Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

9 September 2025

Prepared by

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Department of **Biodiversity, Conservation and Attractions**

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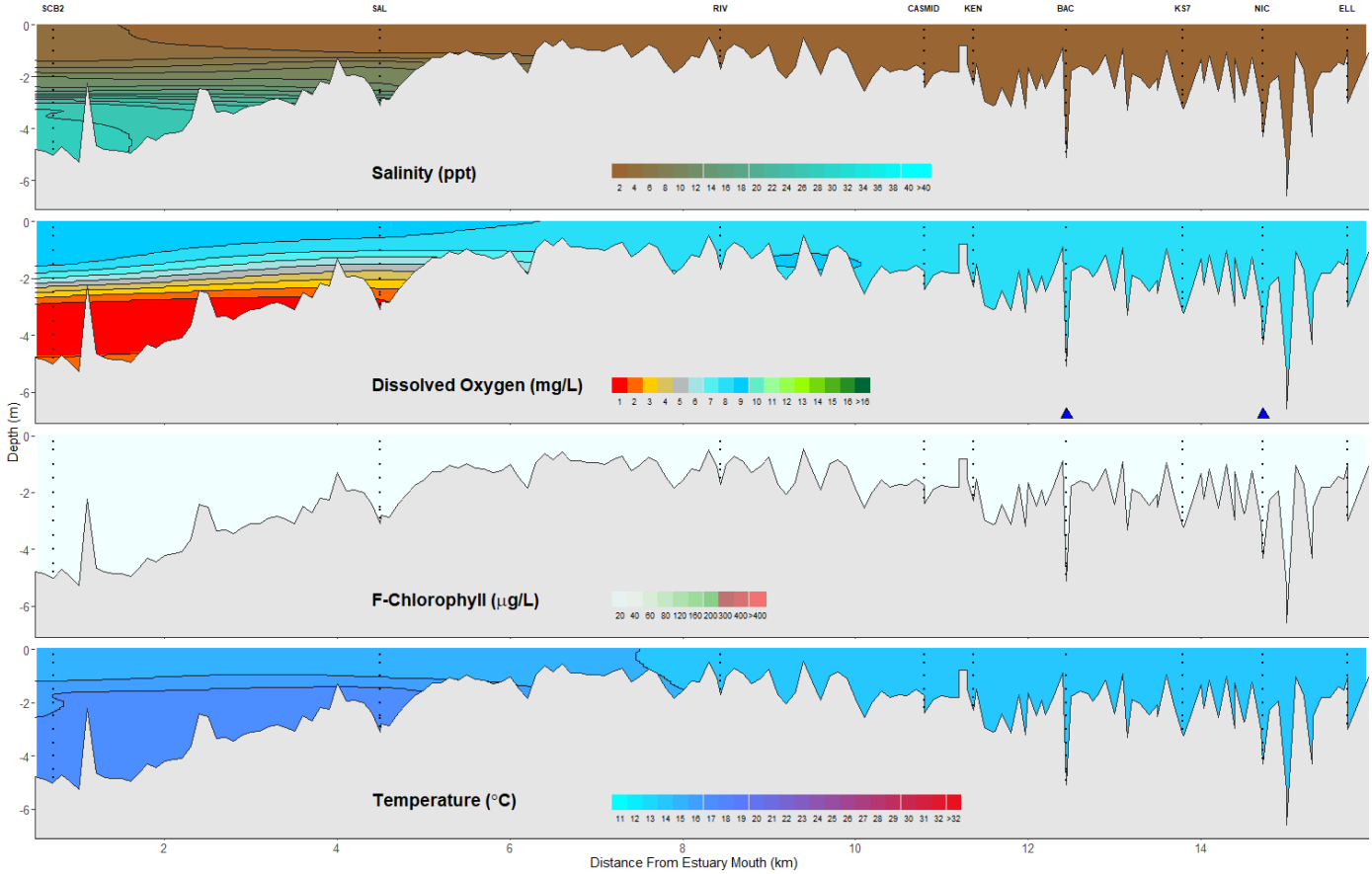
Canning Estuary and Lower Canning River - Water Quality Profiles – 9 September 2025



Date: 9 September 2025

Weather & tide conditions: Conditions were partly cloudy with a south-easterly breeze up to 6.2 knots. The predicted tides at Barrack St were 0.75 m at 5:57 am (low tide), 0.96 m at 12:37 pm (high tide) and 0.78 m at 6:21 pm (second low tide). Perth recorded 55.8 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 RIV): The Canning Estuary was fresh over saline at SCB2, fresh over brackish at SAL, and fresh from RIV to CASMID. Waters were well-oxygenated except for bottom waters at both SCB2 and SAL, which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 13.8 to 16.6 °C.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh and well oxygenated with low chlorophyll fluorescence throughout. Water temperatures ranged from 13.7 to 13.9 °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^{-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 9 September 2025.* Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)