

Weekly River Monitoring Report

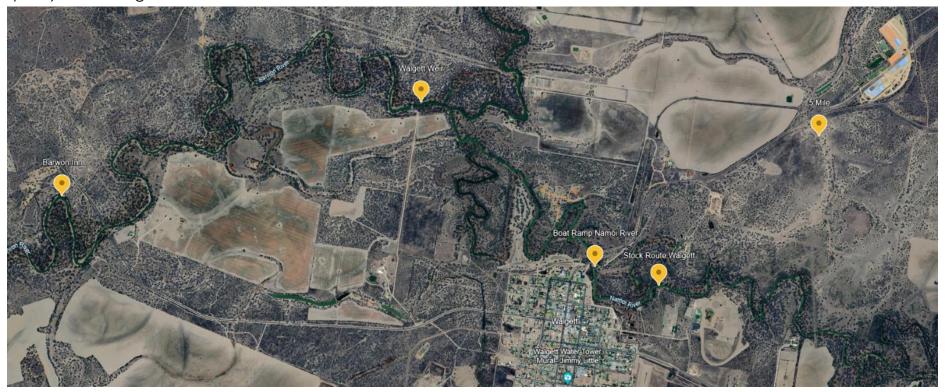
9th April 2024

Introduction

This data was collected on Tuesday 9th April 2024 between 10am and 1pm on the Ngamaay (Namoi) and Baawan (Barwon) River.

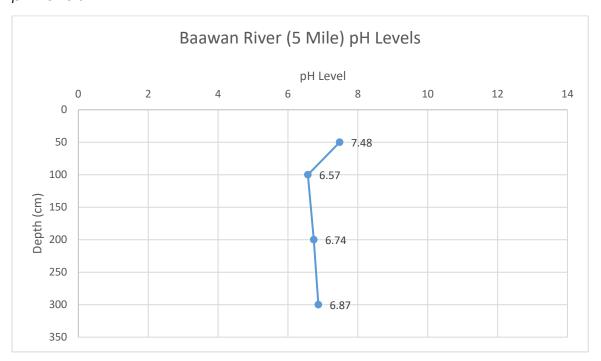
The Dharriwaa Elders Group River Rangers are conducting weekly water quality testing, measuring a range of factors that affect the quality of the river water. Different results affect the health of native animals and plants, and the health of the people that rely on the river for food and water.

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



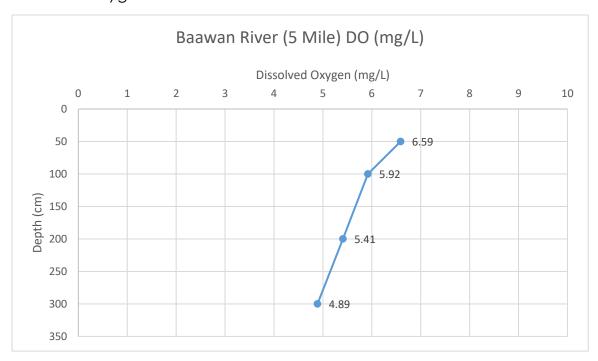
Site one: Baawan River (5 Mile)

pH Levels



The pH levels measured at each depth at site one are within a good range. The river water is not too alkaline or too acidic.

Dissolved Oxygen

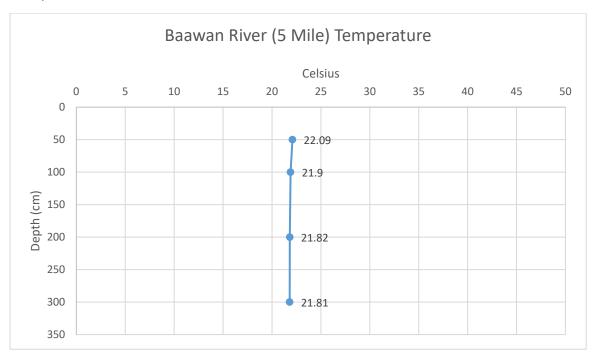


The first oxygen reading at site one is within the healthy range. The three readings at one, two and three metres are outside of the healthy range but are still acceptable.

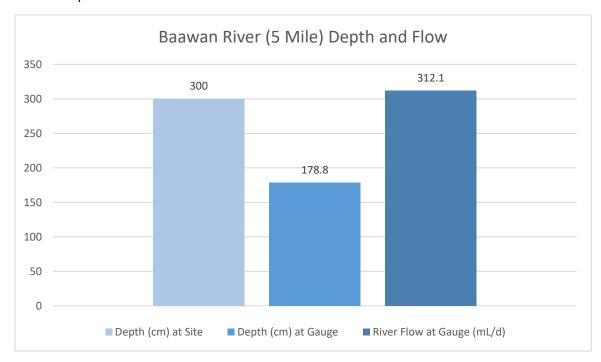


The electrical conductivity is the measurement of salinity. It is within a good range. This is good for freshwater fish.

Temperature



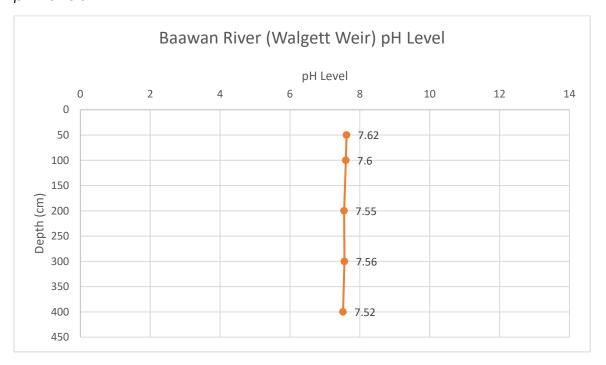
The temperature measured at all depths at site one are within a good range. There is no extreme changes to the temperature which means there is no danger to the fish in the river.



The river depth at both the site and gauge (Barwon@Collarenebri 422003) are at a good level. The river depth is good for large, medium and small fish. The flow at the nearest working gauge (Barwon@Collarenebri 422003) is at a good flow rate which is good for the health of the fish in the river.

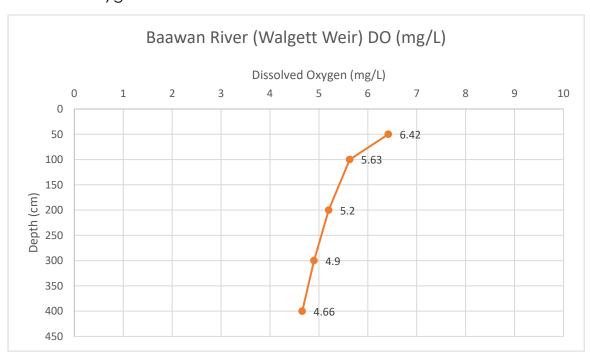
Site two: Baawan River (Walgett Weir)

pH Levels



The pH levels measured at each depth at site two are within a good range. The river water is not too alkaline or too acidic.

Dissolved Oxygen

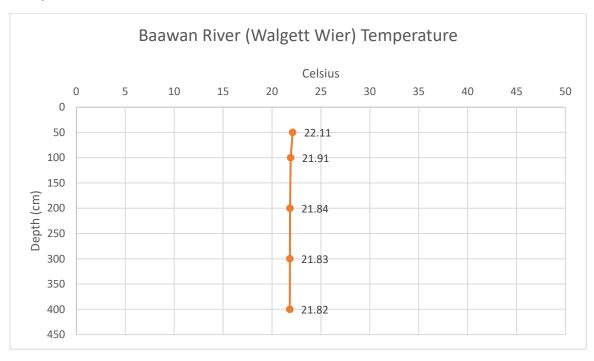


The first reading of the dissolved oxygen at site two is within a healthy range. The last four readings are outside the healthy range but still acceptable.

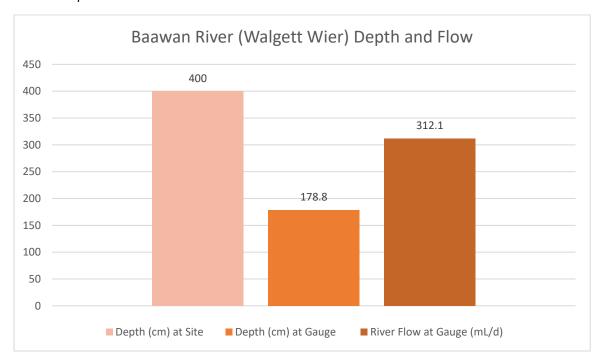


The electrical conductivity is the measurement of salinity. It is within a good range on the Baawan River. This is good for freshwater fish.

Temperature



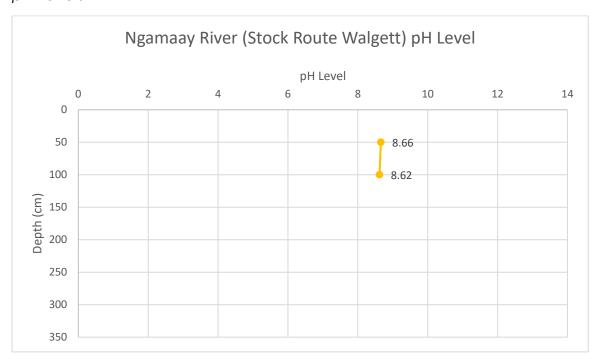
The temperature measured at all depths at site two are within a good range. There is no extreme changes to the temperature which means there is no danger to the fish in the river.



The river depth at both the site and the nearest working gauge (Barwon@Collarenebri 422003) are at a good level. The river depth is good for large, medium and small fish. The river flow at the nearest working gauge (Barwon@Collarenebri 422003) is at a good flow rate. This is good for the health of the fish.

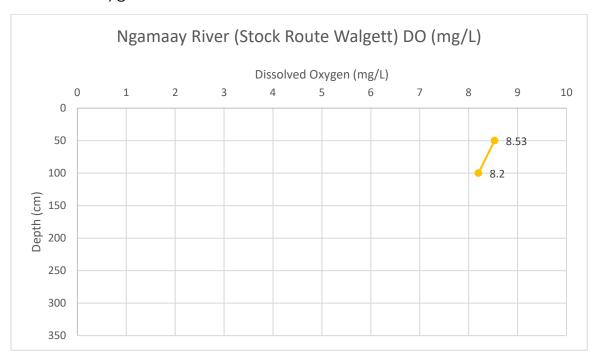
Site three: Ngamaay River (Stock Route Walgett)

pH Levels

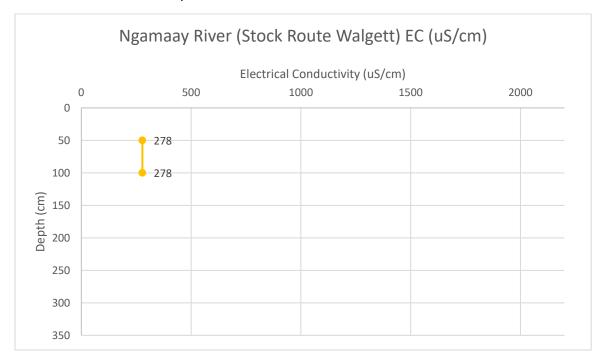


The pH levels measured at site three are slightly outside the acceptable range. The pH levels are more on the alkaline side of the scale, but the water is not too alkaline and is still acceptable.

Dissolved Oxygen

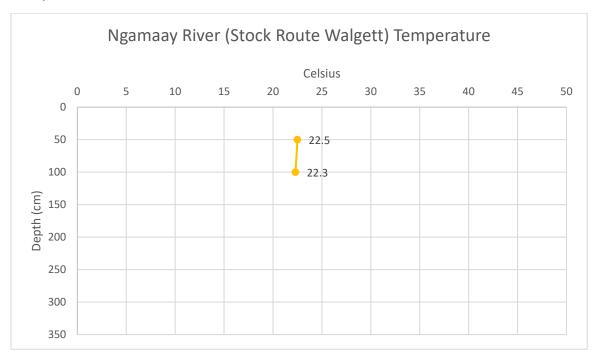


The dissolved oxygen measured at each depth at site three on the Ngamaay River is within the healthy range.

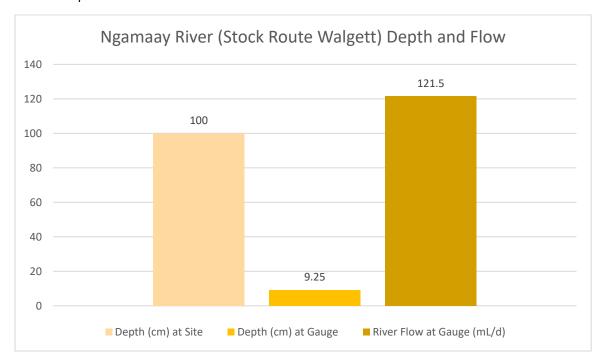


The electrical conductivity is the measurement of salinity. It is within a good range on the Ngamaay River. This is good for freshwater fish.

Temperature



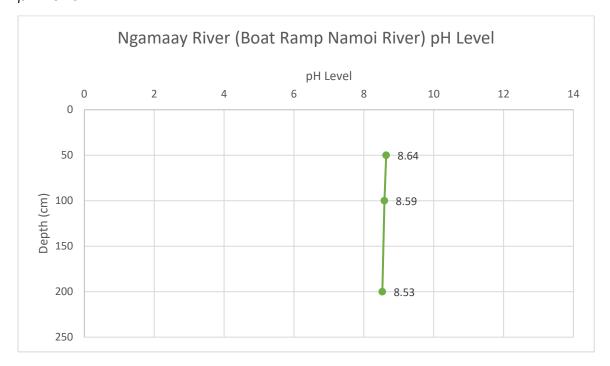
The temperature measured at all depths at site three are within a good range. There is no extreme changes to the temperature which means there is no danger to the fish in the river.



The river depth measured at the site is at a good level for large, medium and small fish. The river depth measured at the nearest working gauge (Namoi@Goangra 419026) is not at the expected level. This river level is not good for large, medium or small fish. The river flow at the nearest working gauge (Namoi@Goangra 419026) is at a good flow rate. This is good for the health of the fish.

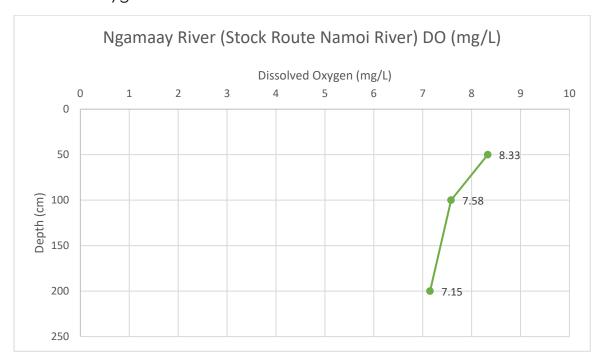
Site four: Ngamaay River (Boat Ramp Namoi River)

pH Level

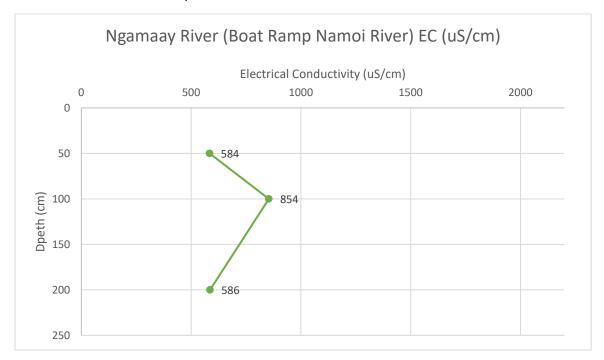


The pH levels measured at site four are within an acceptable range. The pH levels are more on the alkaline side of the scale, but the water is not too alkaline and is still acceptable.

Dissolved Oxygen

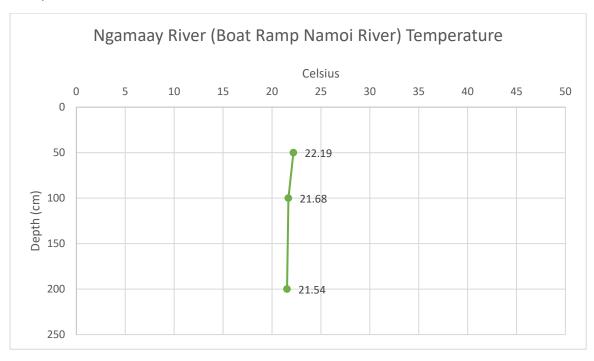


The dissolved oxygen measured at each depth at site four on the Ngamaay River is within the healthy range.

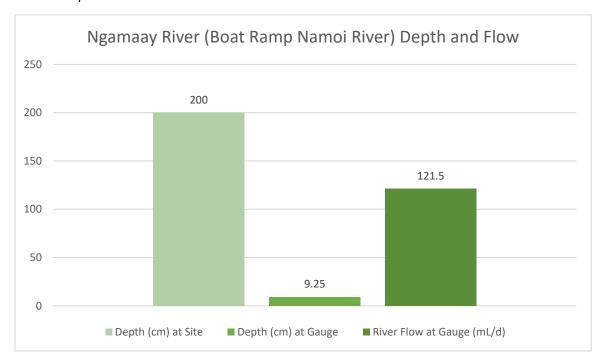


The electrical conductivity is the measurement of salinity. It is within a good range on the Ngamaay River. This is good for freshwater fish.

Temperature



The temperature measured at all depths at site four are within a good range. There is no extreme changes to the temperature which means there is no danger to the fish in the river.



The river depth measured at the site is at a good level for large, medium and small fish. The river depth measured at the nearest working gauge (Namoi@Goangra 419026) is not at the expected level. This river level is not good for large, medium or small fish. The river flow at the nearest working gauge (Namoi@Goangra 419026) is at a good flow rate. This is good for the health of the fish.

Conclusion

The pH levels on the Baawan River are all within a healthy range. The pH levels on the Ngamaay River are measuring to be more on the alkaline side but the pH is still acceptable.

The dissolved oxygen measured on the Baawan River is within an acceptable range. The first reading at both the 5 Mile and the Walgett Weir is within a healthy range. The dissolved oxygen that is measured on the Ngamaay River is within a healthy range.

The salinity that is measured at each site on both the Baawan and the Ngamaay Rivers is within a good range. This is good for the freshwater fish.

The temperature measured at each site on both the Baawan and the Ngamaay Rivers are within a good range. There is no extreme changes to the temperatures which means there is no danger to the fish.

The river depth at the sites and nearest working gauge (Barwon@Collarenebri 422003) are at good levels for large, medium and small fish. The river depth measured at the sites on the Ngamaay River are at a good level for large, medium and small fish. The river level at the nearest working gauge

(Namoi@Goangra 419026) on the Ngamaay River is not at the expected level. The river flow at the nearest working gauge for both the Baawan and Ngamaay River is at a good flow rate. This is good for the health of the fish.