



Department of Biodiversity,
Conservation and Attractions



Biodiversity and
Conservation Science

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Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

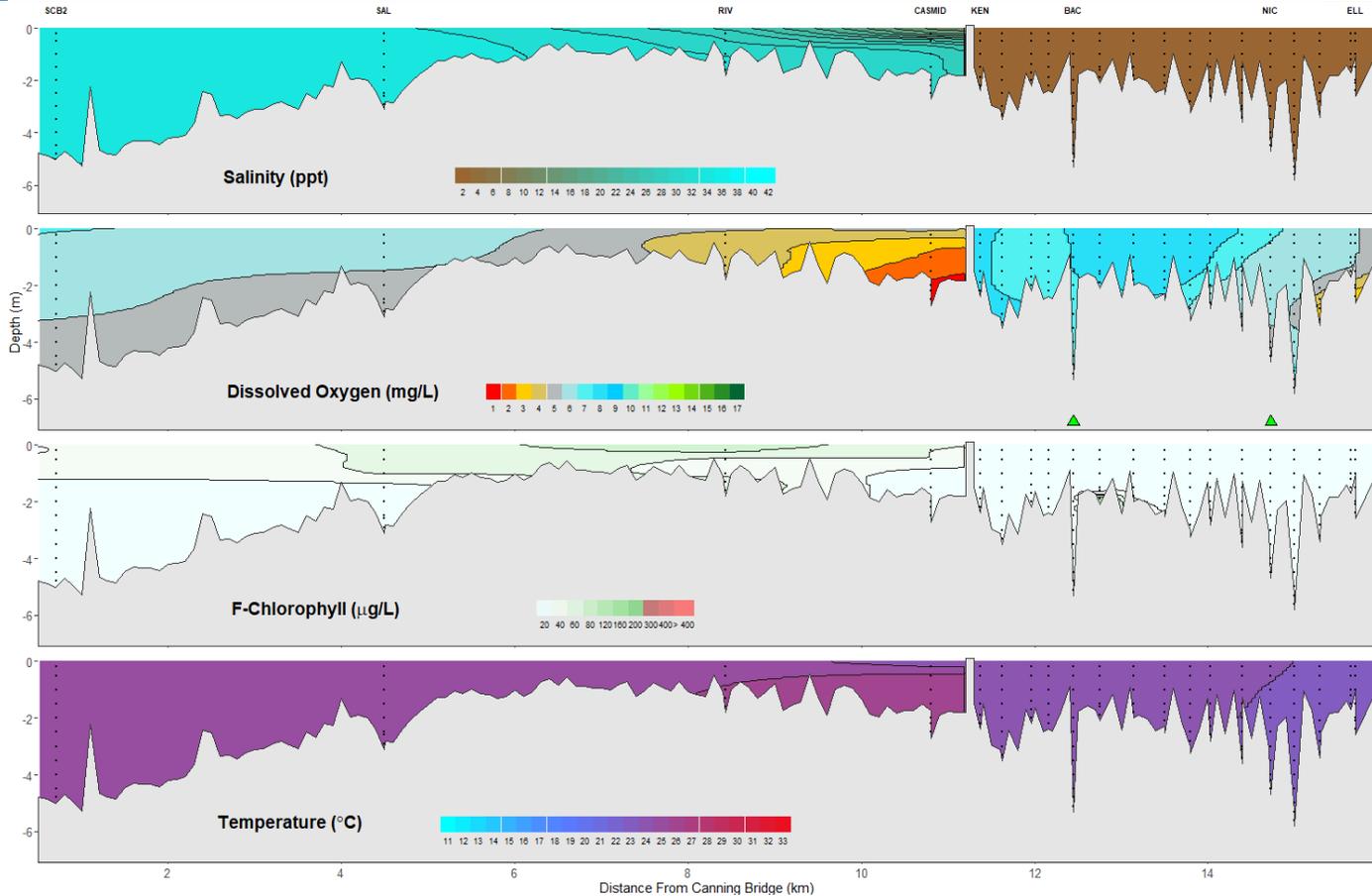
Canning Estuary and Lower Canning River

7th April 2021

Prepared by

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Canning Estuary and Lower Canning River - Water Quality Profiles – 7th April 2021



Date: 7th April 2021

Weather & tide conditions: Conditions were overcast with a light southerly breeze of up to 3 knots. The predicted tides at Barrack St were 0.66 m at 5:12 am (low tide) and 1.07 m at 8:07 pm (high tide). Gosnells recorded 1.3 mm 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 RIV and brackish over saline at CASMID. Surface waters were oxygenated from SCB2 to SAL and low in oxygen between RIV and CASMID. 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 24.1 to 25.6 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen at NIC and ELL and hypoxic at PAC. Chlorophyll fluorescence was highest at BACU300 indicating higher microalgal activity in that area. Water temperature ranged from 22.0 to 23.8 °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 2021. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 7th April 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)