



# Weekly River Monitoring Report

3rd April 2024

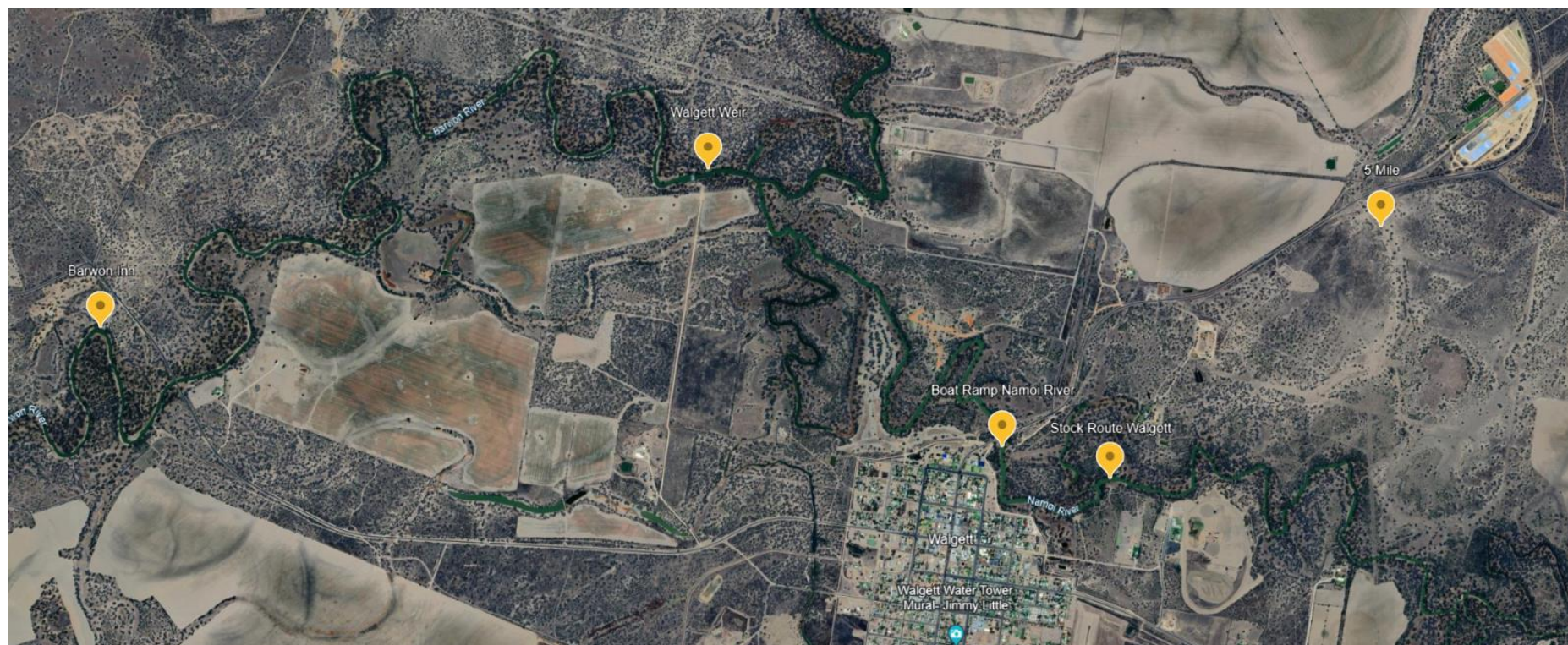
## Introduction

This data was collected on Wednesday 3<sup>rd</sup> April 2024 between 10am and 1pm on the Ngamaay (Namoï) 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.

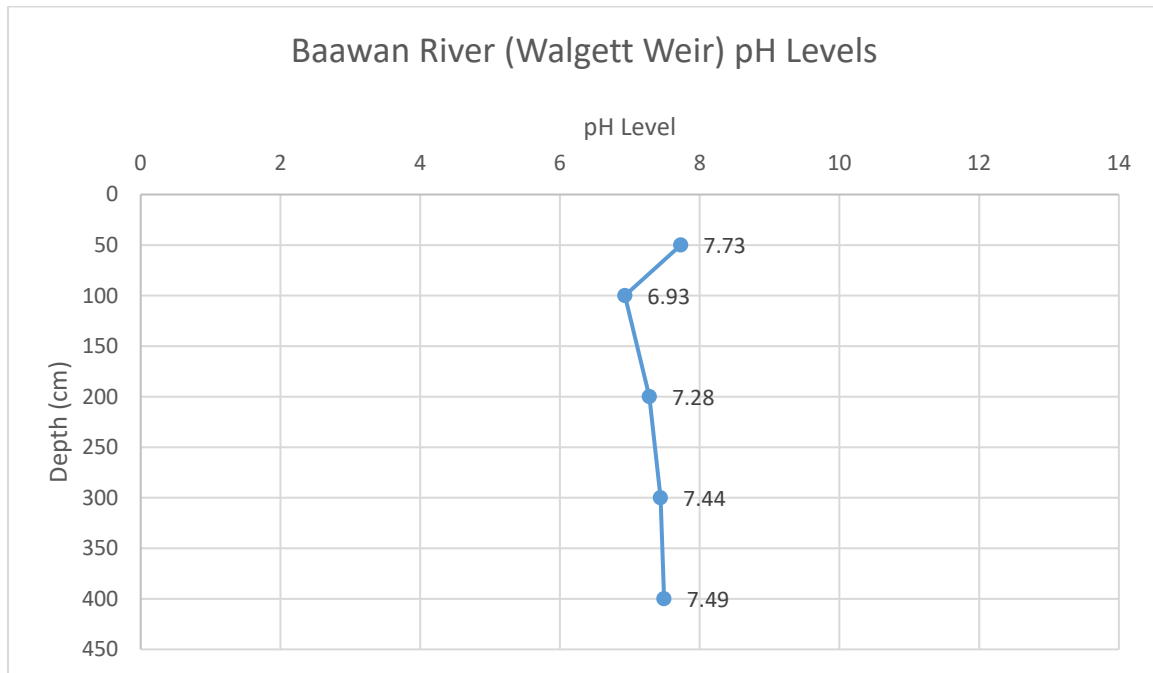


Picture: Map of the Baawan (Barwon) River and Ngamaay (Namoi) River where the DEG River Rangers do their water quality monitoring.



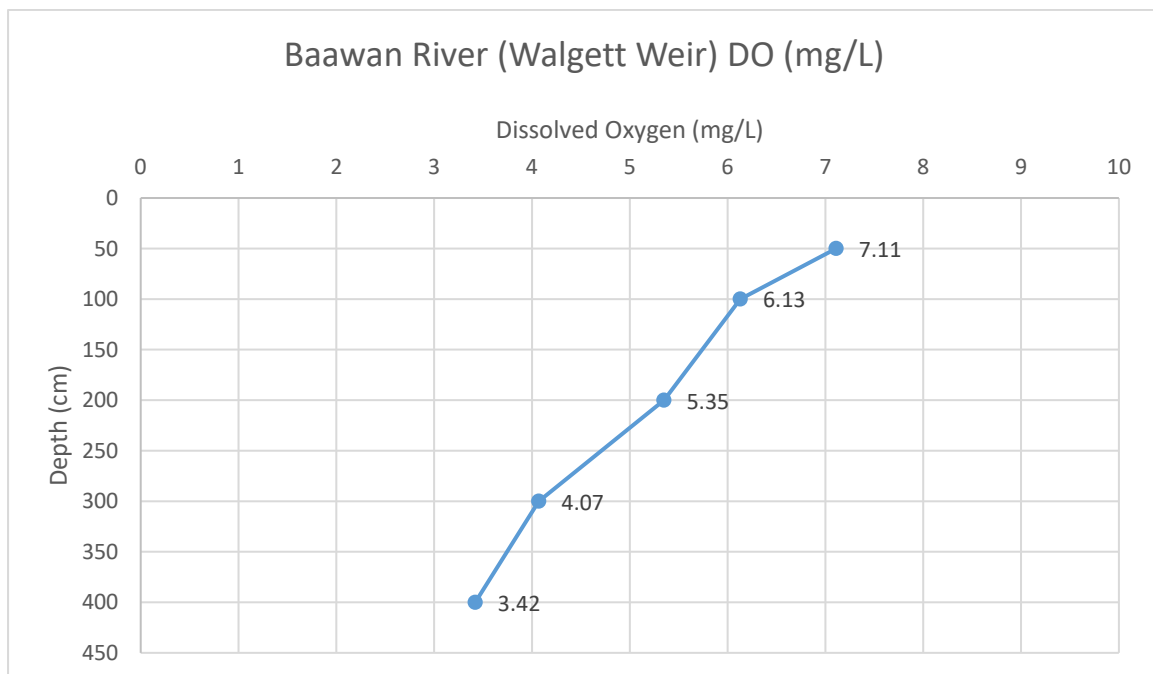
## Site one: Baawan River (Walgett Weir)

### pH Levels



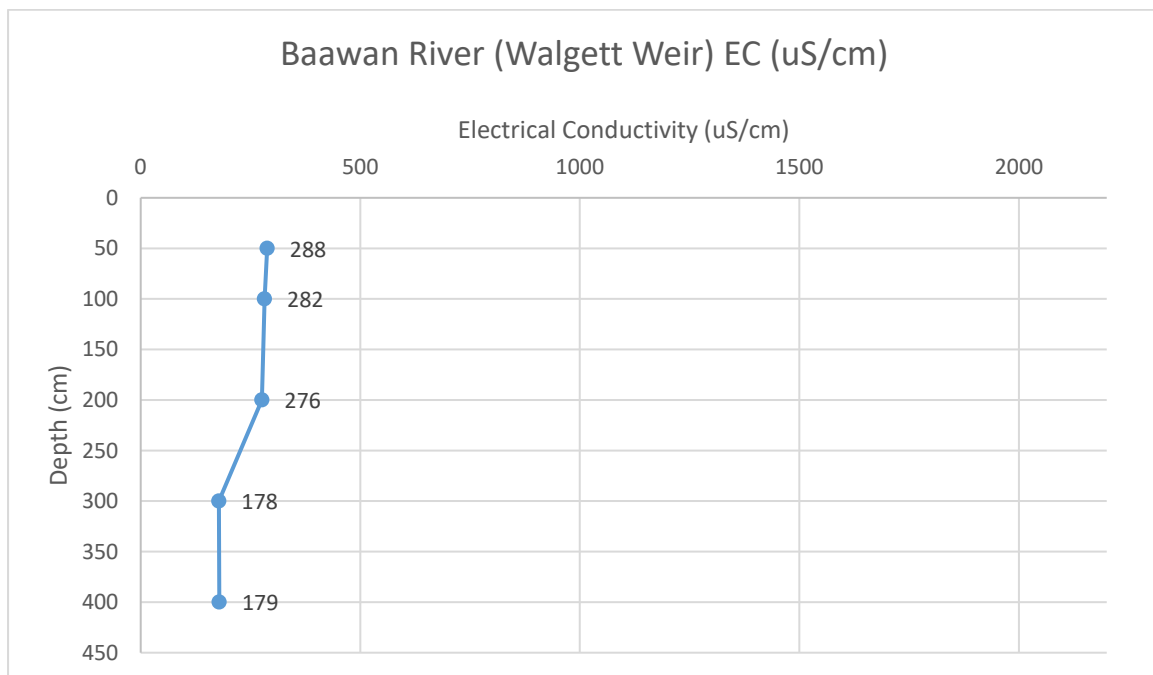
The pH levels measured at site one on the Baawan River are within a good range. This means that the water is not too acidic or too alkaline.

### Dissolved Oxygen



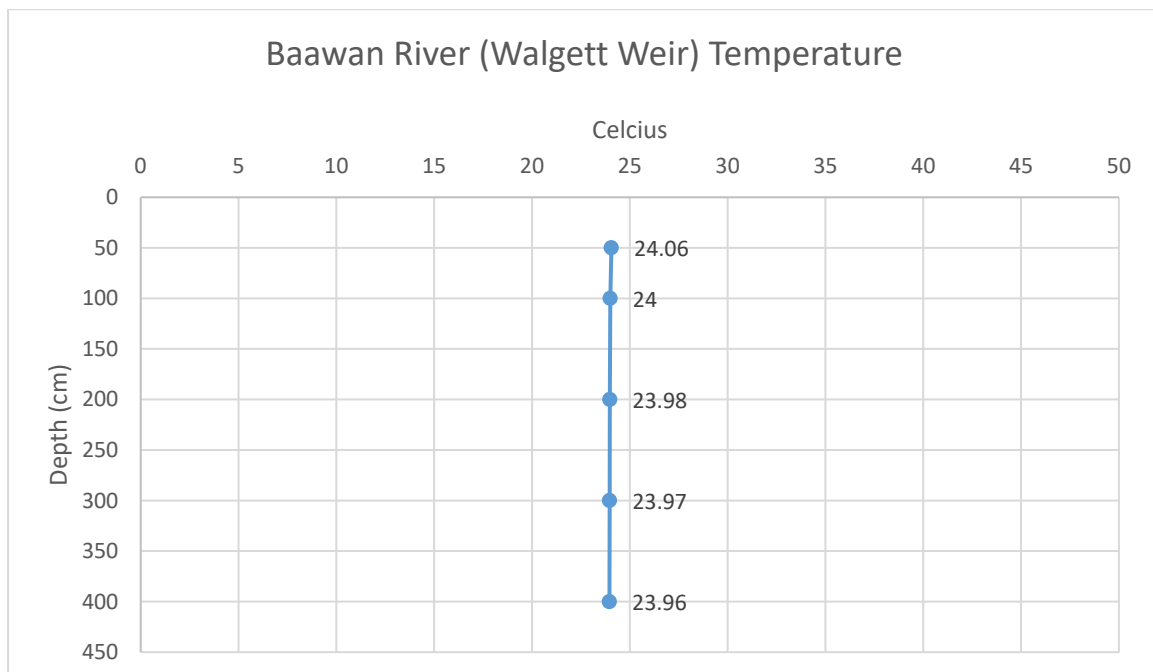
The oxygen levels are outside of the healthy range but still acceptable at two and three metres. At four metres the oxygen levels are concerning.

## Electrical Conductivity



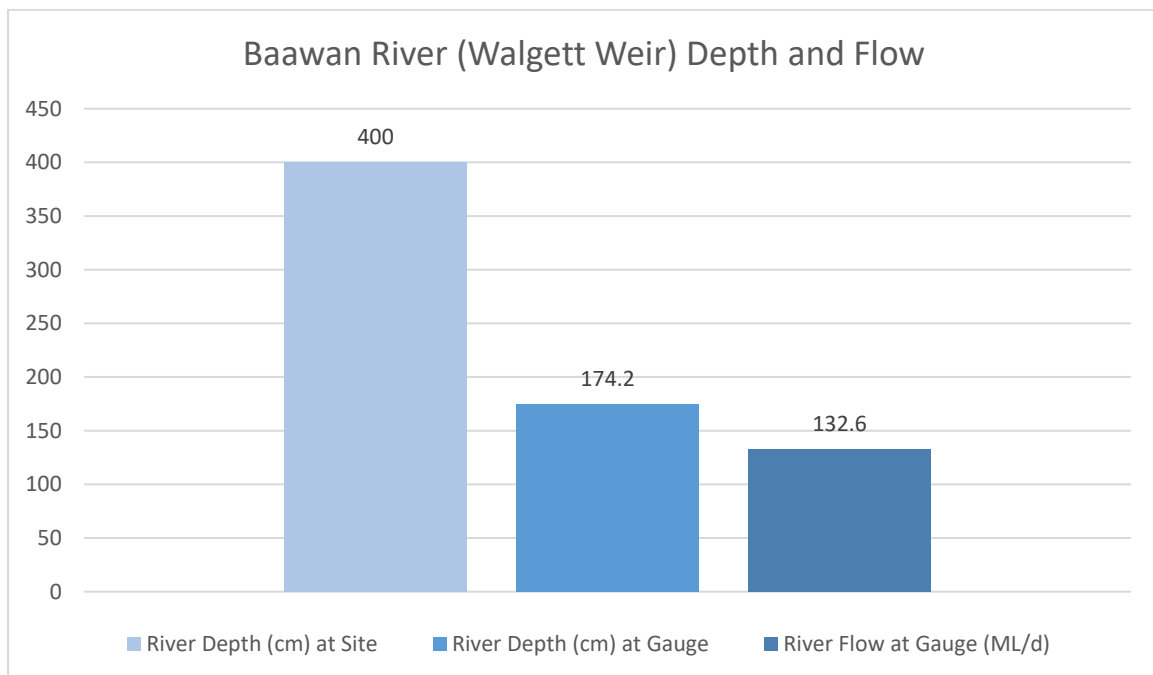
The electrical conductivity is the measurement of salinity. The salinity at site one is within a good range, which is good for freshwater fish.

## Temperature



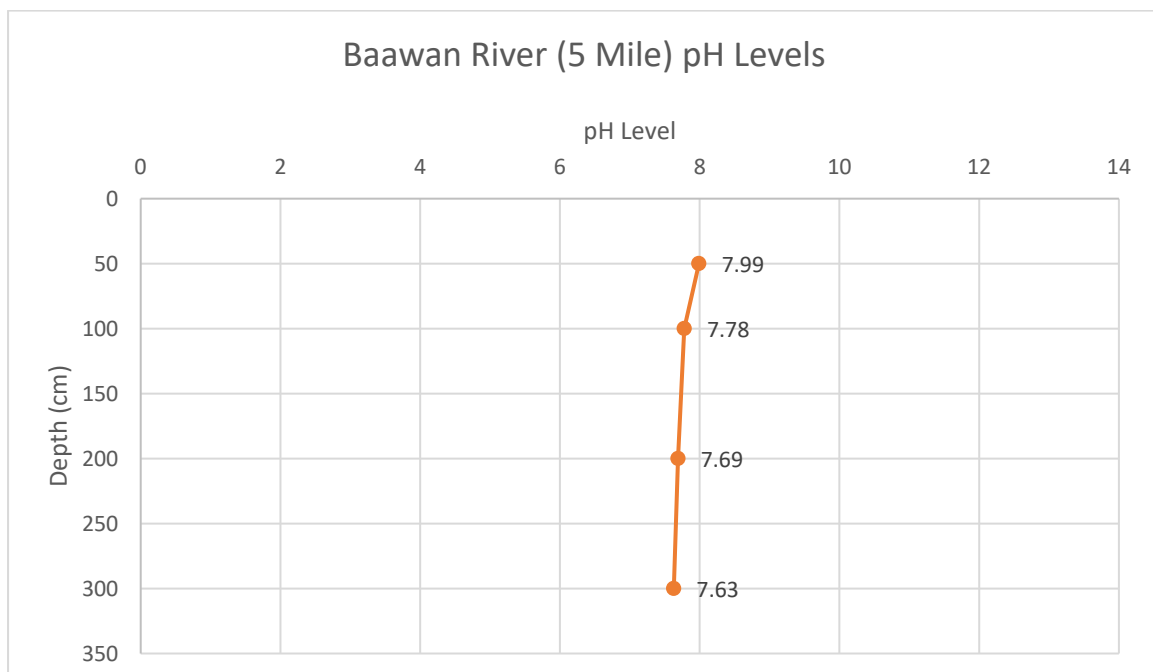
The temperature measured at each depth at site one is within a good range. There are no extreme changes between the temperatures which is good for the fish.

## River Depth and Flow



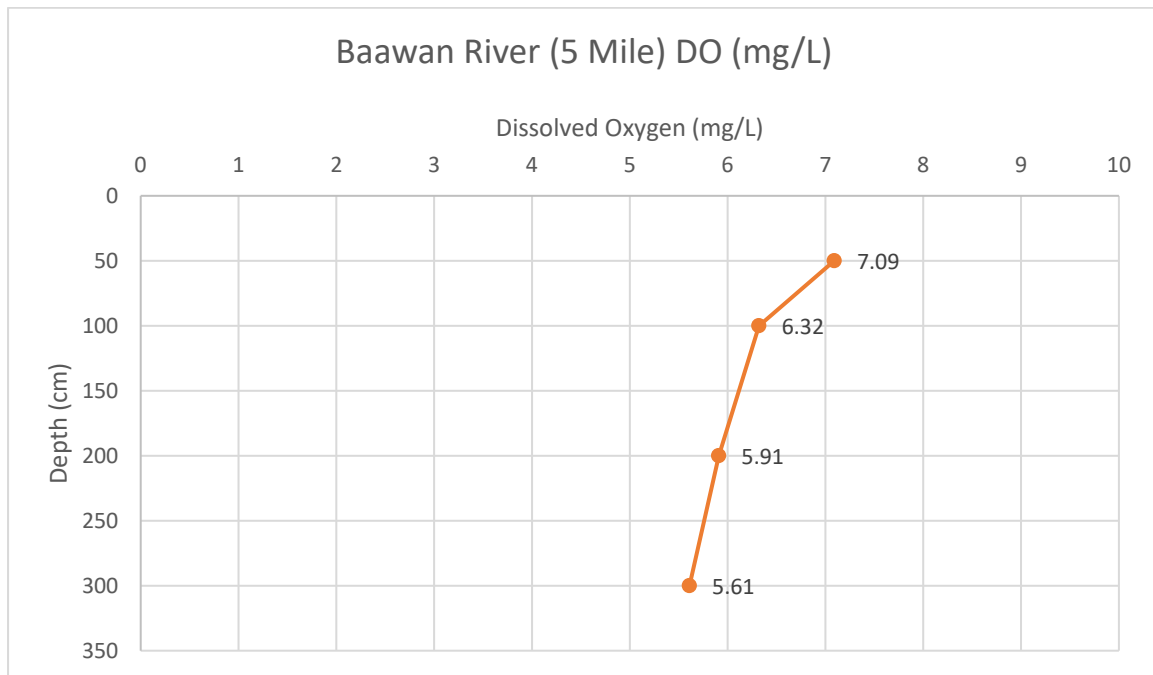
The depth at both the site and the nearest working gauge are at good levels. The river flow at the nearest working gauge is at a good flow rate. This is good for small, medium and large fish.

### Site two: Baawan River (5 Mile)



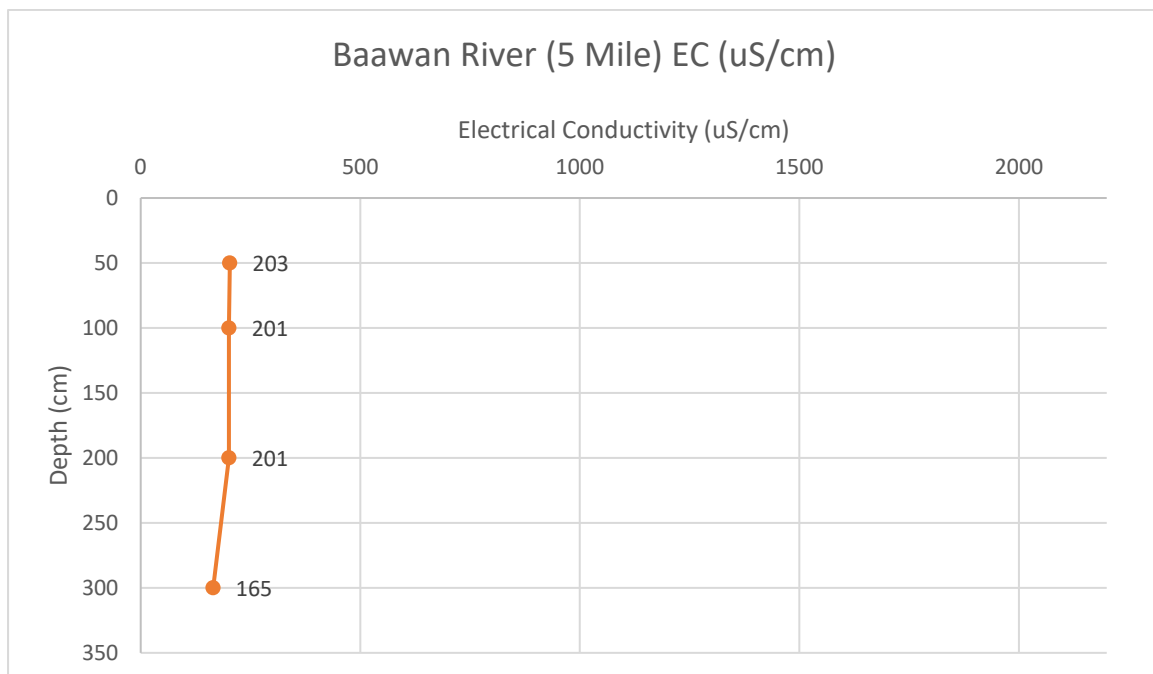
The pH levels measured at site two on the Baawan River are within a good range. This means that the water is not too acidic or too alkaline.

## Dissolved Oxygen



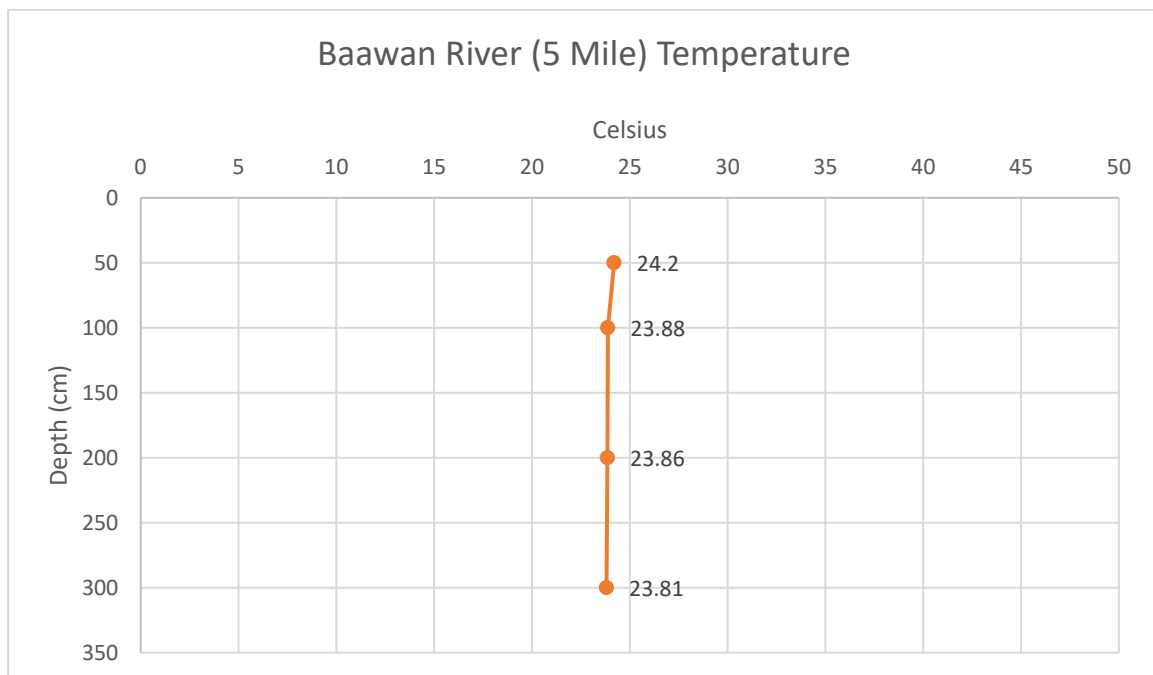
The dissolved oxygen measured at each depth at site two on the Baawan are within a good range.

## Electrical Conductivity



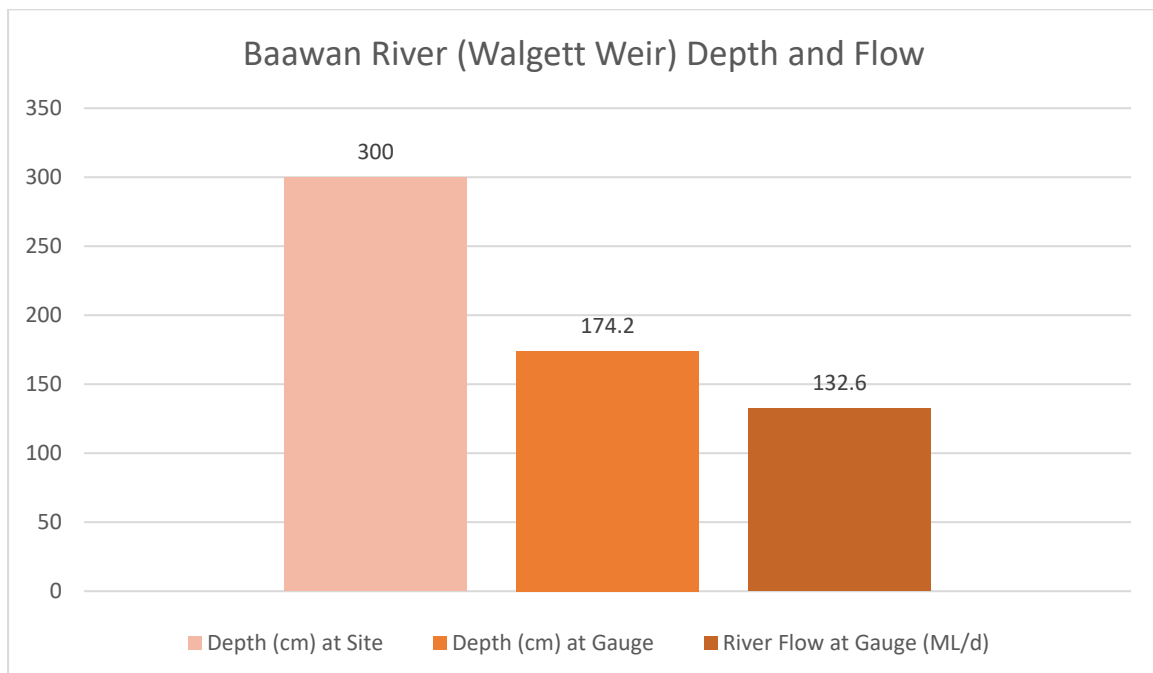
The electrical conductivity is the measurement of salinity. The salinity at site two is within a good range, which is good for freshwater fish.

## Temperature



The temperature measured at each depth at site two is within a good range. There are no extreme changes between the temperatures which is good for the fish.

## River Depth and Flow

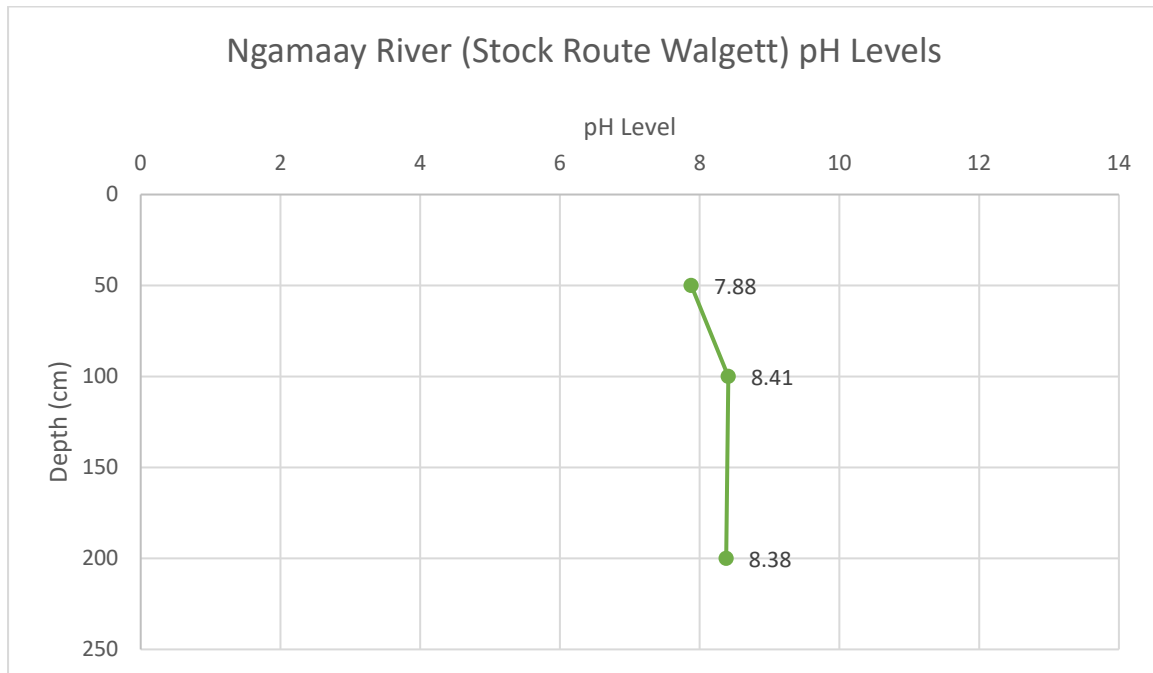


The depth at both the site and the nearest working gauge are at good levels. The river flow at the nearest working gauge is at a good flow rate. This is good for small, medium and large fish.



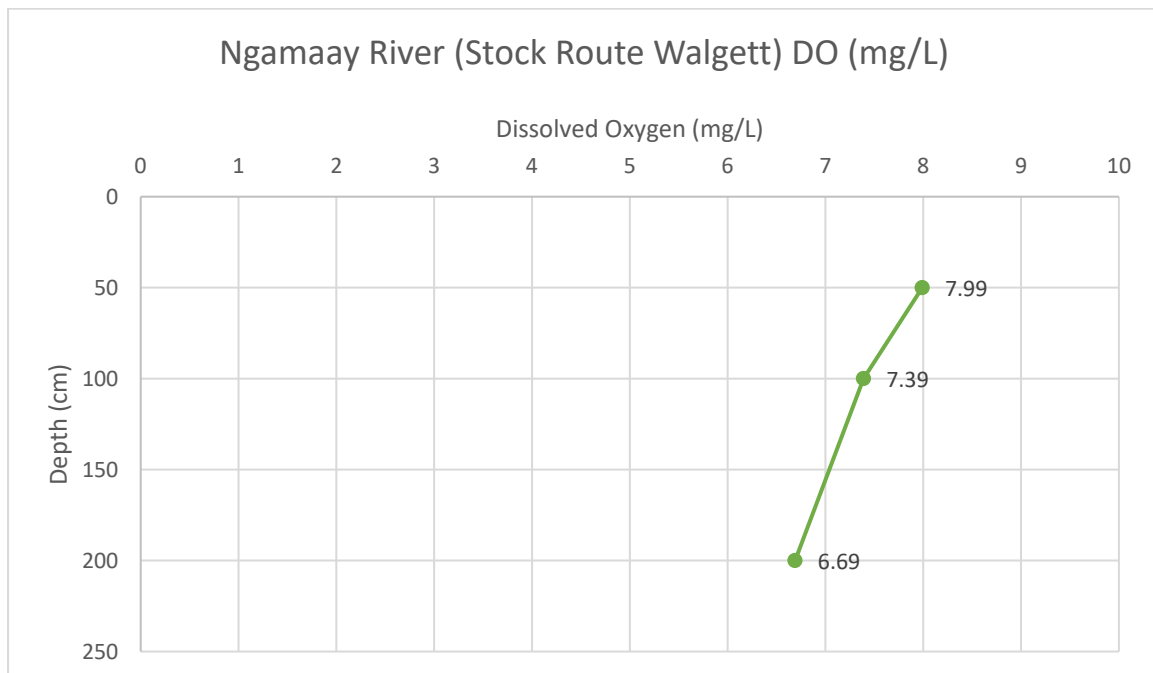
### Site Three: Ngamaay River (Stock Route Walgett)

#### pH Levels



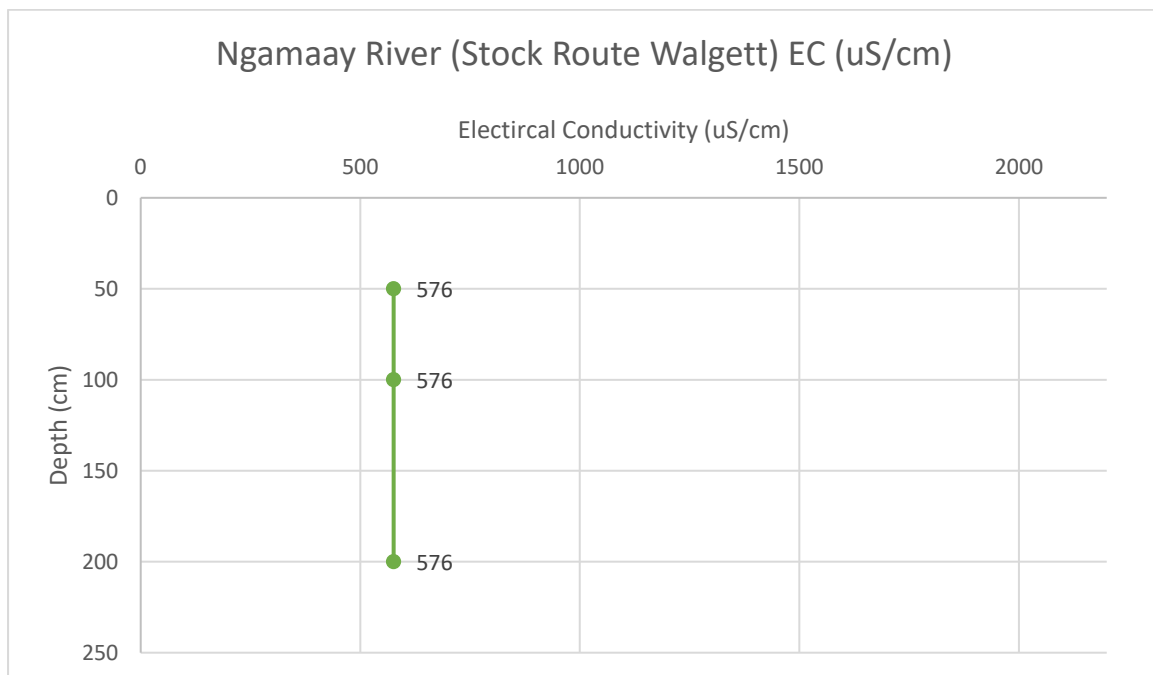
The pH levels measured at site three on the Ngamaay River are within a good range. This means that the water is not too acidic or too alkaline.

#### Dissolved Oxygen



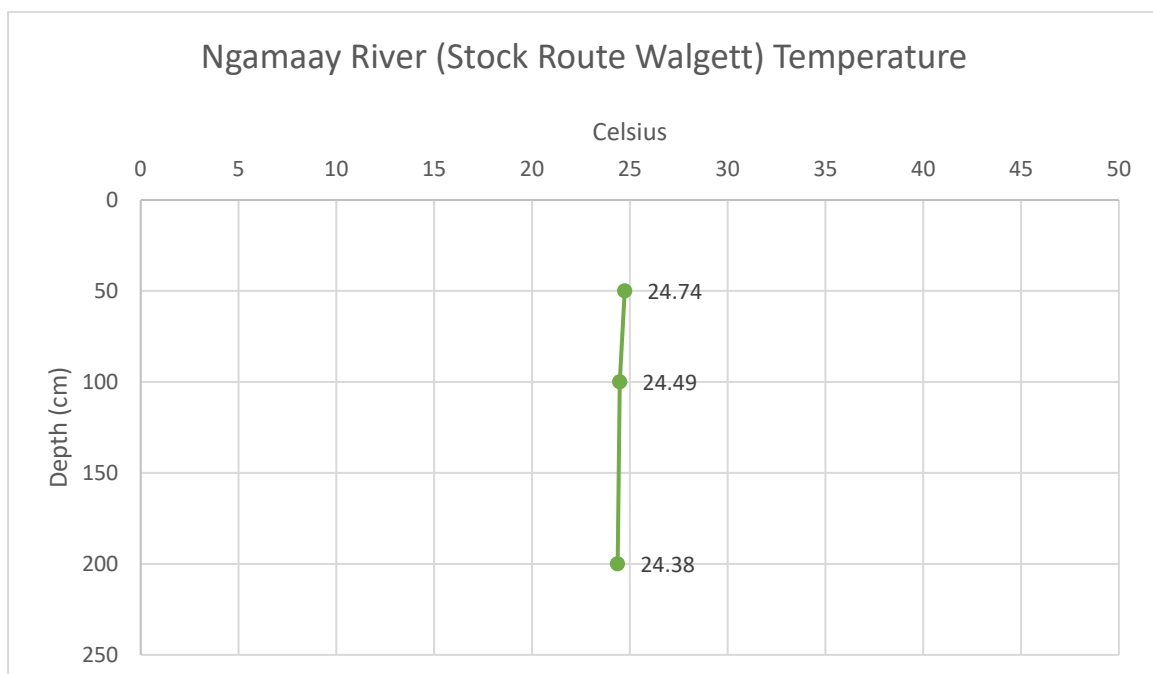
The dissolved oxygen measured at each depth at site three on the Ngamaay are within a good range.

## Electrical Conductivity



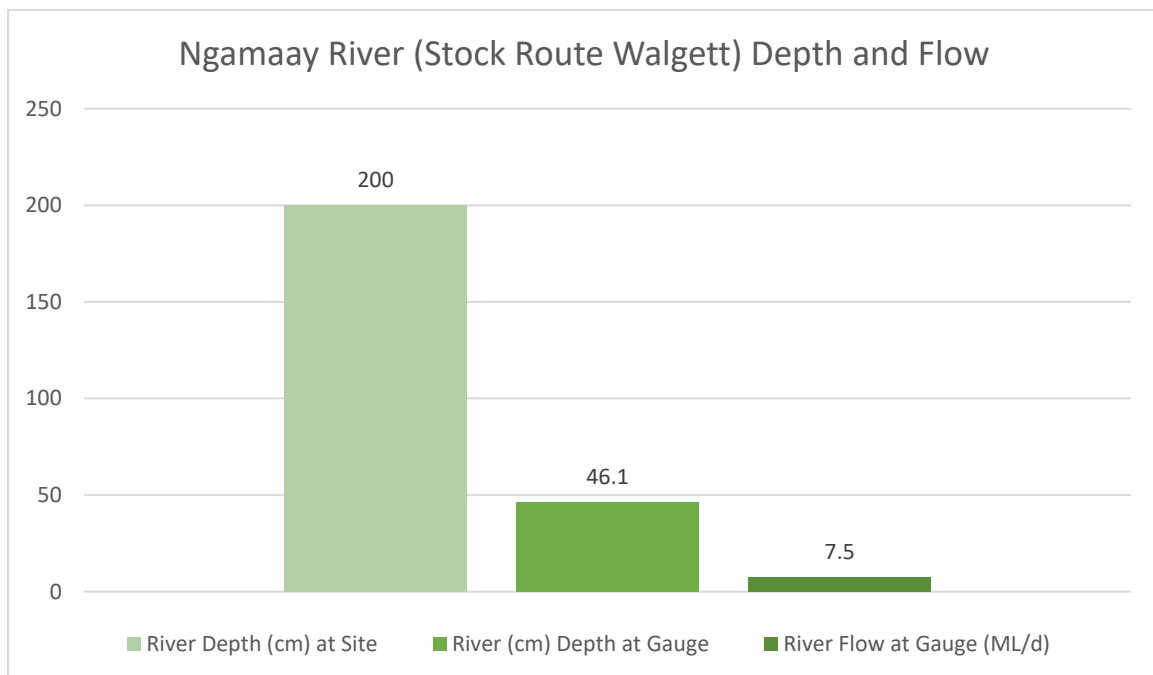
The electrical conductivity is the measurement of salinity. The salinity at site three is within a good range, which is good for freshwater fish.

## Temperature



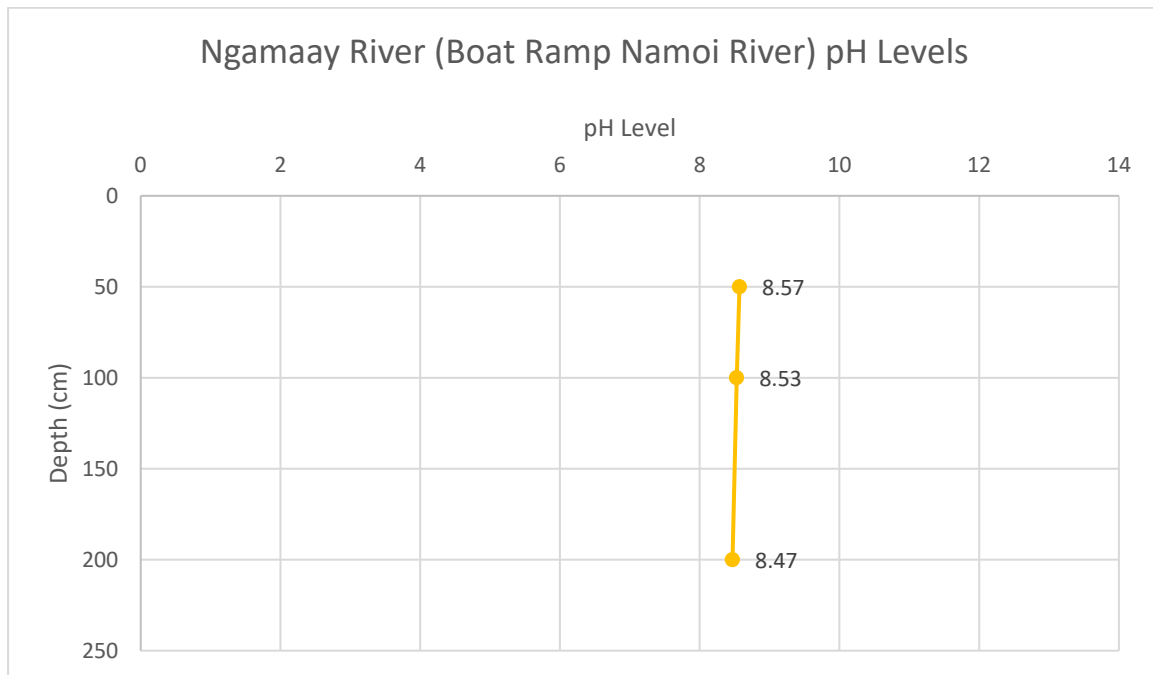
The temperature measured at each depth at site three is within a good range. There are no extreme changes between the temperatures which is good for the fish.

## River Depth and Flow



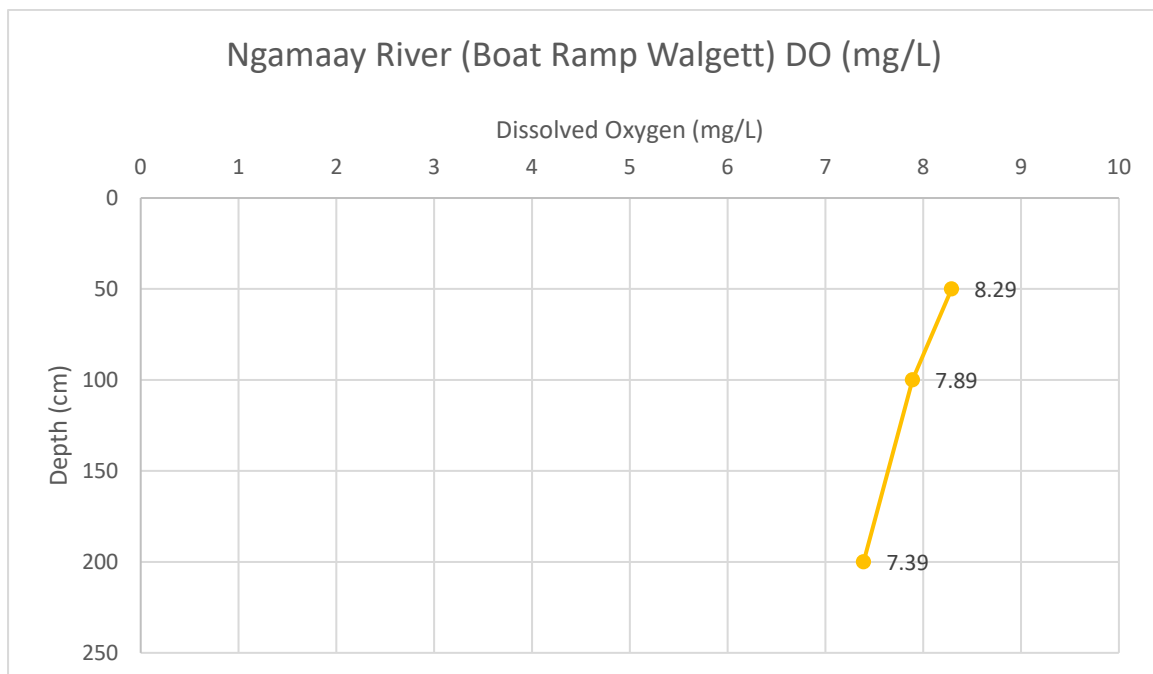
The depth measured at the site is at a good level for large, medium and small fish. The depth measured at the nearest working gauge is not at a good level for large fish but is suitable for small and medium fish. The river flow at the nearest working gauge is not at the expected flow. This could have an impact on the health of the fish.

#### Site Four: Ngamaay River (Boat Ramp Namoi River)



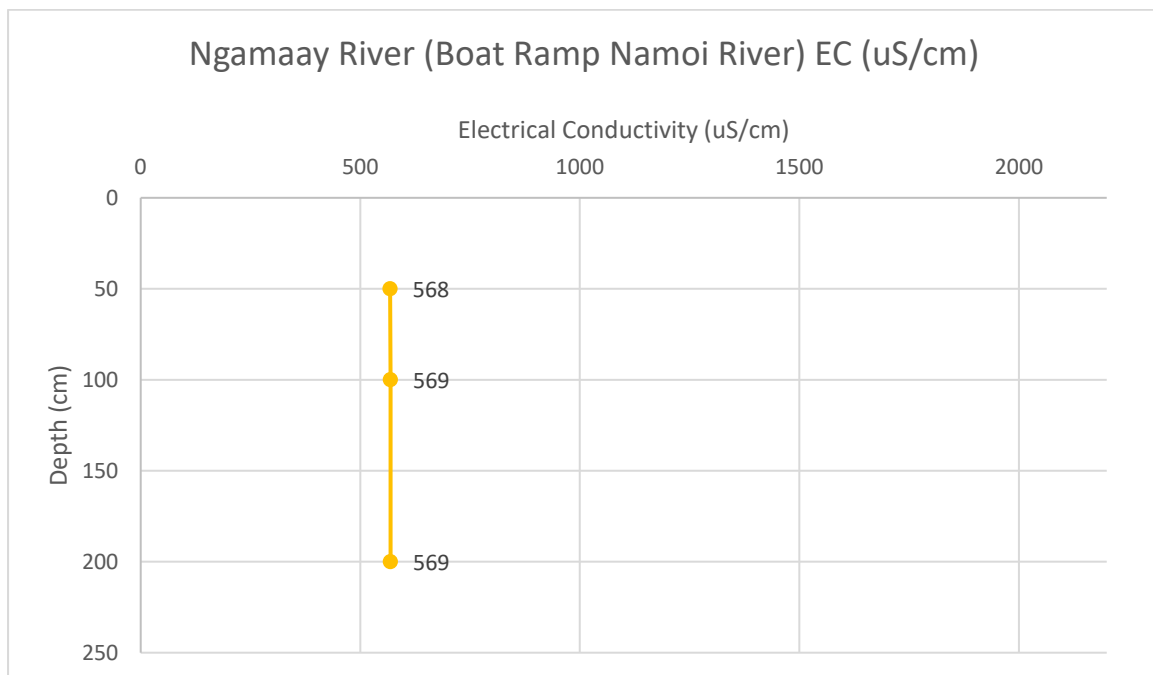
The pH levels measured at site four on the Ngamaay River are within a good range. This means that the water is not too acidic or too alkaline.

#### Dissolved Oxygen



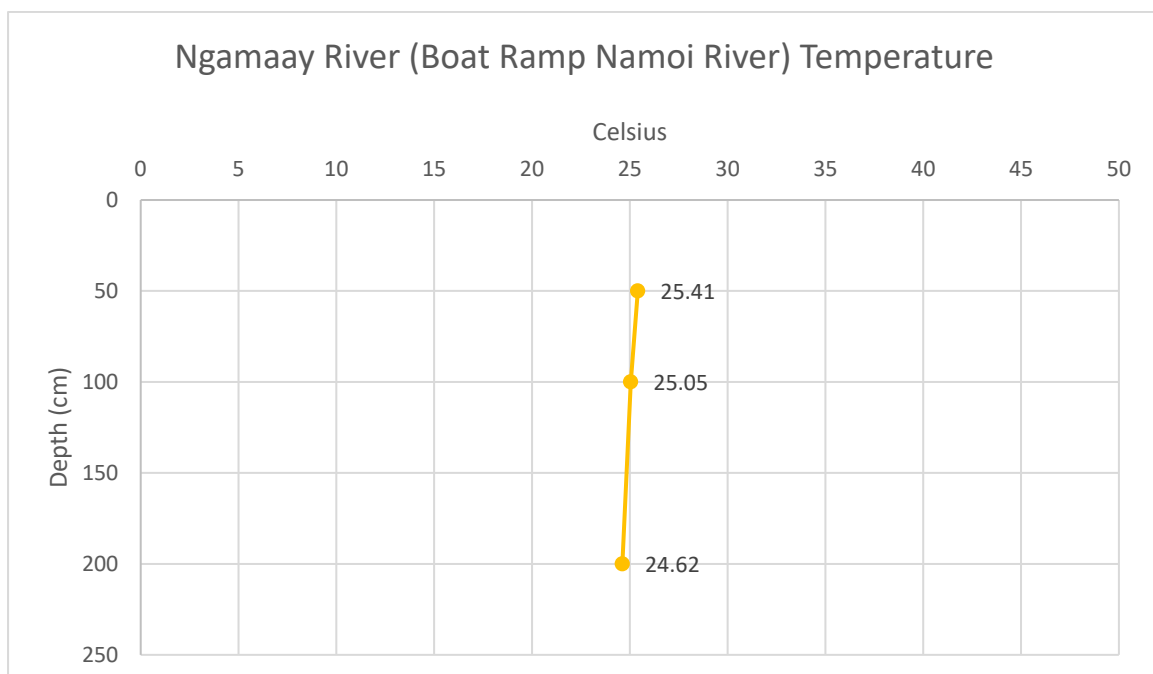
The dissolved oxygen levels measured at each depth at site four on the Ngamaay are within a good range.

## Electrical Conductivity



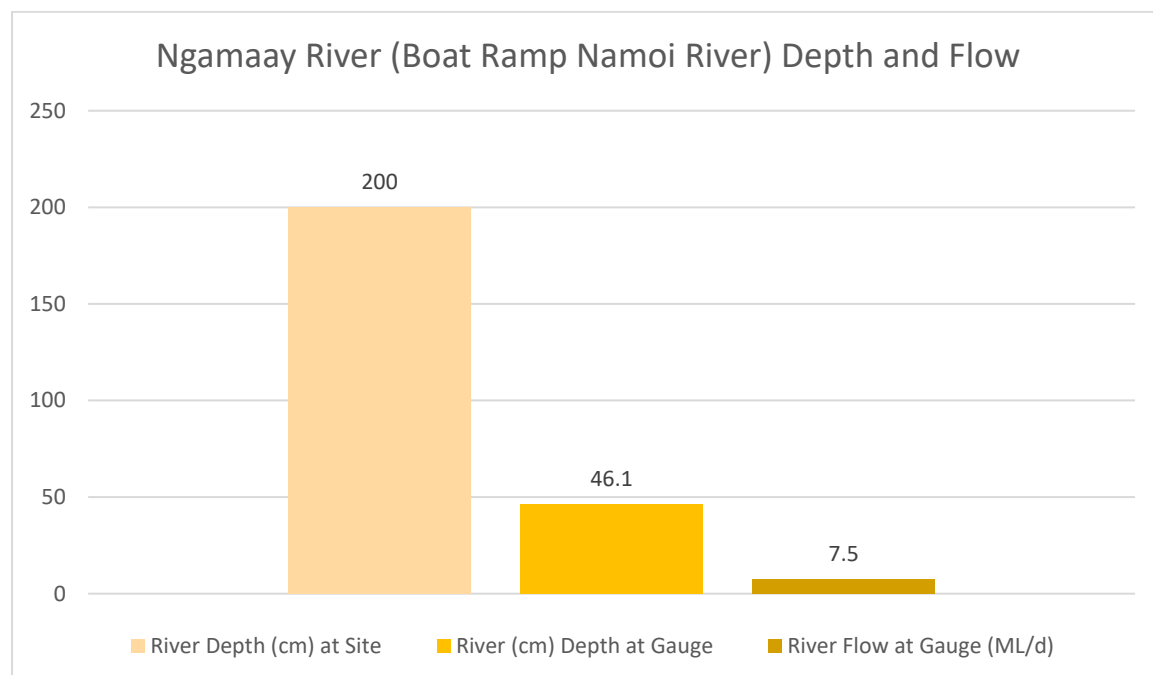
The electrical conductivity is the measurement of salinity. The salinity at site four is within a good range, which is good for freshwater fish.

## Temperature



The temperature measured at each depth at site three is within a good range. There is no extreme changes between the temperatures which is good for the fish.

## River Depth and Flow



The depth measured at the site is at a good level for large, medium and small fish. The depth measured at the nearest working gauge is not at a good level for large fish but is suitable for small and medium fish. The river flow at the nearest working gauge is not at the expected flow. This could have an impact on the health of the fish.

### Conclusion

The pH levels measured at each depth at each site are within a good range. The water in both the Baawan and Ngamaay is not too alkaline or too acidic.

The dissolved oxygen measured at each site is within a good range. This is good for the fish in the river.

The electrical conductivity measured at each site are all within a good range. This is good for freshwater fish.

The temperature measured at each depth at each site are all within a good range. There are no extreme changes to the temperatures which is good for the fish.

The river depth measured at each site is at a good level for small, medium and large fish. The river depth at the nearest working gauge on the Baawan River is at a good level for small, medium and large fish. The river depth at the nearest working gauge on the Ngamaay River is at a suitable level for small and medium fish but not for large fish. The flow at the nearest working gauge on the Baawan River is at good flow rate. The flow at the nearest working gauge on the Ngamaay River is not at the expected flow. This could cause health issues for the fish.