

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

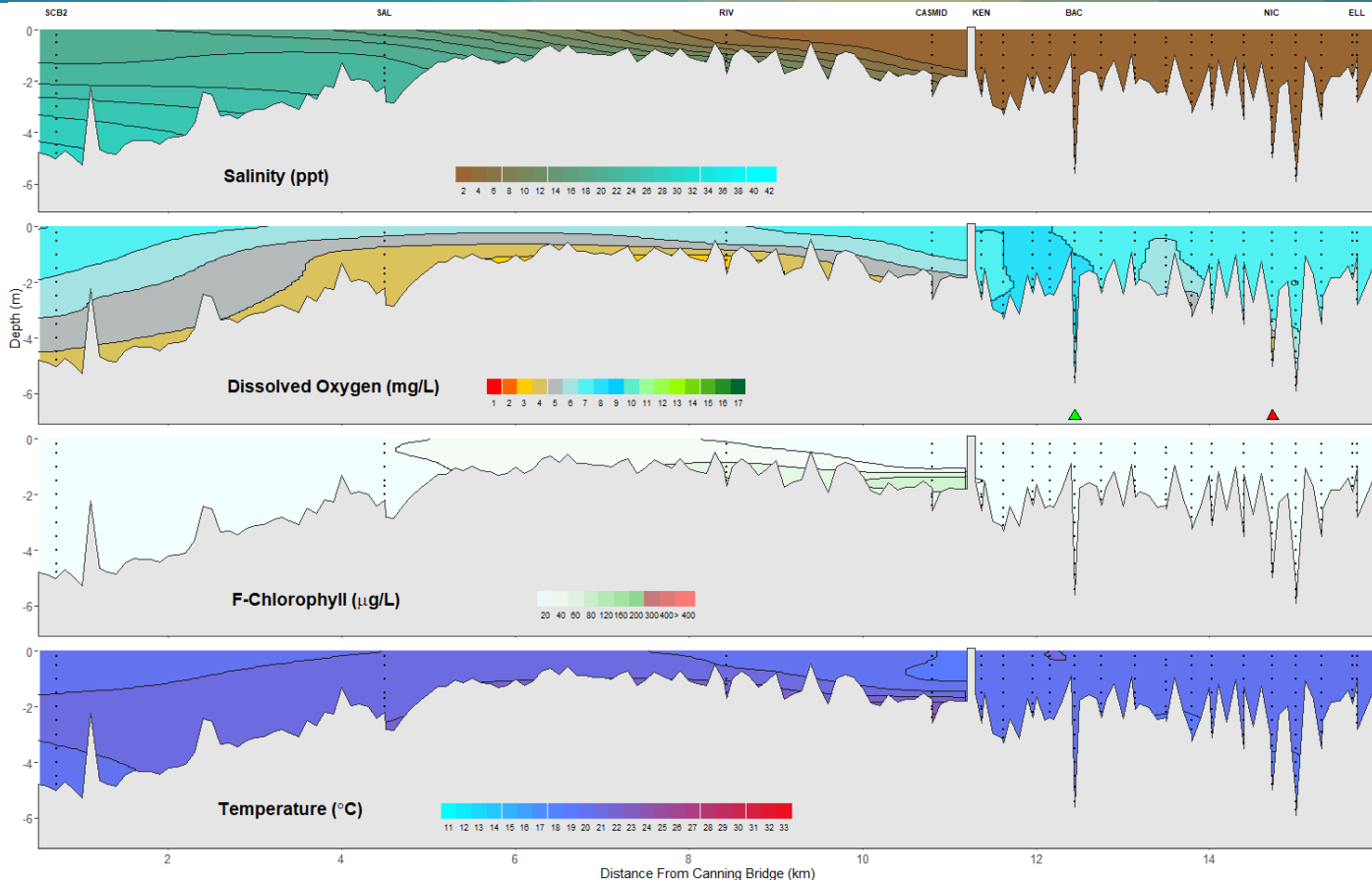
Canning Estuary and Lower Canning River

9 November 2021

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Canning Estuary and Lower Canning River - Water Quality Profiles – 9 November 2021



Date: 9 November 2021

Weather & tide conditions: Conditions were overcast with a south easterly breeze of up to 7 knots. The predicted tides at Barrack St were 1.10 m at 12:54 am (high tide) and 0.47 m at 12:42 pm (low tide). Perth recorded 40.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling. The Nicholson Rd oxygenation plant was not operational.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was brackish over saline at SCB2, brackish at SAL and fresh over brackish from RIV to CASMID. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen from SCB2 to RIV. Chlorophyll fluorescence was highest at CASMID indicating higher microalgal activity in this area. Water temperature ranged from 18.9 to 23.0 °C.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, waters were well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 18.6 to 20.1 °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 >6 mg/L, oxygenated >4-6 mg/L, low oxygen >2-4 mg/L, hypoxic 0.5-2 mg/L, anoxic <0.5 mg/L

Recommended reference: Department of Biodiversity, Conservation and Attractions 2021. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 9 November 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)