Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

13 May 2025

Prepared by

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Department of **Biodiversity, Conservation and Attractions**

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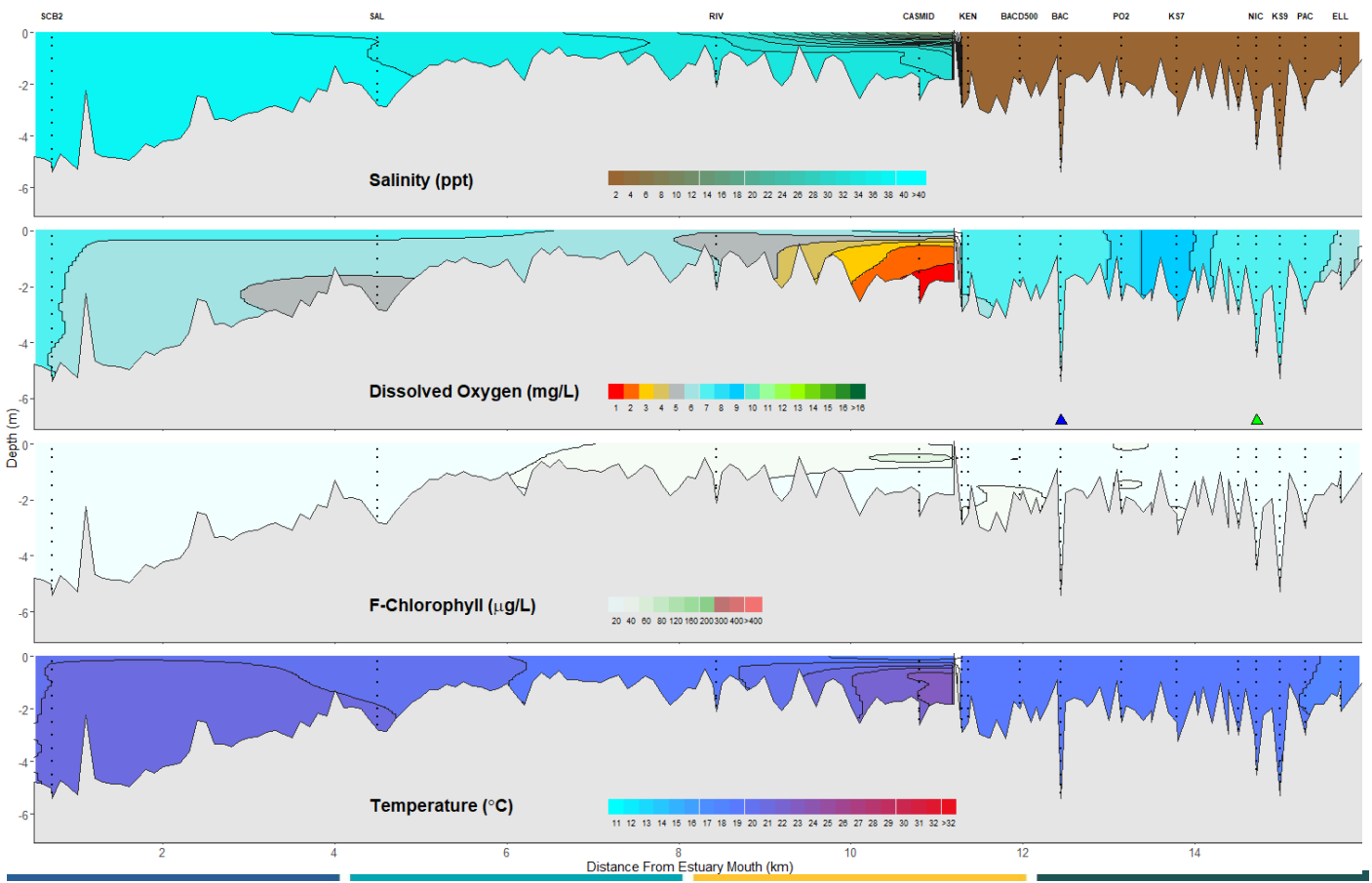
Canning Estuary and Lower Canning River - Water Quality Profiles – 13 May 2025



Date: 13 May 2025

Weather & tide conditions: Conditions were clear with a predominately easterly breeze of up to 10.1 knots. The predicted tides at Barrack St were 1.28 m at 11:07 am (high tide) and 0.77 m at 9:08 pm (low tide). Perth recorded no rain in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Nicholson Rd oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling, whereas the Bacon St plant was operable but not triggered to provide oxygen during this window.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was hypersaline at SCB2, saline over hypersaline at SAL, saline at RIV and brackish over saline at CASMID. Waters were oxygenated or well oxygenated, except for bottom to sub-surface waters at CASMID which ranged from anoxic to low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 18.6 to 22.1 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 17.8 to 18.9 °C at the time of sampling.

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^{-1}, oxygenated >4-6 mg L^{-1}, low oxygen >2-4 mg L^{-1}, hypoxic 0.5-2 mg L^{-1}, anoxic <0.5 mg L^{-1}
Chlorophyll fluorescence (low flow): low < 50 µg L^{-1}, moderate 50-150 µg L^{-1}, high 150-400 µg L^{-1}, extreme > 400 µg L^{-1}

Recommended reference: Department of Biodiversity, Conservation and Attractions 2025. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 13 May 2025.* Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)