



Department of Biodiversity,  
Conservation and Attractions



Biodiversity and  
Conservation Science

*We're working for  
Western Australia.*

# Swan Canning Estuary Water Quality Monitoring Project

## Weekly Water Quality Report

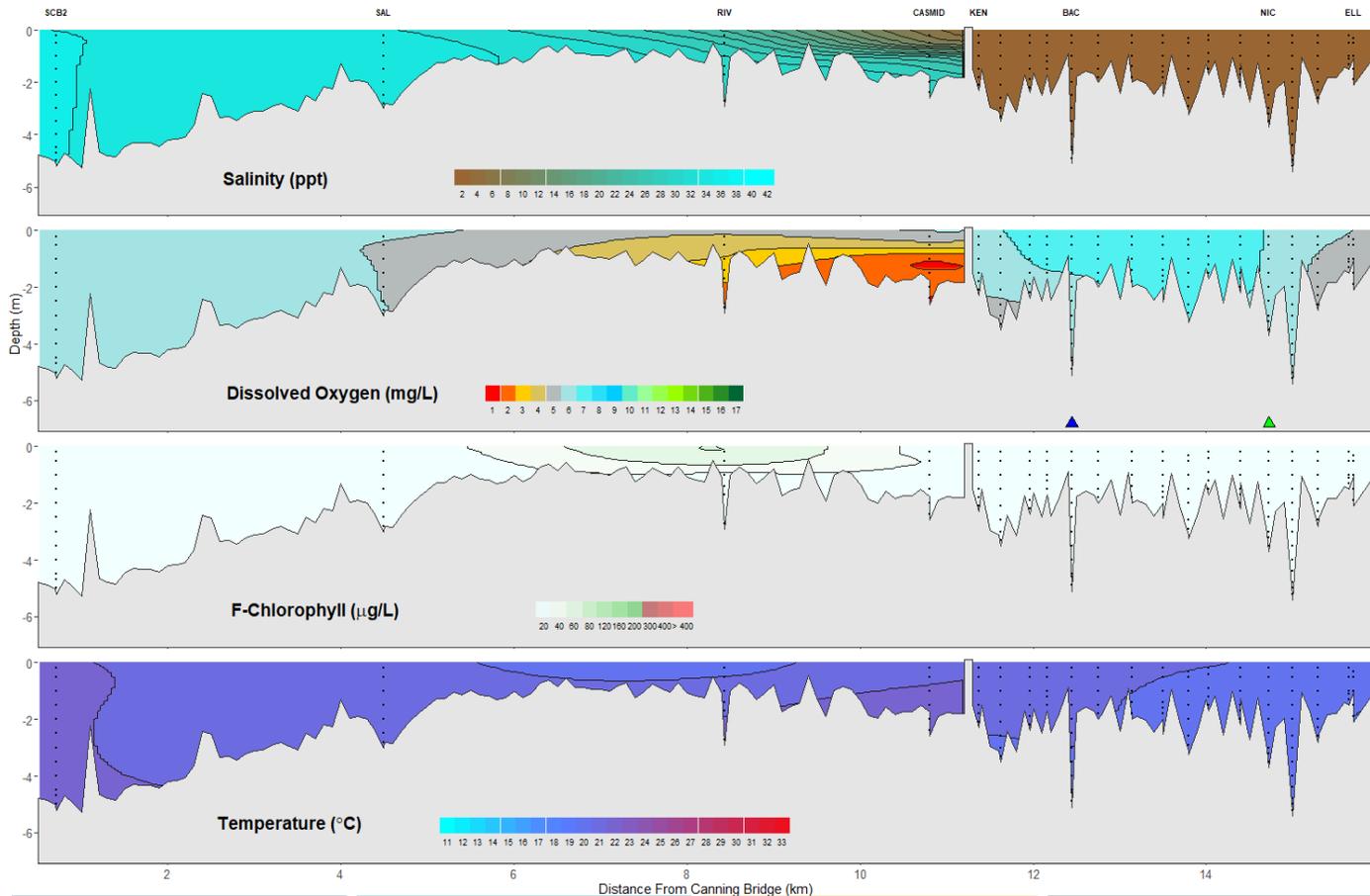
### Canning Estuary and Lower Canning River

13<sup>th</sup> April 2021

Prepared by

Rivers and Estuaries Science  
Biodiversity and Conservation Science  
Department of Biodiversity, Conservation and Attractions

## Canning Estuary and Lower Canning River - Water Quality Profiles – 13<sup>th</sup> April 2021



Date: 13<sup>th</sup> April 2021

Weather & tide conditions: Conditions were overcast with a light southerly breeze of up to 4 knots. The predicted tides at Barrack St were 0.81 m at 4:42 am (low tide), 1.10 m at 12:08 pm (high tide) and 0.82 m at 7:51 pm (second low tide). Roleystone recorded 18.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

NB: The weather station at Gosnells has not provided reliable rainfall data since mid-March.

Oxygenation: The Bacon St oxygenation plant was operational but not triggered to provide oxygen and the Nicholson Rd oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (downstream of Kent St Weir): The Canning Estuary was saline between SCB2 and RIV and brackish over saline at CASMID. Surface waters were oxygenated from SCB2 to SAL and at CASMID and were hypoxic at RIV. Bottom waters were low in oxygen at RIV and hypoxic at CASMID. Chlorophyll fluorescence was highest at RIV indicating higher microalgal activity in that area. Water temperature ranged from 19.8 to 21.7 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh and waters were oxygenated or well oxygenated. Chlorophyll fluorescence was highest at MASD50 indicating higher microalgal activity in that area. Water temperature ranged from 19.0 to 21.0 °C.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available at [wir.water.wa.gov.au](http://wir.water.wa.gov.au).

**Oxygenation Plant Operational Status:**

- ▲ Operating for part or all of the 24 hours prior to sampling
- ▲ Operable but not triggered to operate in the 24 hours prior to sampling
- ▲ Inoperable for part or all of the 24 hours prior to sampling

**Definitions:**

Salinity – fresh <5, brackish 5-25, saline 25-35, hypersaline >35  
Dissolved oxygen – well oxygenated >6mg/L, oxygenated >4-6mg/L, low oxygen >2-4mg/L, hypoxic 0.5-2mg/L, anoxic <0.5mg/L

**Recommended reference:** Department of Biodiversity, Conservation and Attractions 2021. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 13<sup>th</sup> April 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)