

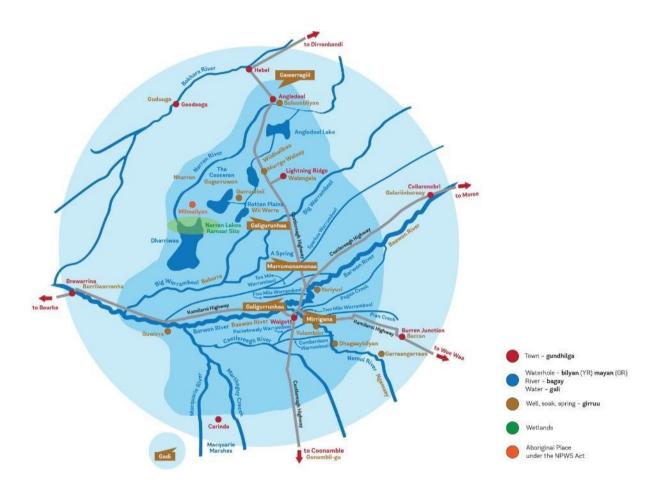
# Weekly River Monitoring Report

18th September 2024

### Introduction

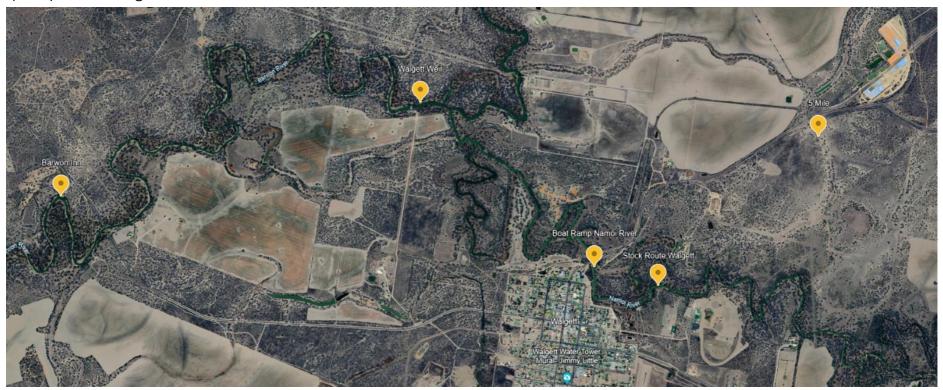
This data was collected on Wednesday 18<sup>th</sup> September between 10am and 3pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

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.

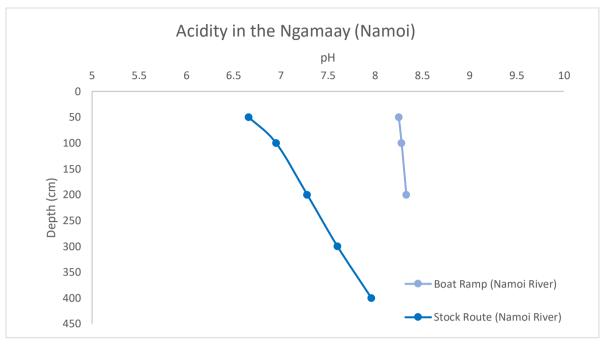


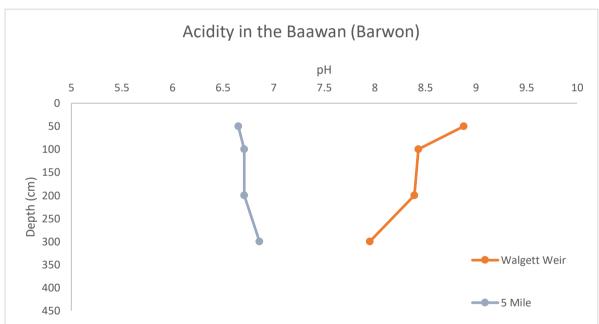
(Picture: Dharriwaa Elders Group area of interest)

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

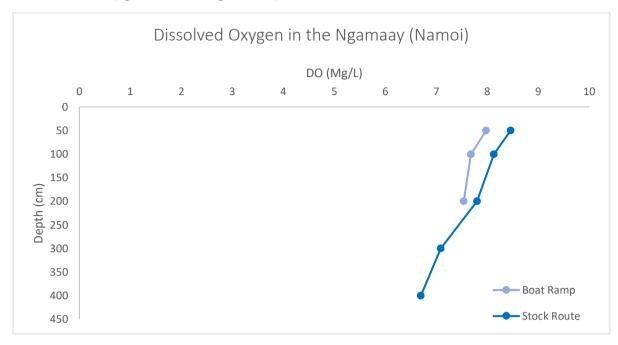


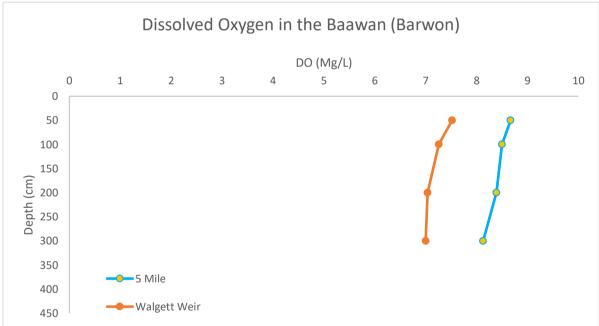


All pH readings at both the Boat Ramp and Stock Route (Ngamaay River) are in the healthy range. The pH readings at the 5 Mile (Baawan River) are within the healthy range. The first pH reading at the Walgett Weir is outside the healthy range, but all other readings are in the healthy range. The maximum reading is 8.88 and the minimum reading is 6.65.

Healthy range: 6.5 - 8.5 pH

# Dissolved Oxygen in the Ngamaay and Baawan Rivers

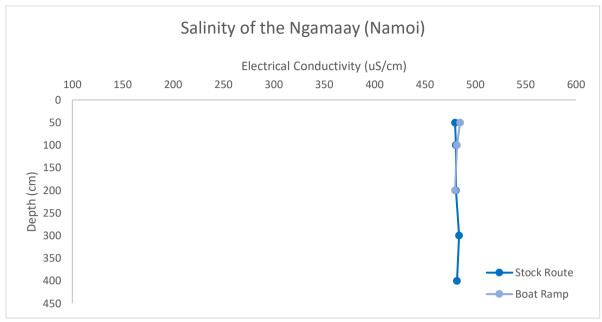


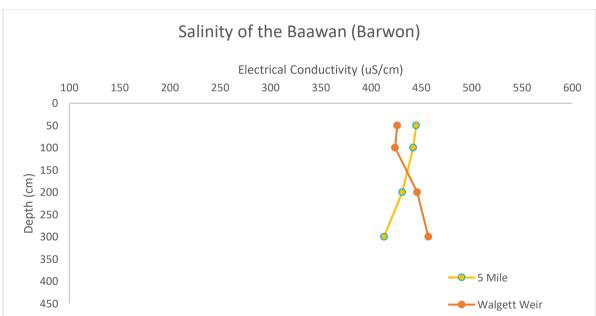


The dissolved oxygen readings at the Boat Ramp (Ngamaay River) and the Walgett Weir (Baawan River) are within the healthy range. The first two readings at the Stock Route (Ngamaay River) are outside the healthy range, the rest of the readings are in the healthy range. The dissolved oxygen readings at the 5 Mile (Baawan River) are outside the healthy range. The maximum reading is 8.67 and the minimum reading is 6.70.

Healthy Range: 6 - 8 (Mg/L)

# Salinity in the Ngamaay and Baawan Rivers

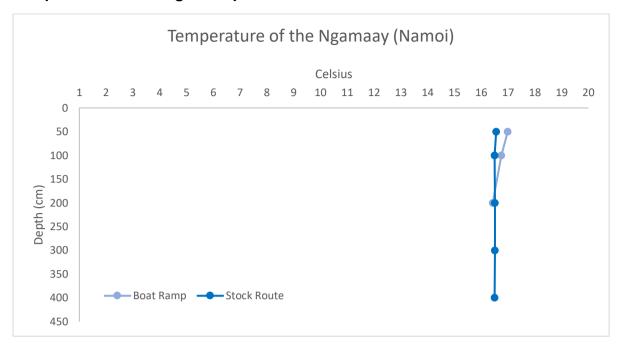




The salinity readings at all sites on the Ngamaay and Baawan River are within the healthy range. The maximum readings are 485 and the minimum reading is 413.

Healthy Range: 125 - 2,200 uS/cm

### Temperature in the Ngamaay and Baawan Rivers





The temperature readings in the Ngamaay River at both the Stock Route and Boat Ramp aer outside the healthy range. The first reading at the Walgett Weir (Baawan River) is in the healthy range but as it gets deeper into the river the temperature is outside the healthy range. The first two readings at the 5 Mile (Baawan River) are in the healthy range, the last two readings are outside the healthy range. The maximum reading is 18.99 and the minimum reading is 16.43.

Healthy Range: 18-28 degrees (Celsius)

### Conclusion

The pH readings at the Stock Route, Boat Ramp (Ngamaay River) and the 5 Mile (Baawan River) are within the healthy range. At the Walgett Weir (Baawan River) majority of the readings are in the healthy range.

The dissolved oxygen readings at the Boat Ramp (Ngamaay River) and Walgett Weir (Baawan River) are in the healthy range. Majority of the dissolved oxygen readings are in the healthy range at the Stock Route (Ngamaay River). At the 5 Mile (Baawan River) the pH readings are outside the healthy range.

The salinity is in the heathy range at all sites on the Ngamaay and Baawan Rivers. This is good for freshwater fish.

Majority if the temperature readings are outside the healthy range at all sites on the Ngamaay and Baawan Rivers.