



Department of Biodiversity,  
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# Swan Canning Estuary Water Quality Monitoring Project

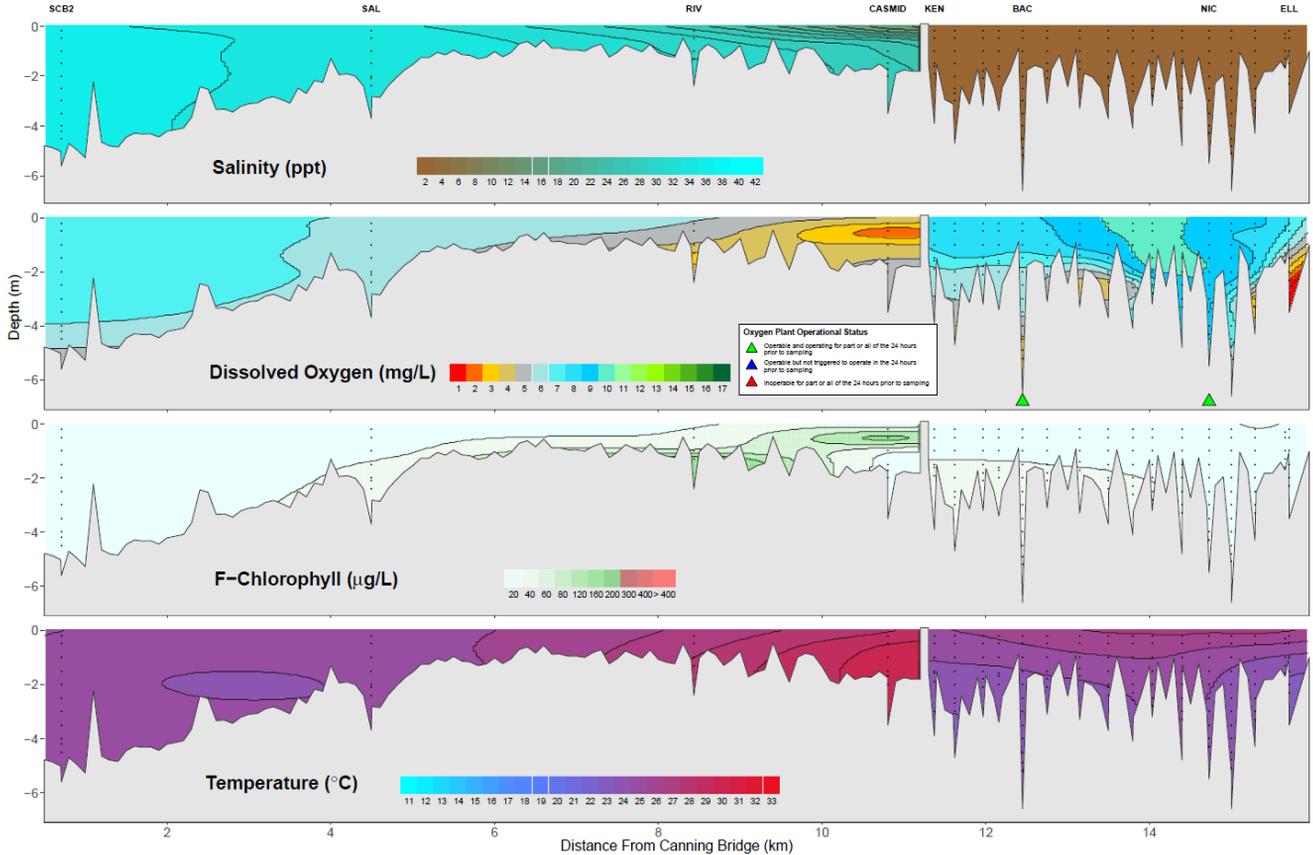
## Weekly Profile Report for the Canning Estuary and Lower Canning River

7<sup>th</sup> January 2020

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### Canning River Estuary – Physical-Chemical Profile – 7th Jan 2020



Date: 7<sup>th</sup> January 2020

Weather & tide conditions: Conditions were clear with a predominantly north westerly breeze of up to 7 knots. The predicted tides at Barrack St were 0.55 m at 7:19 am (low tide) and 1.07 m at 8:47 pm (high tide) and flow was observed at Kent St Weir. Gosnells recorded 0.8 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Nicholson Rd and Bacon St oxygenation plants were both 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 RIV and hypoxic at CASMID. Bottom waters were low in oxygen at RIV. Chlorophyll fluorescence was high in bottom waters at RIV and in surface waters at CASMID indicating higher microalgal activity in these areas. Water temperature ranged from 24.0 to 29.6 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh and surface waters were oxygenated or well oxygenated throughout this zone. Bottom waters were low in oxygen at BACD500, BAC and from GRE to MACD50 and hypoxic at PAC and ELL. Chlorophyll fluorescence was highest at KENU300 indicating higher microalgal activity in that area. Water temperature ranged from 22.4 to 27.1 °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).

#### **Recommended reference**

Department of Biodiversity, Conservation and Attractions 2019. *Swan Canning Estuary water quality monitoring weekly profile report, Canning River Estuary, 7<sup>th</sup> January 2020*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)

#### **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.