NGARRANGARRA-LI WALAAYBAA RANGERS

Water Quality Monitoring Report

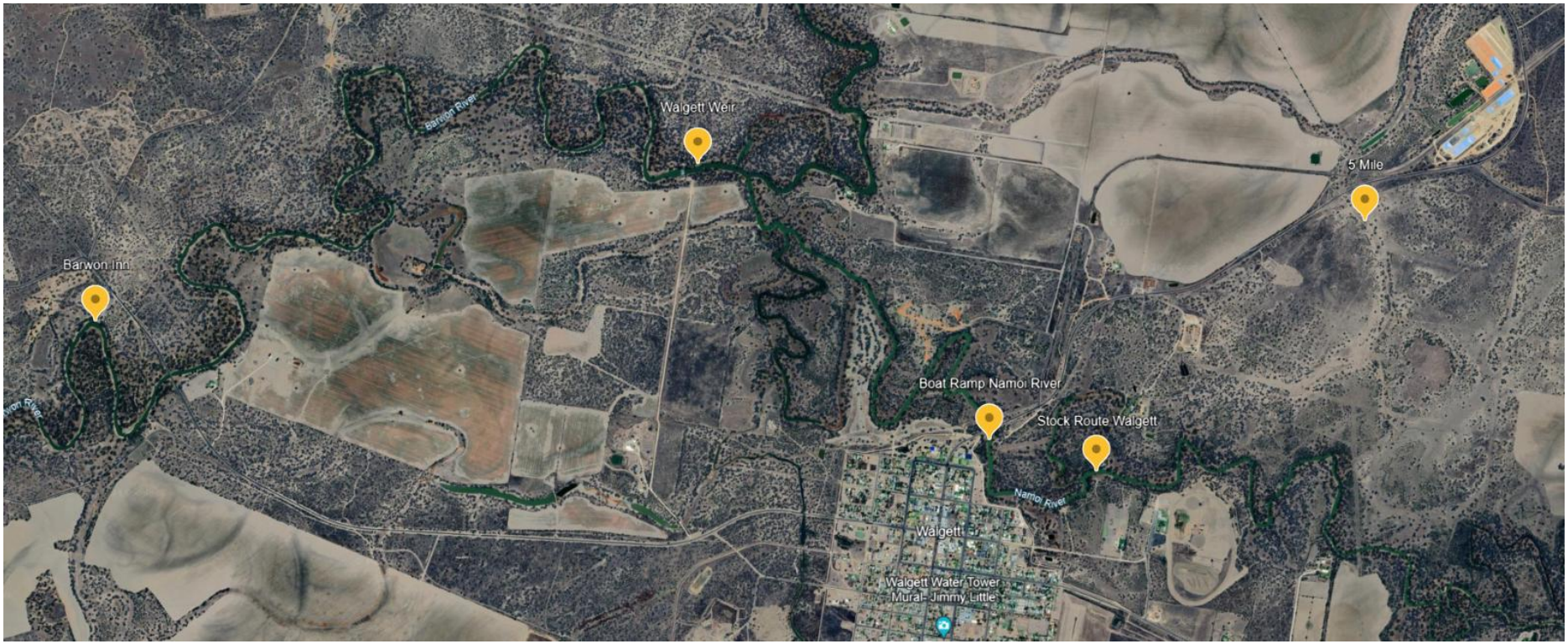
15th September 2026

Introduction

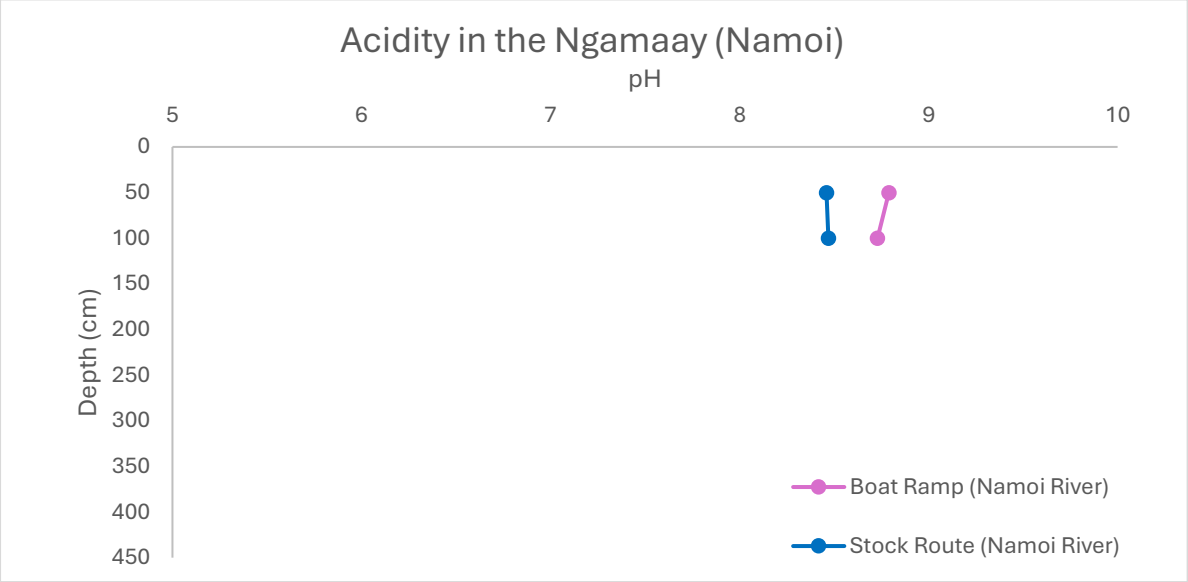
This data was collected on Tuesday 15th September between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

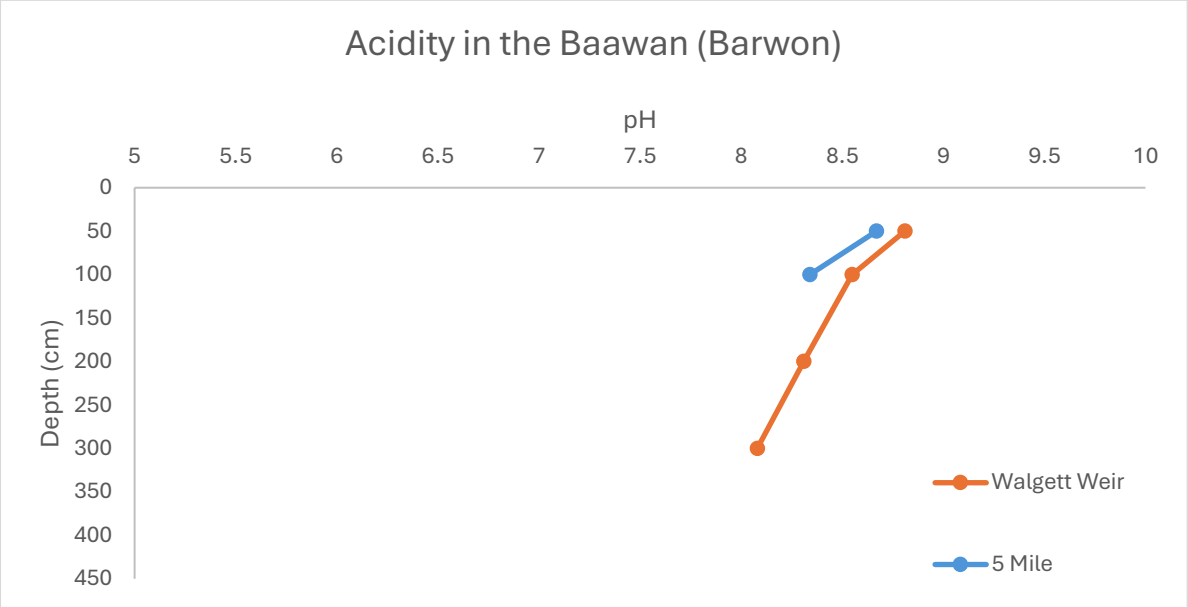
The Dharriwaa Elders Group River Rangers are conducting weekly water quality testing, measuring a range of factors that affect the quality of the river water. Different results affect the health of native animals and plants, and the health of the people that rely on the river for food and water.

Picture: 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

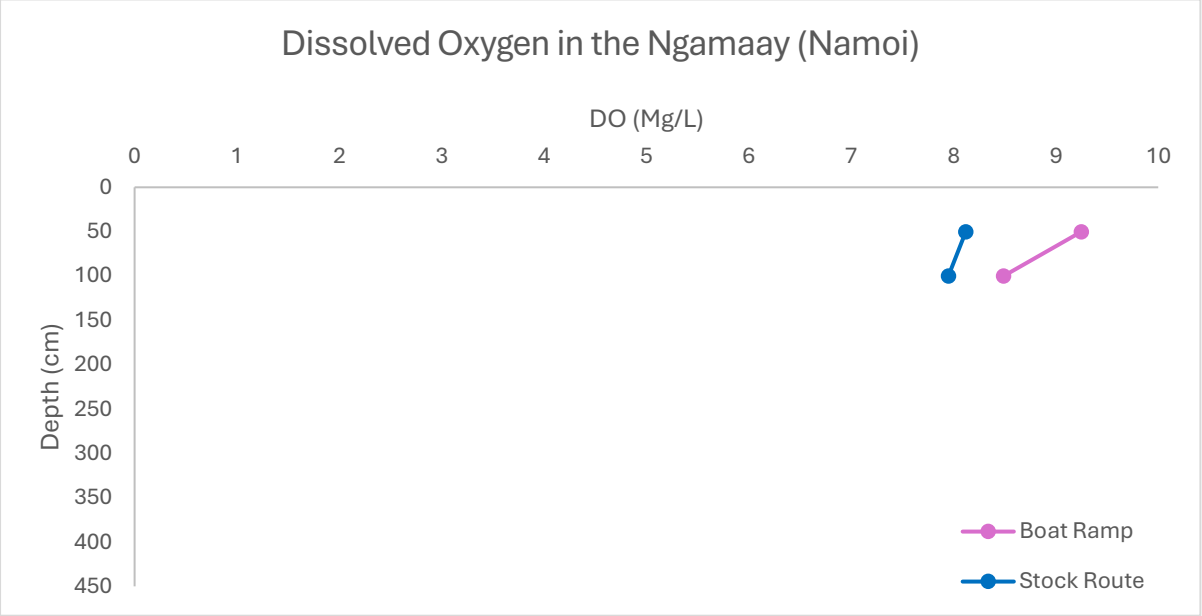


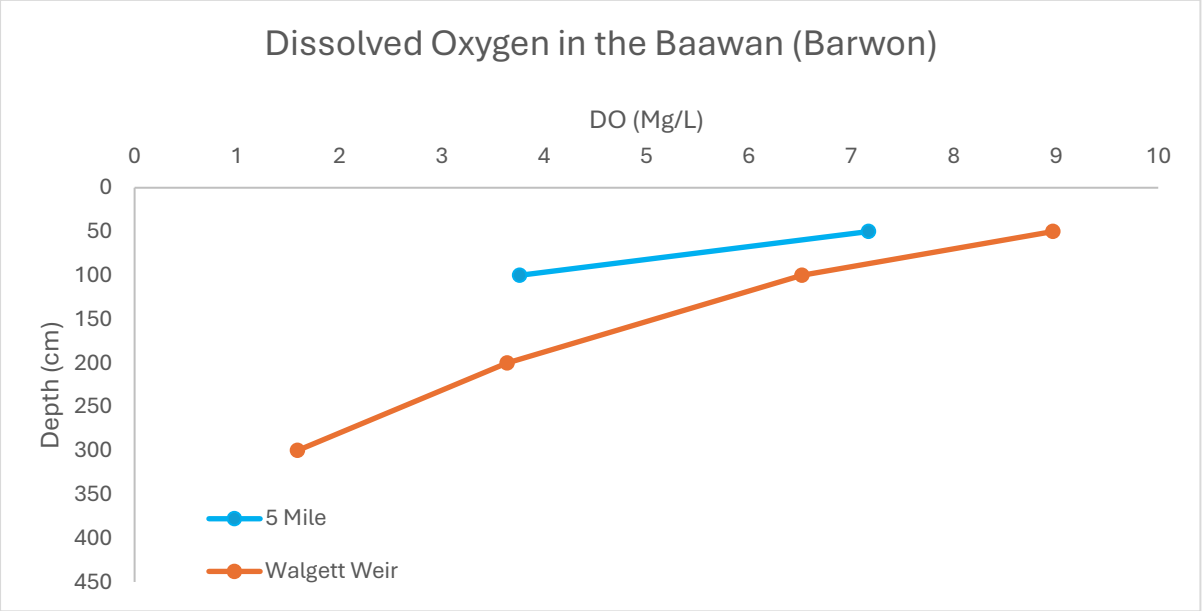


All pH readings are outside the healthy range in both the Ngamaay and Baawan Rivers. The highest reading is 8.81 at the Walgett Weir (Baawan River) and the lowest reading is 8.08 also at the Walgett Weir.

Healthy range: 6.5 - 8.5 pH

Dissolved Oxygen in the Ngamaay and Baawan Rivers

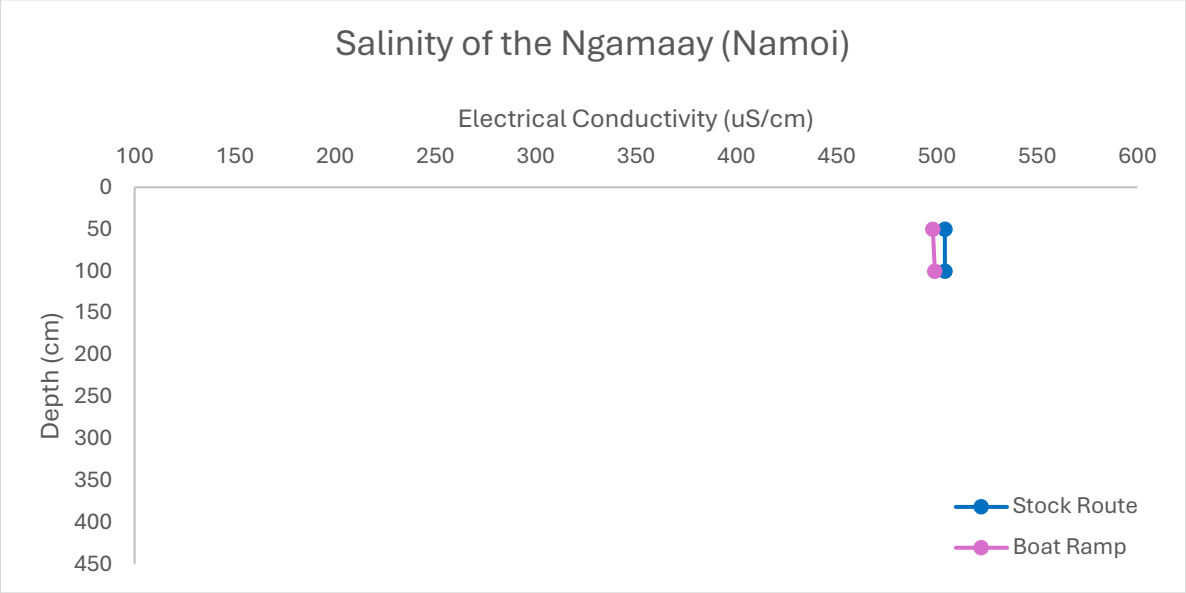


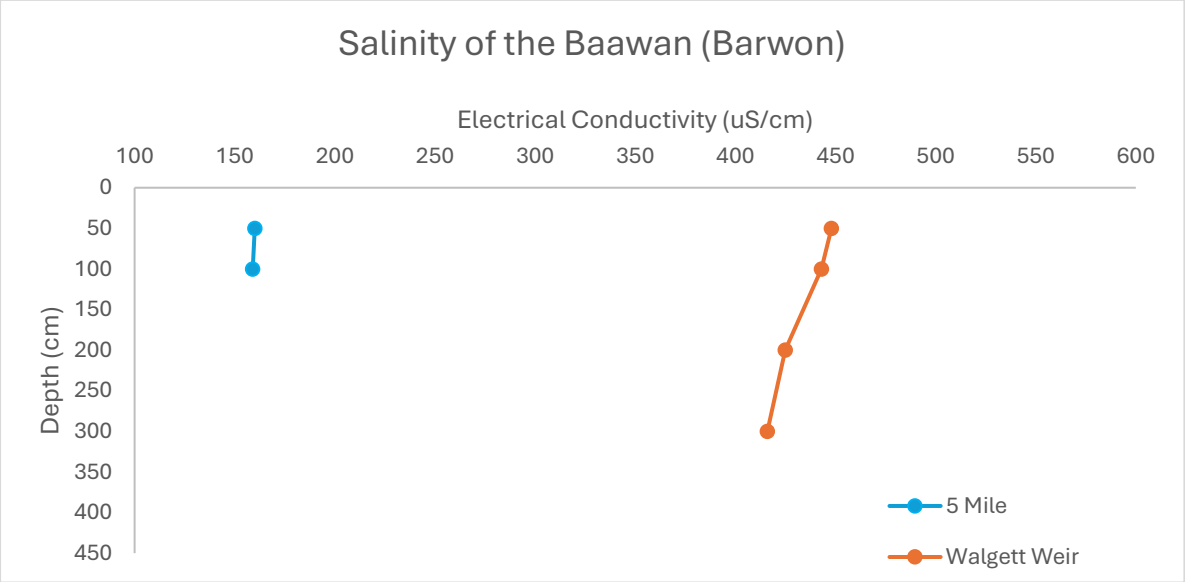


The dissolved oxygen in the Ngamaay River at both sites are within the healthy range. The readings at the Walgett Weir and 5 Mile on the Baawan River are outside the healthy range. The highest reading is 9.25 at the Boat Ramp (Ngamaay River) and the lowest reading is 1.59 at the Walgett Weir (Baawan River).

Healthy Range: 6 - 10 (Mg/L)

Salinity in the Ngamaay and Baawan Rivers

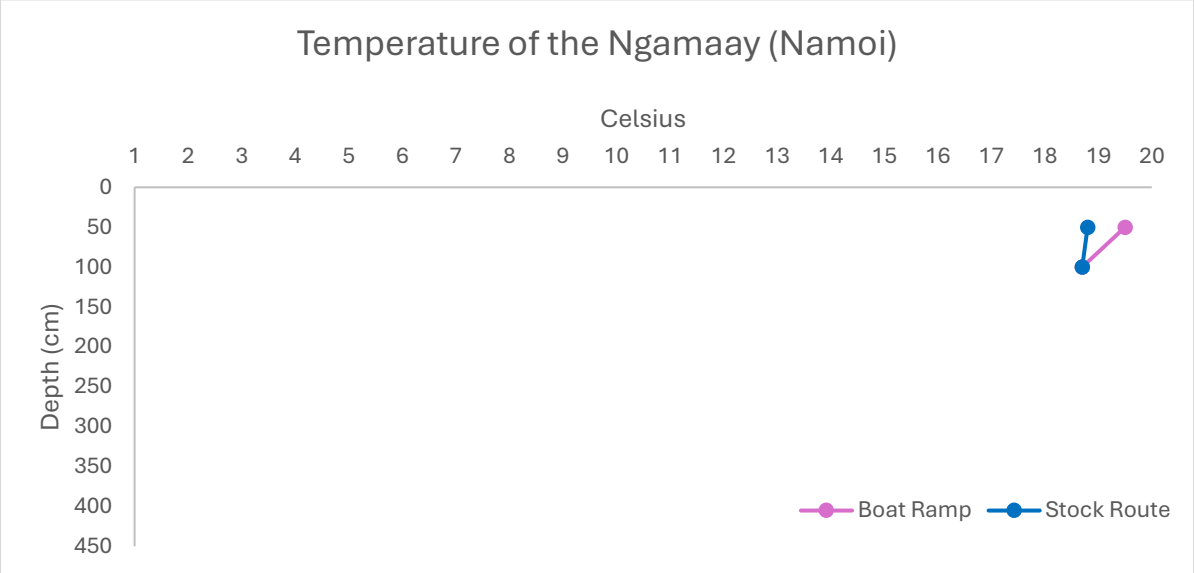


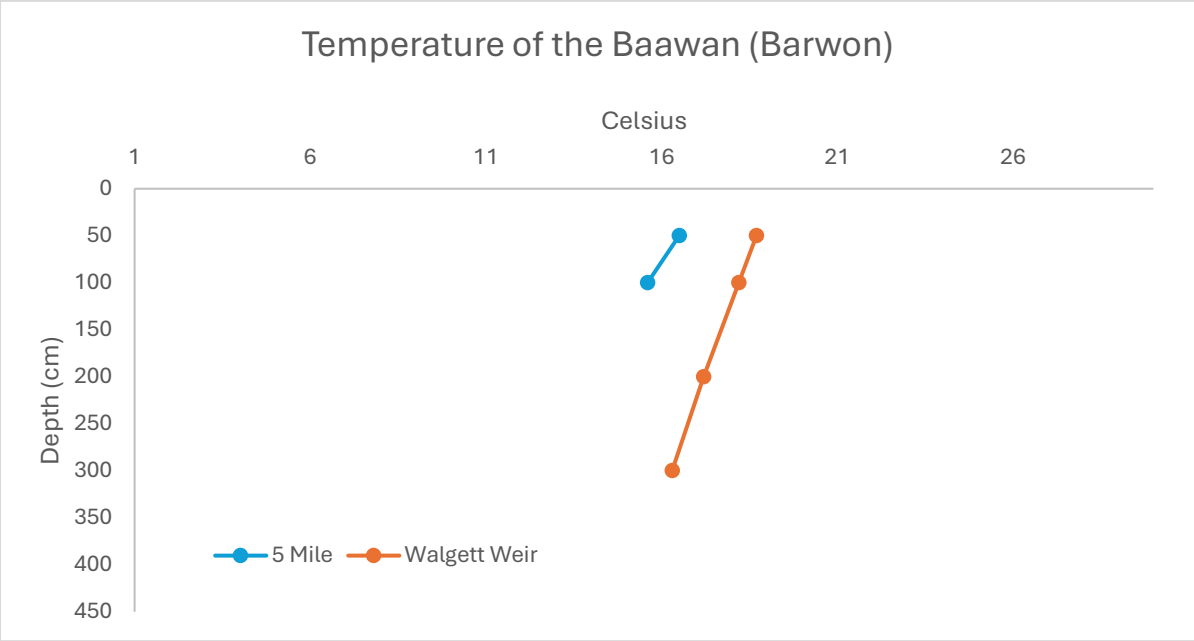


The salinity at all sites in both the Ngamaay and Baawan Rivers are within the healthy range. The highest reading is 504 at the Boat Ramp (Ngamaay River) and the lowest reading is 159 at the 5 Mile in the Baawan River.

Healthy Range: 125 - 2,200 uS/cm

Temperature in the Ngamaay and Baawan River





The temperature in the Ngamaay River at both sites are within the healthy range. The temperature readings at the 5 Mile and Walgett Weir in the Baawan are outside the healthy range. The highest reading is 19.5 at the Boat Ramp (Ngamaay River), and the lowest reading is 16.3 at the Walgett Weir (Baawan River).

Healthy Range: 18-28 degrees (Celsius)

Conclusion

The pH readings are just outside the healthy range. The water is more alkaline than neutral.

The dissolved oxygen readings in the Baawan River at both sites are concerning. As it gets deeper the lower the dissolved oxygen is. At 3 mg/L fish kills happen. Over the next week the Ranger Team will keep monitoring these sites.

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

The temperature readings that are outside the healthy range are on the colder side, but this could be because the temperature in the mornings are still quite cool.