



Department of Biodiversity,  
Conservation and Attractions



Biodiversity and  
Conservation Science

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# Swan Canning Estuary Water Quality Monitoring Project

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

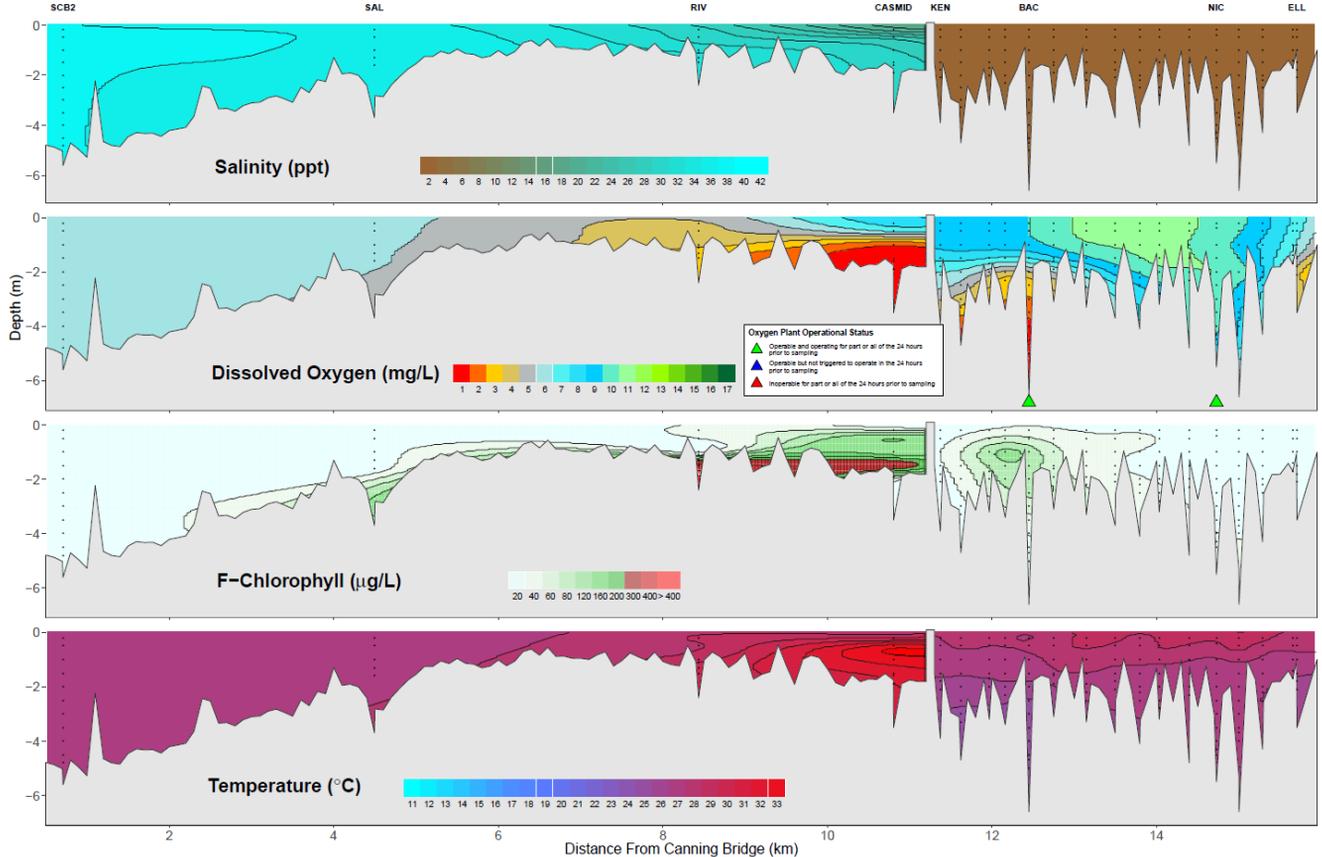
29<sup>th</sup> January 2020

Prepared by

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### Canning River Estuary – Physical–Chemical Profile – 29th Jan 2020



Date: 29<sup>th</sup> January 2020

Weather & tide conditions: Conditions were clear with a predominantly westerly breeze of up to 11 knots. The predicted tides at Barrack St were 0.59 m at 09:15 am (low tide) and 0.91 m at 12:01 pm (high tide overnight) and flow was observed at Kent St Weir. Gosnells recorded no 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 or well oxygenated except at RIV where they were low in oxygen. Bottom waters were oxygenated between SCB2 and SAL, low in oxygen at RIV and anoxic at CASMID. Chlorophyll fluorescence was highest at RIV indicating higher microalgal activity in this area. Water temperature ranged from 26.4 to 32.7 °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 KENU300, hypoxic at BACD300 and ELL and anoxic at BAC. Chlorophyll fluorescence was highest BACD300 indicating higher microalgal activity in this area. Water temperature ranged from 24.7 to 28.9 °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, 29<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.