



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

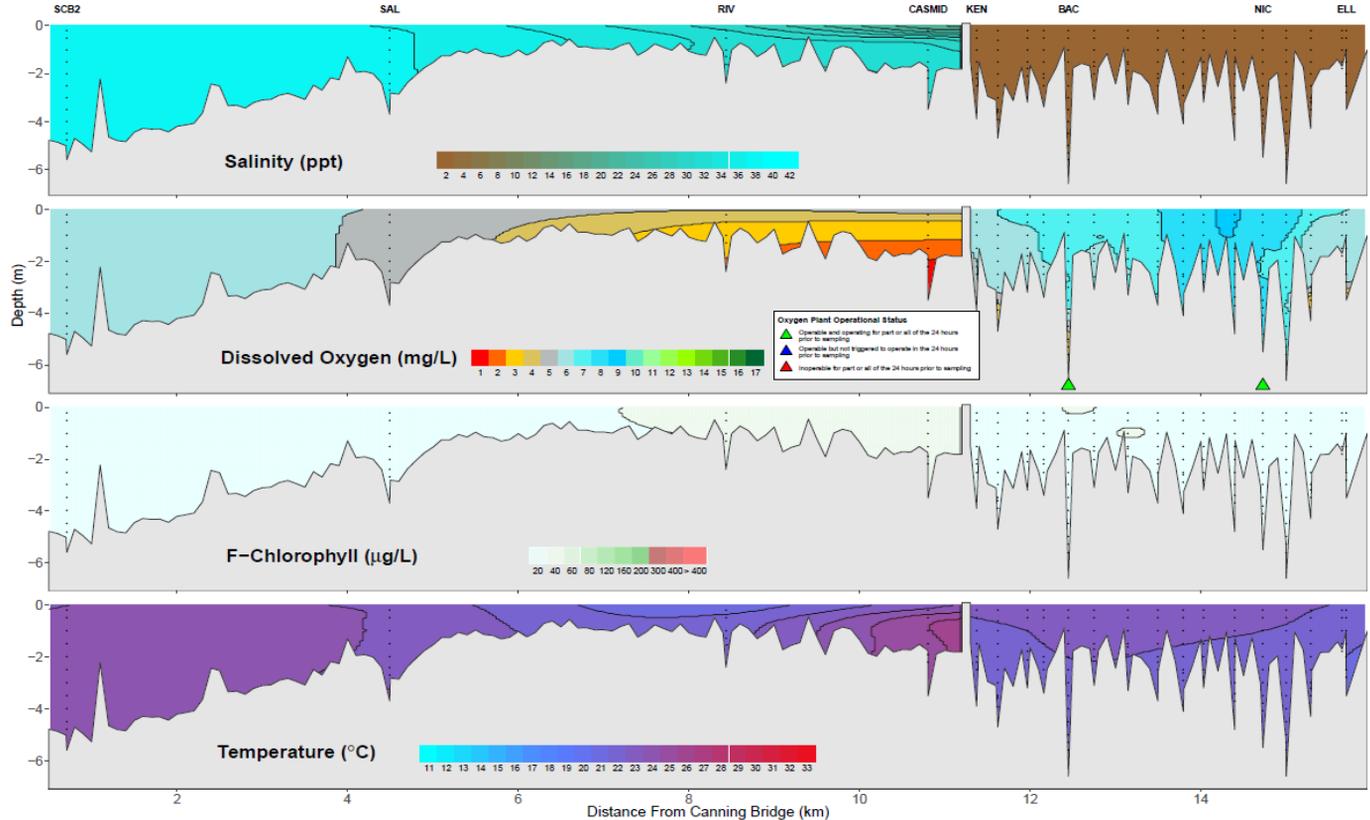
15th April 2020

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Canning River Estuary – Physical-Chemical Profile – 15th Apr 2020



Date: 15th April 2020

Weather & tide conditions: Conditions were clear with a predominantly westerly breeze of up to 6 knots. The predicted tides at Barrack St were 0.61 m at 3:41 am (low tide) and 1.07 m at 3:36 pm (high tide) 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. Waters were oxygenated between SCB2 and SAL, low in oxygen at RIV and hypoxic at CASMID. Chlorophyll fluorescence was highest at CASMID indicating higher microalgal activity in that area. Water temperature ranged from 22.8 to 24.9 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh and waters were oxygenated or well oxygenated except bottom waters at KENU300 and BAC which were low in oxygen and PAC which were hypoxic. Chlorophyll fluorescence was highest at PO2 indicating higher microalgal activity in that area. Water temperature ranged from 20.7 to 22.9 °C.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available at 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 2019. *Swan Canning Estuary water quality monitoring weekly profile report, Lower to Upper Swan Estuary 15th April 2020*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)