

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

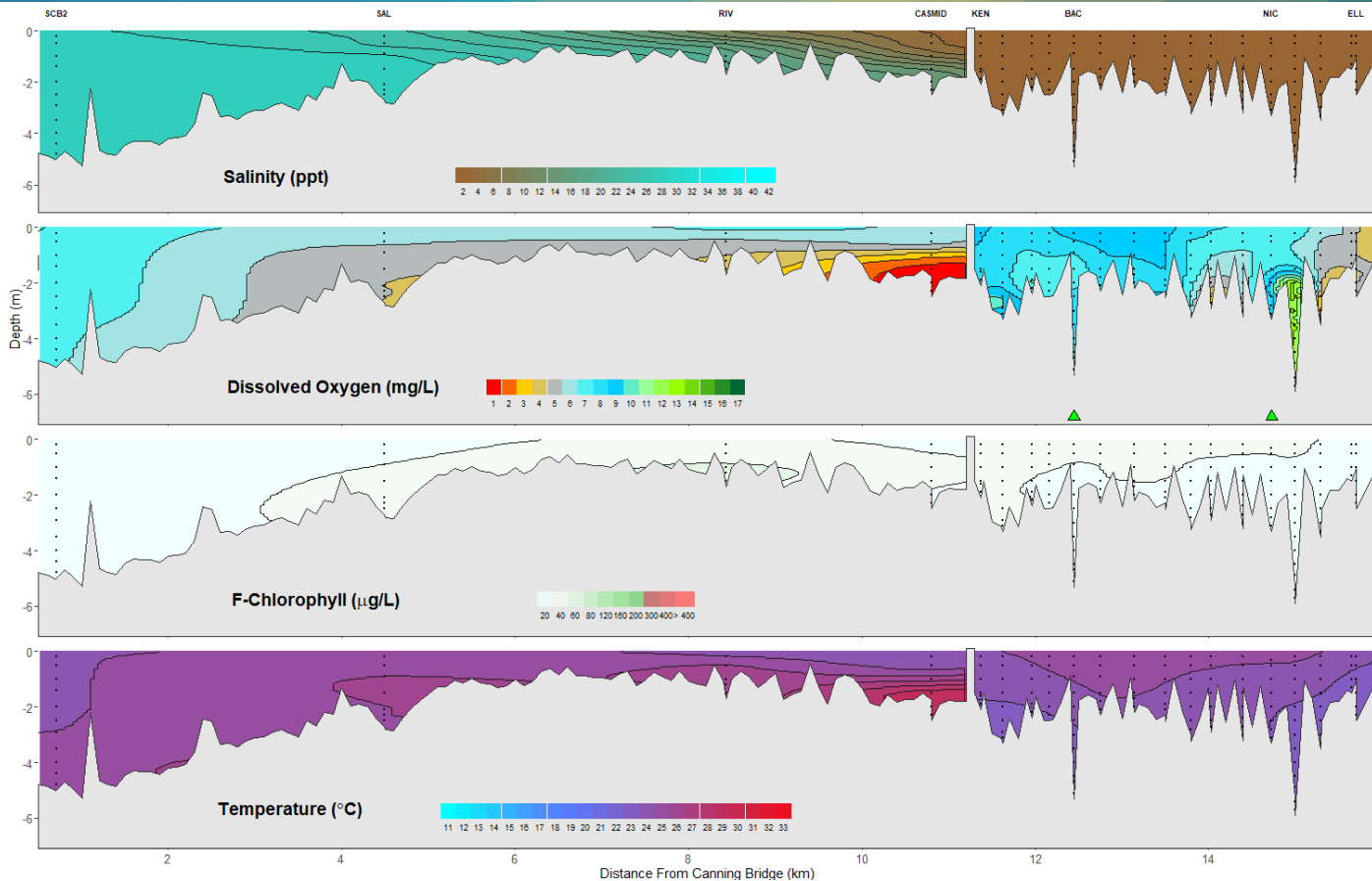
Canning Estuary and Lower Canning River

30 November 2021

Prepared by

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Canning Estuary and Lower Canning River - Water Quality Profiles – 30 November 2021



Date: 30 November 2021

Weather & tide conditions: Conditions were variable with a breeze of up to 10 knots. The predicted tides at Barrack St were 0.76 m at 7:25 am (high tide) and 0.72 m at 1:01 pm (low tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were both triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was saline at SCB2, brackish over saline at SAL, brackish at RIV and fresh over brackish at CASMID. Surface waters were oxygenated or well oxygenated and bottom waters were 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 23.4 to 28.6 °C.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen at MASD50 and hypoxic at PAC. Chlorophyll fluorescence was highest at KEN indicating higher microalgal activity in this area. Water temperature ranged from 22.1 to 24.9 °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 >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 30 November 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)