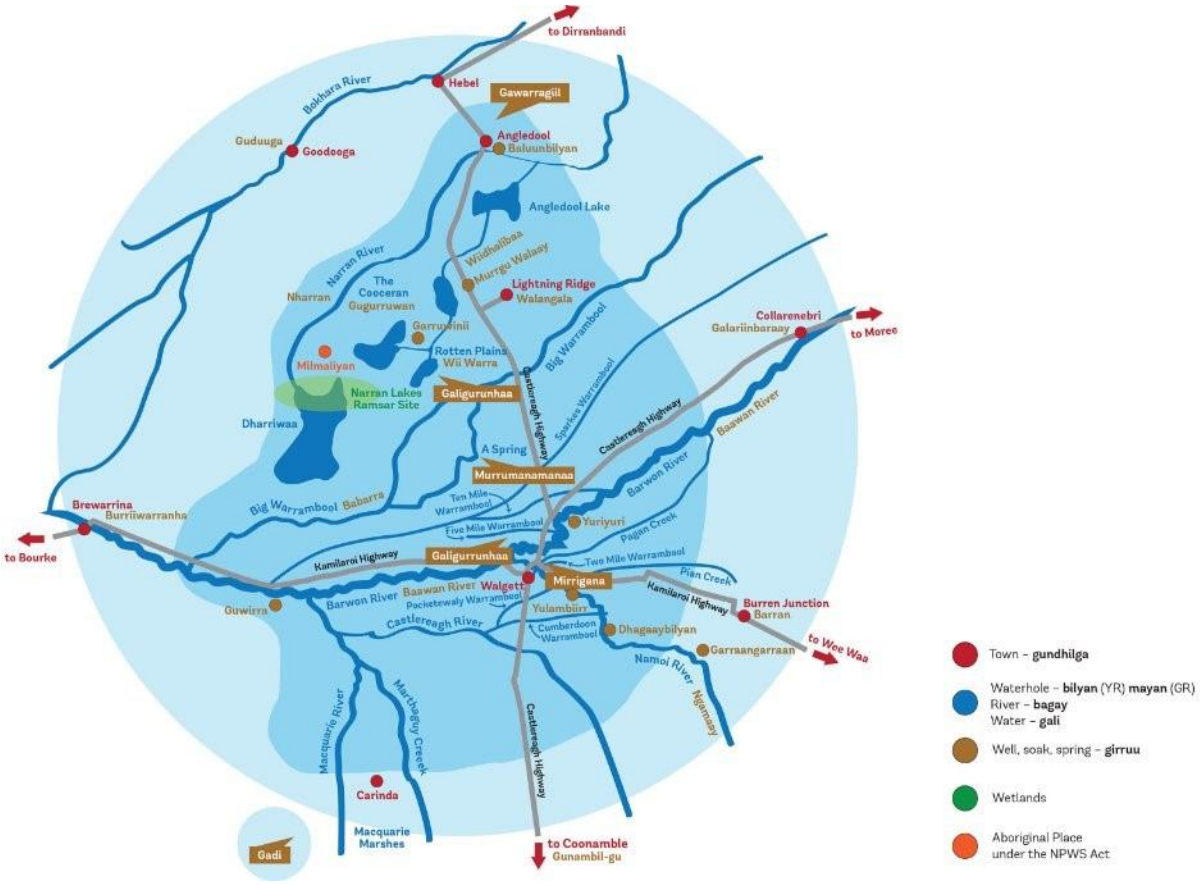
Water Quality Monitoring Report

9th September 2026

Introduction

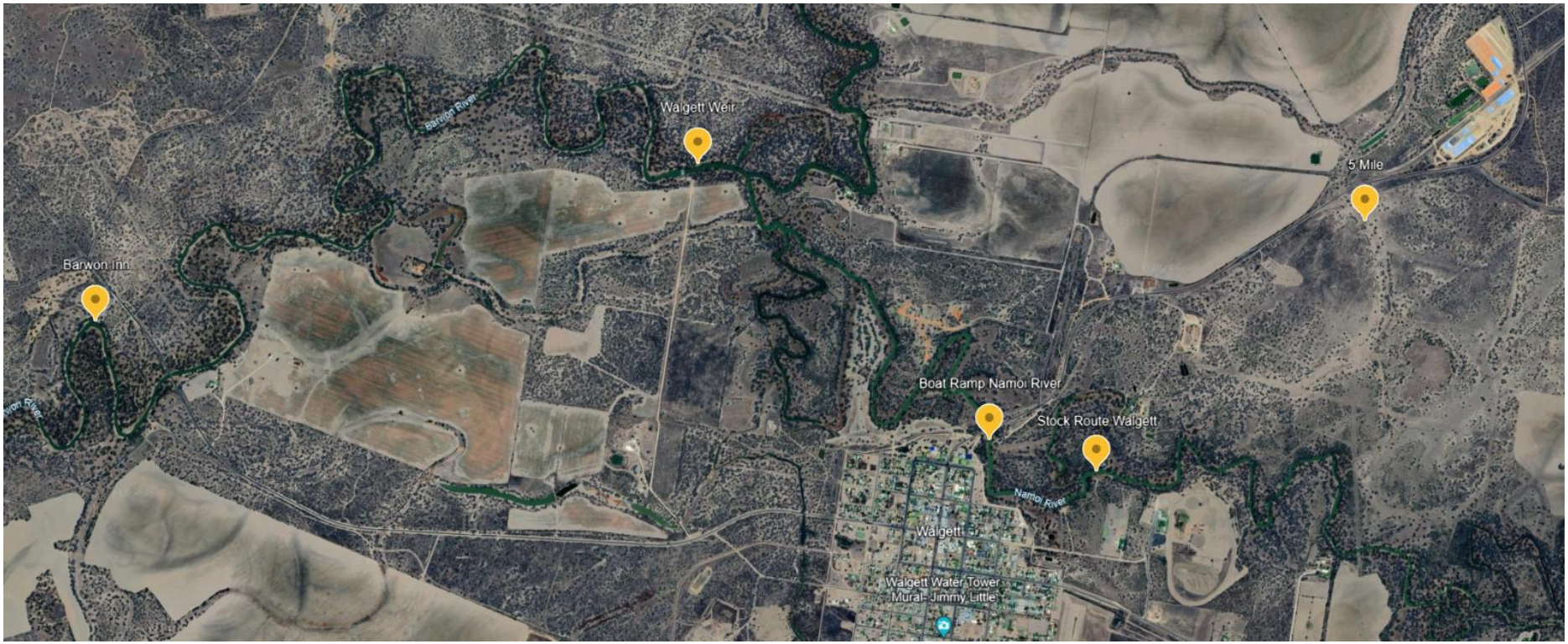
This data was collected on Wednesday 9th September between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

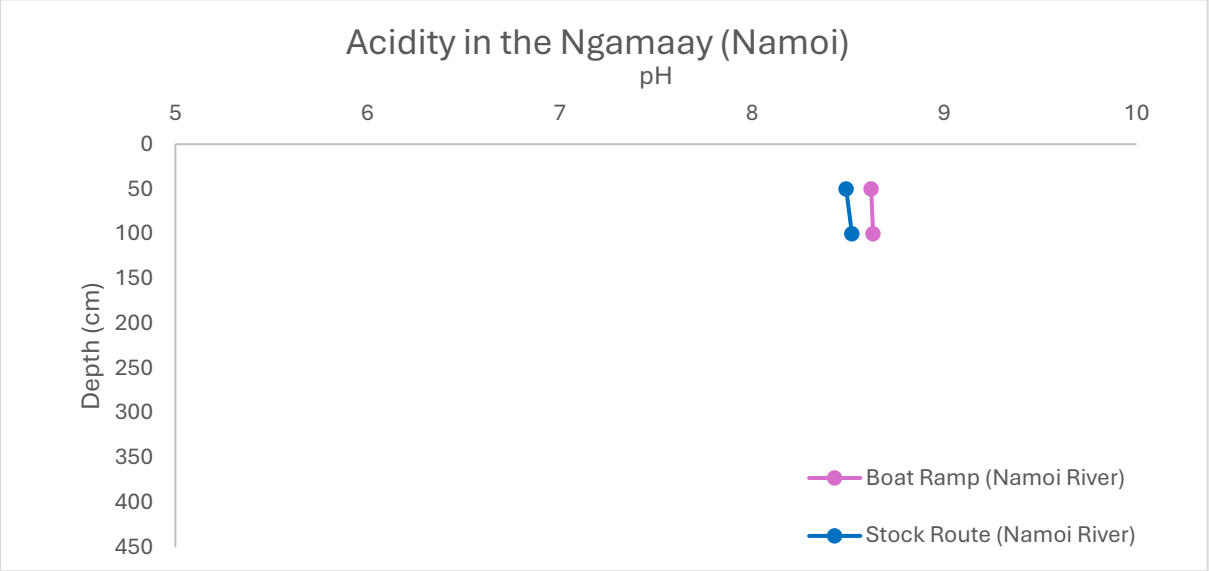


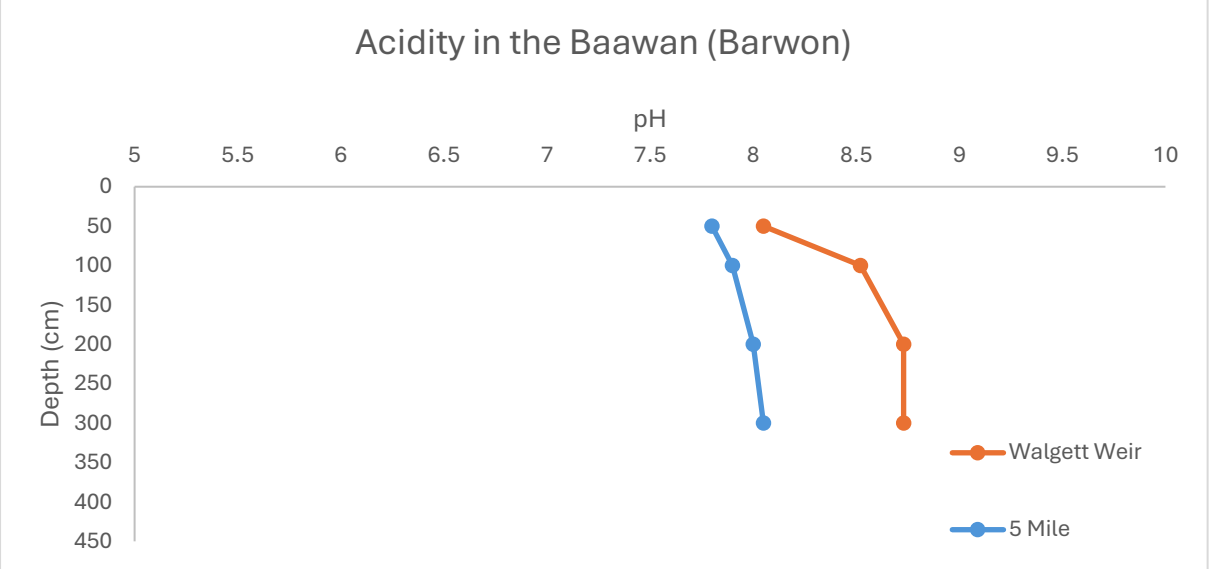
(Picture: Dharriwaa Elders Group area of interest)

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

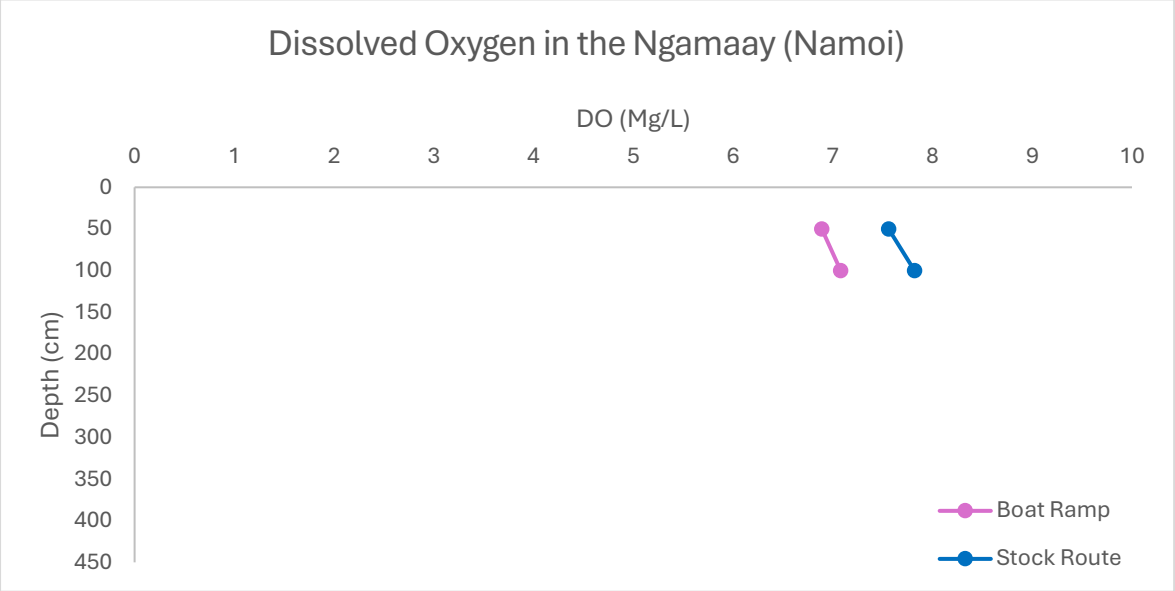


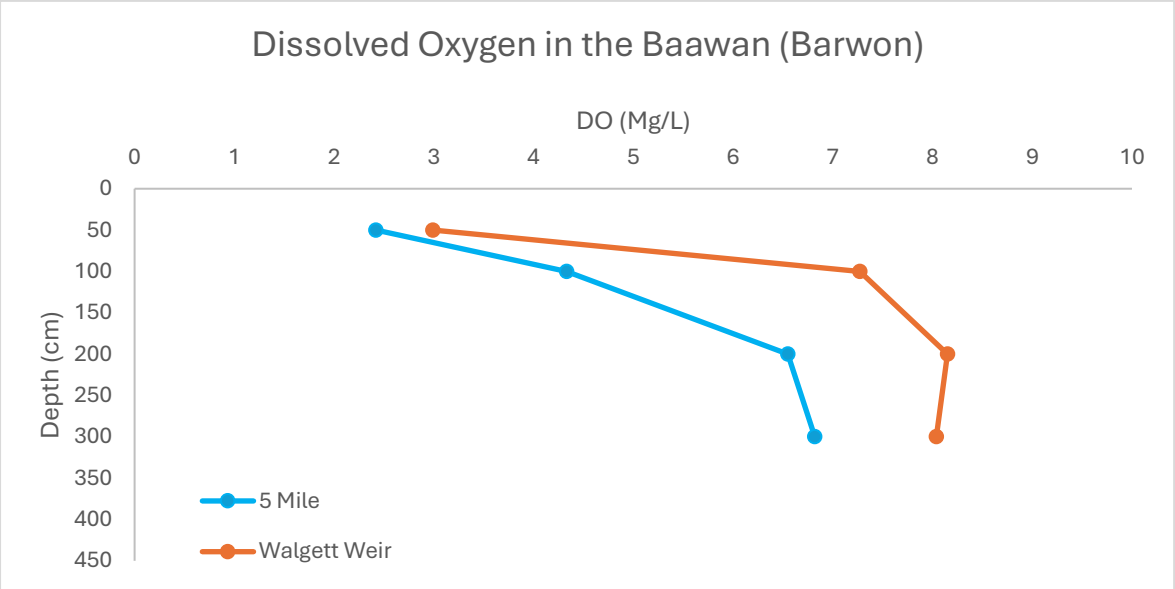


The pH at the Stock Route (Ngamaay River) and the 5 Mile (Baawan River) are within the healthy range. The pH at the Boat Ramp (Ngamaay River) and the Walgett Weir (Baawan River) are outside the healthy range. The highest reading is 8.73 at the Walgett Weir, and the lowest reading is 8 at the 5 Mile.

Healthy range: 6.5 - 8.5 pH

Dissolved Oxygen in the Ngamaay and Baawan Rivers

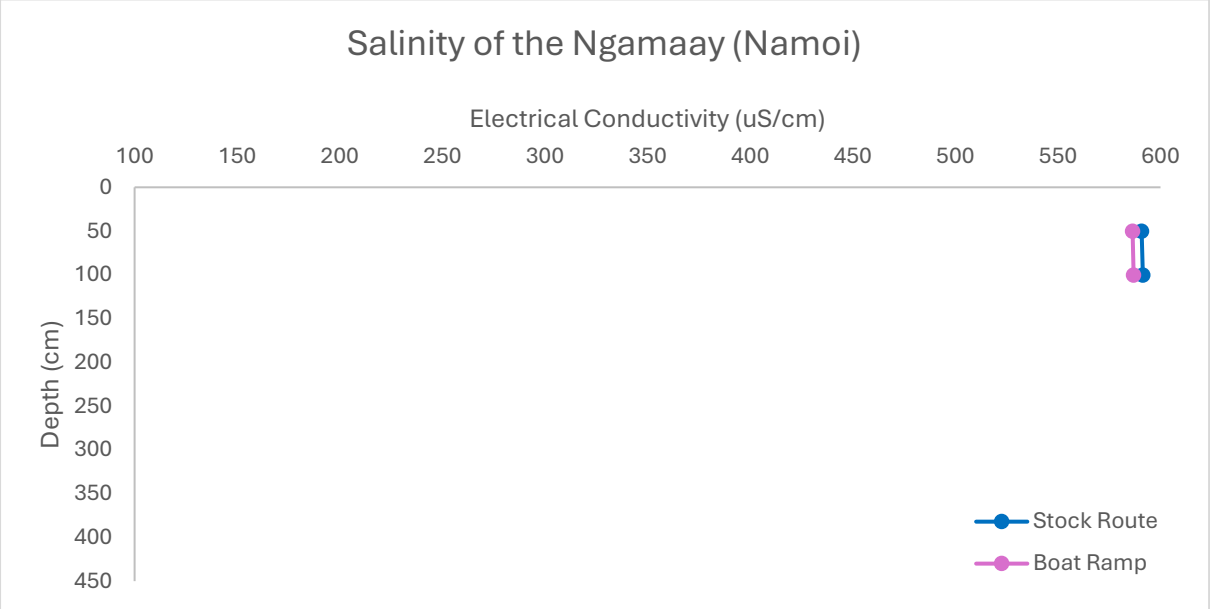


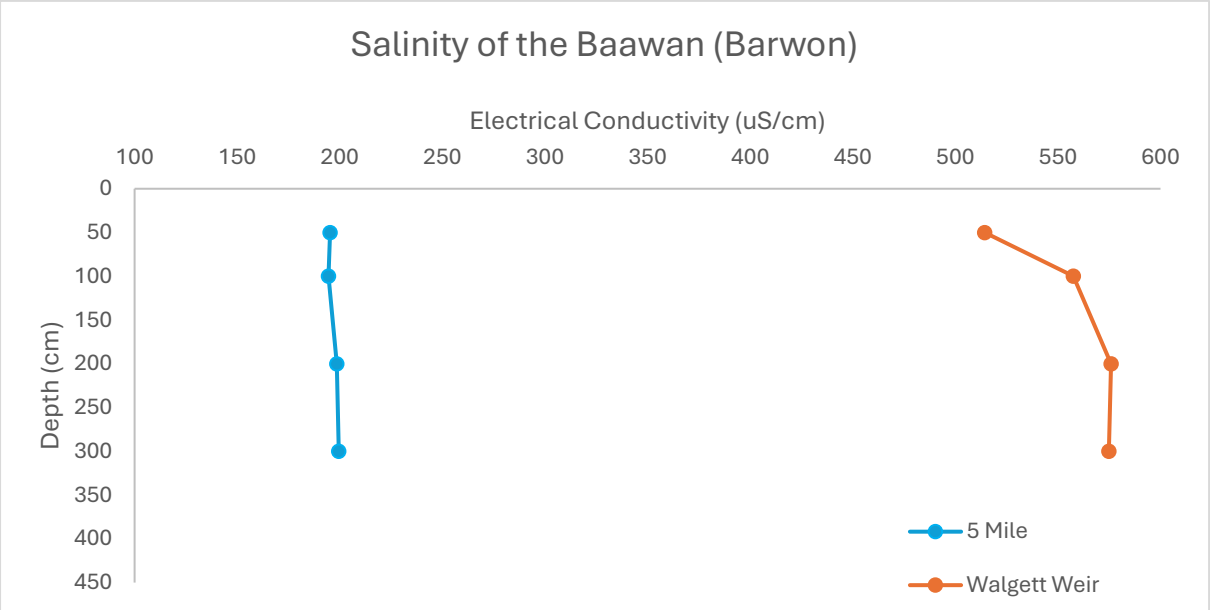


The dissolved oxygen in the Ngamaay is within the healthy range. At the Walgett Weir (Baawan River) the dissolved oxygen is within the healthy range. At the 5 Mile (Baawan River) the dissolved oxygen is outside the healthy range. The highest reading is 8.15 at the Walgett Weir and the lowest reading is 2.42 at the 5 Mile.

Healthy Range: 6 - 8 (Mg/L)

Salinity in the Ngamaay and Baawan Rivers

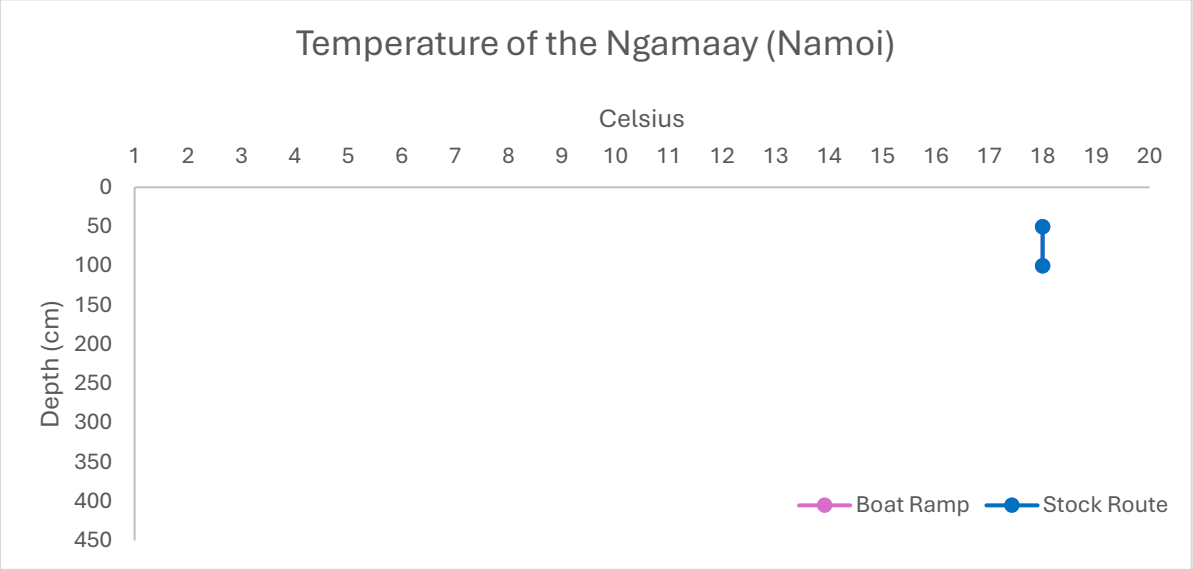


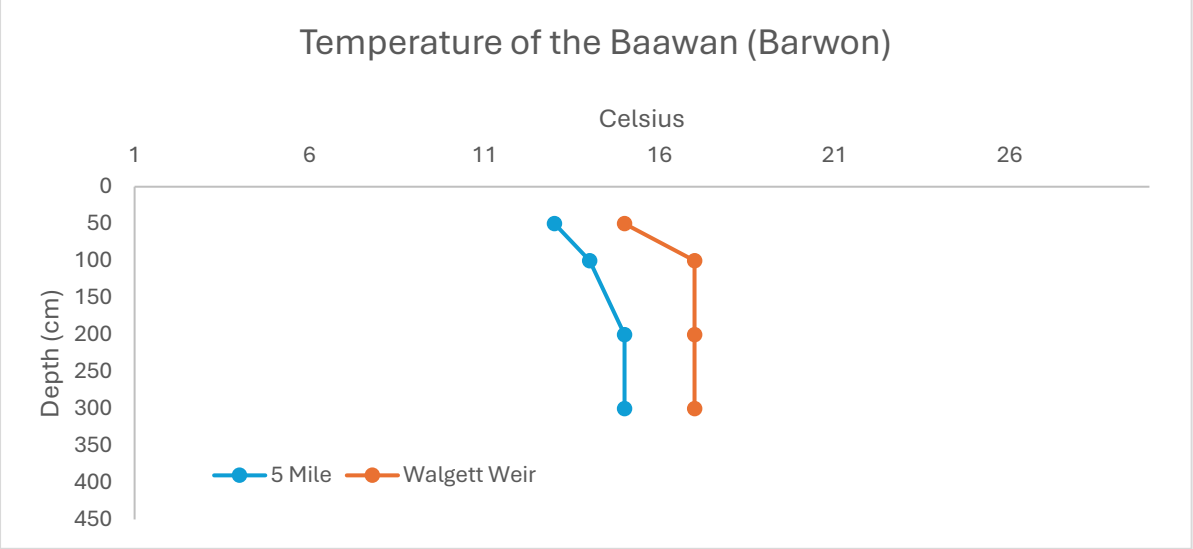


The salinity at all sites on the Ngamaay and Baawan Rivers are within the healthy range. The highest reading is 591 at the Stock Route (Ngamaay River) and the lowest reading is 195 at the 5 Mile (Baawan River).

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Ngamaay and Baawan Rivers





The temperature within the Ngamaay River at both sites are within the healthy range. The temperature in the Baawan River at both sites are outside the healthy range. The highest reading is 18 at both sites on the Ngamaay and the lowest reading is 13 at the 5 Mile (Baawan River).

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH in the Ngamaay River is just a bit outside the healthy range nothing to be concerned about. This means that the water in the Ngamaay River is more alkaline than acidic.

Majority of the readings at the 5 Mile (Baawan River) shows that the dissolved oxygen is outside the healthy range which is not great. Fish kills occur at 3Mg/L.

The salinity is within the healthy range. The is good for freshwater aquatic life.

The temperature in the Baawan River is outside the healthy range. The weather is still quite cool in the mornings when the monitoring is being conducted therefore the weather could influence the water temperature.