Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

15 July 2025

Prepared by

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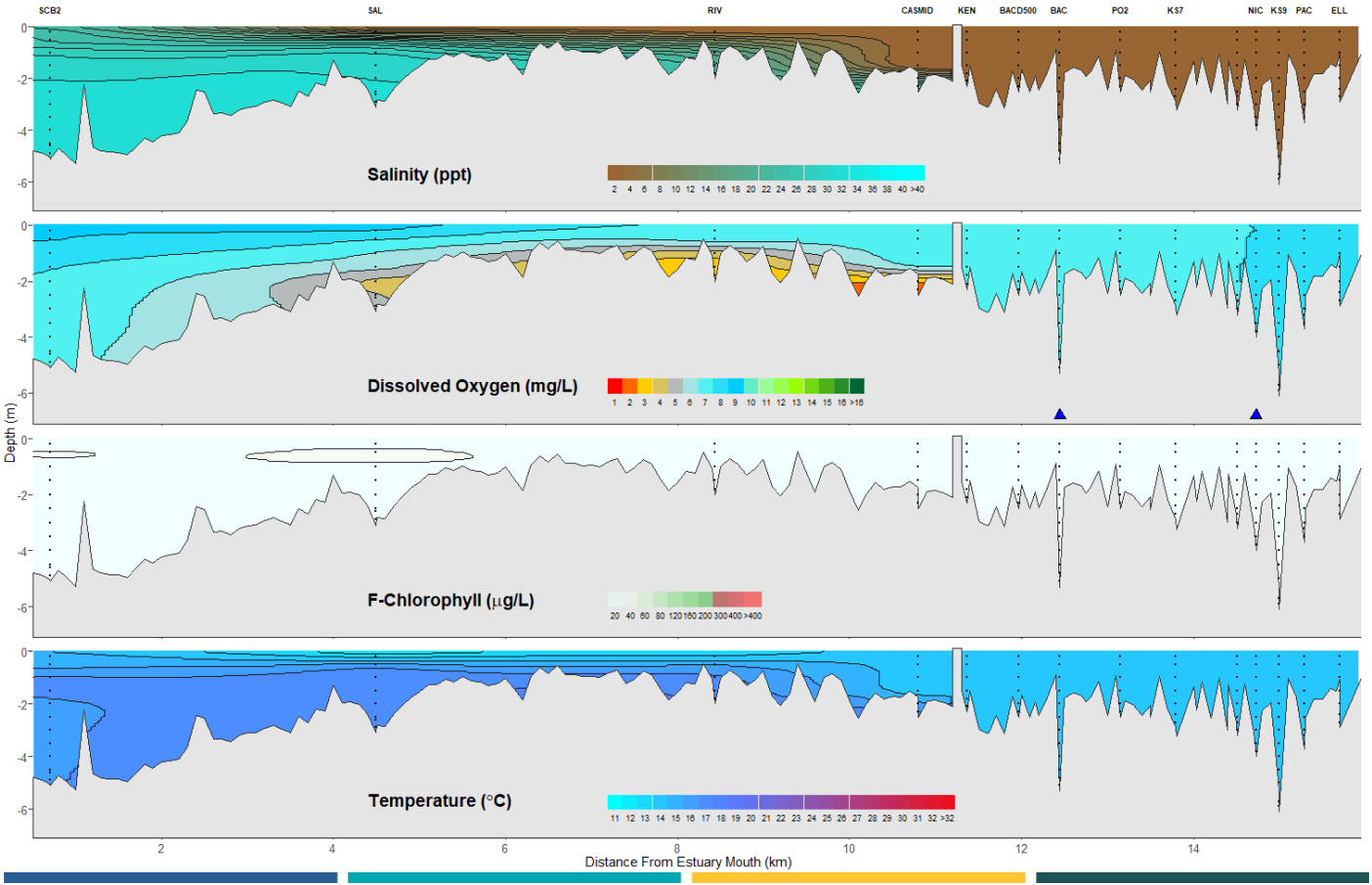
Canning Estuary and Lower Canning River - Water Quality Profiles – 15 July 2025



Date: 15 July 2025

Weather & tide conditions: Conditions were clear with a northernly breeze of up to 8.6 knots. The predicted tides at Barrack St were 1.15 m at 1:14 pm (high tide) and 0.83 m at 9:53 pm (low tide). Perth recorded 22 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were operable but not triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was brackish over saline from SCB2 to SAL, and fresh over saline through RIV to CASMID. Dissolved oxygen levels were low at the bottom of RIV, while bottom waters at CASMID recorded low/hypoxic levels. Chlorophyll fluorescence was low and water temperatures ranged from 12.7 to 16.8 °C.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, all sites were well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 13.5 to 13.8 °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 >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 15 July 2025.* Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)