



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

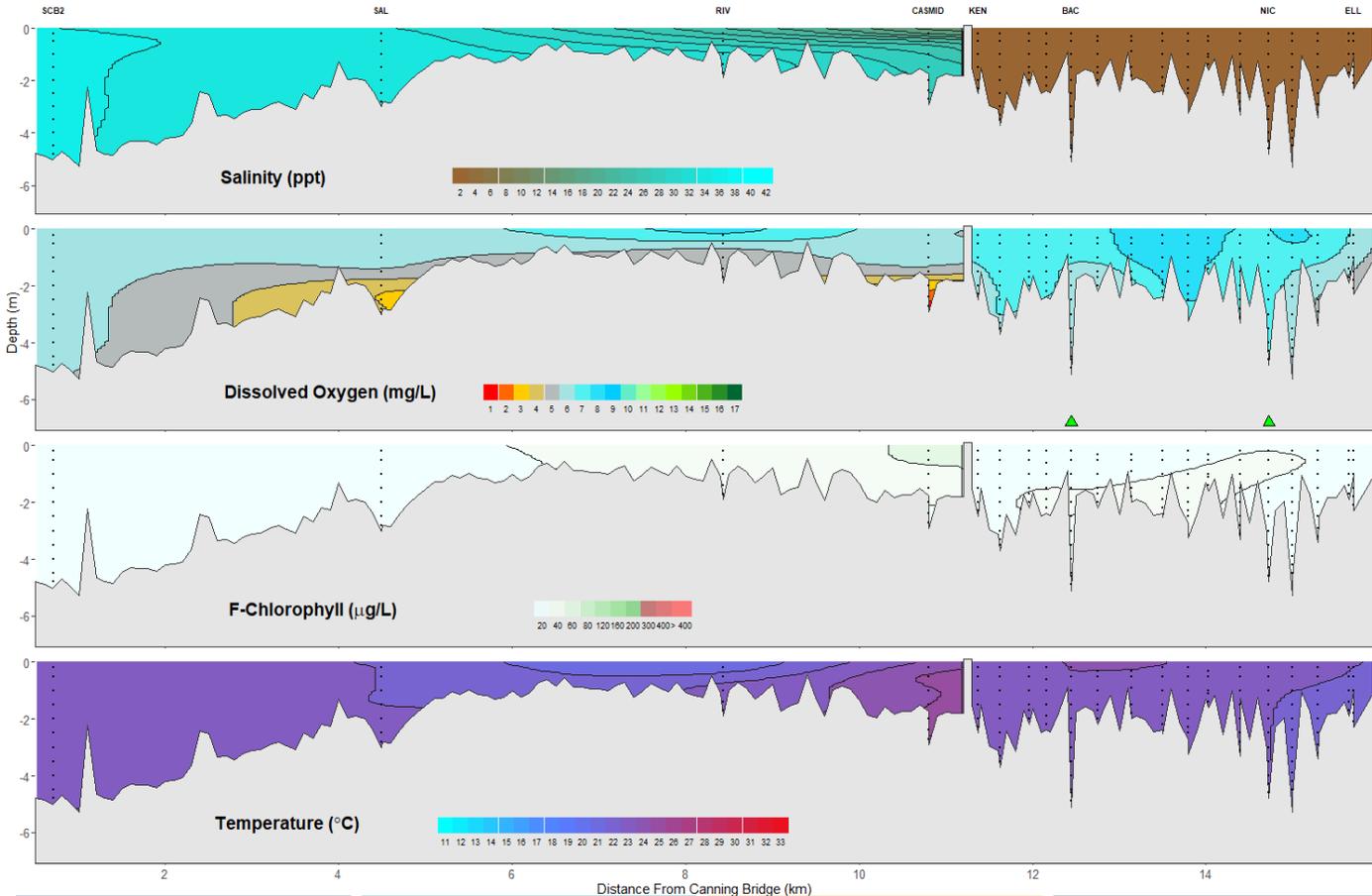
Canning Estuary and Lower Canning River

16th March 2021

Prepared by

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Canning Estuary and Lower Canning River - Water Quality Profiles – 16th March 2021



Date: 16th March 2021

Weather & tide conditions: Conditions were overcast with a predominantly easterly breeze of up to 5 knots. The predicted tides at Barrack St were 0.73 m at 6:16 am (low tide), 0.98 m at 1:28 pm (high tide) and 0.82 m at 7:15 pm (second low tide). Gosnells recorded no 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 at SAL and anoxic at CASMID. Chlorophyll fluorescence was highest at CASMID indicating higher microalgal activity in that area. Water temperature ranged from 22.0 to 25.3 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh. Waters were oxygenated or well oxygenated and chlorophyll fluorescence was highest at BACD300 indicating higher microalgal activity in that area. Water temperature ranged from 21.3 to 23.2 °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 16th March 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)