



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

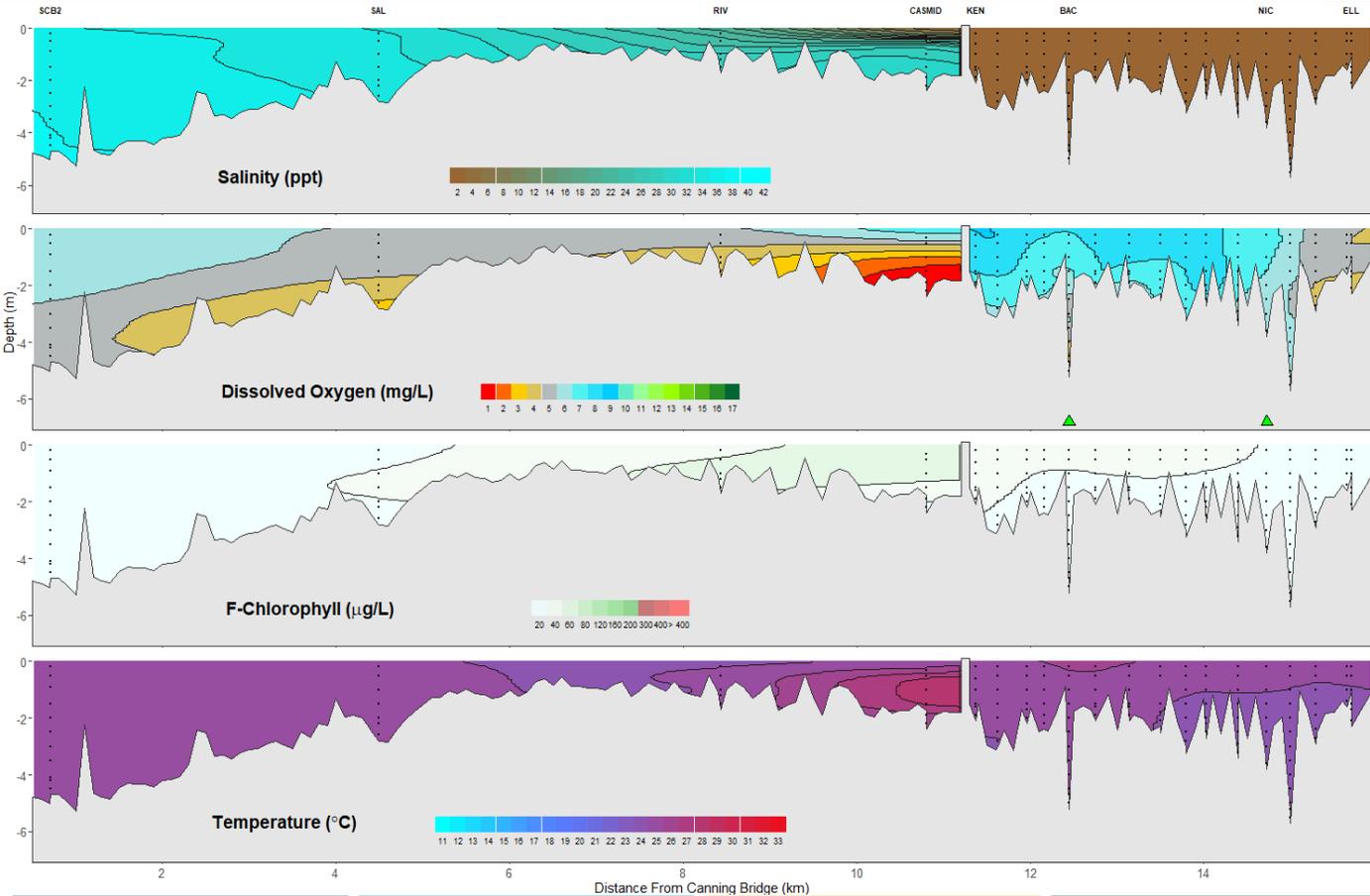
### Canning Estuary and Lower Canning River

9<sup>th</sup> March 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 – 9<sup>th</sup> March 2021



Date: 9<sup>th</sup> March 2021

Weather & tide conditions: Conditions were clear with a predominantly easterly breeze of up to 5 knots. The predicted tides at Barrack St were 0.55 m at 6:30 am (low tide) and 1.11 m at 8:28 pm (high tide). Gosnells recorded 25.1 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were 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 SAL and brackish over saline from RIV to CASMID. Surface waters were oxygenated and bottom waters were low in oxygen from SAL to RIV and anoxic at CASMID. Chlorophyll fluorescence was highest at CASMID indicating higher microalgal activity in that area. Water temperature ranged from 24.0 to 27.3 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh. Surface waters were oxygenated or well oxygenated from KEN to MACD50 and low in oxygen at ELL. Bottom waters were low in oxygen at BAC, PAC, and ELL. Chlorophyll fluorescence was highest at KS9 indicating higher microalgal activity in that area. Water temperature ranged from 23.6 to 25.2 °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 9<sup>th</sup> March 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)