Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

14 October 2025

Prepared by

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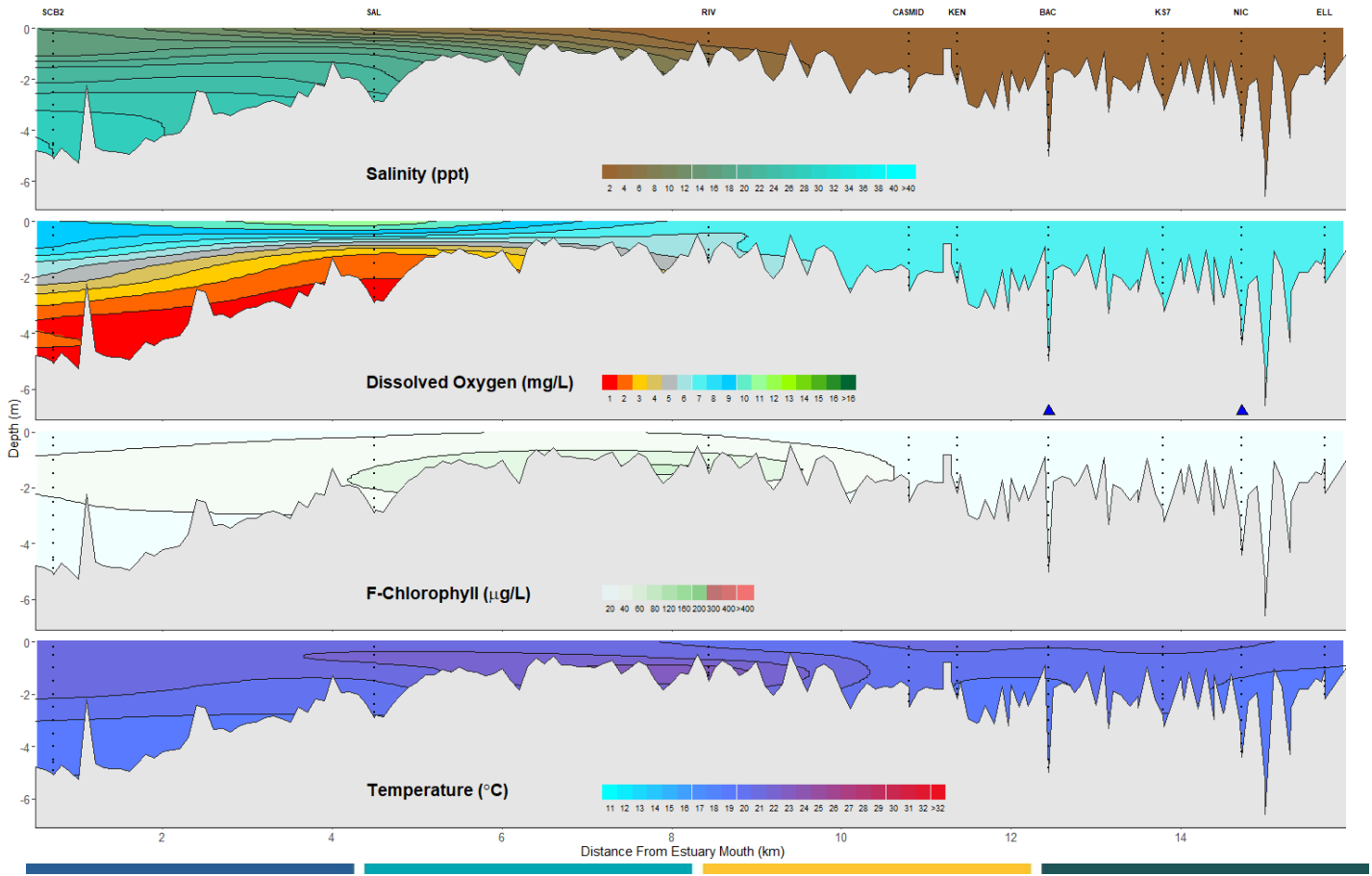
GOVERNMENT OF WESTERN AUSTRALIA

Biodiversity and Conservation Science

Canning Estuary and Lower Canning River - Water Quality Profiles – 14 October 2025



Date: 14 October 2025

Weather & tide conditions: Conditions were overcast with a variable breeze up to 4.4 knots. The predicted tides at Barrack St were 0.66 m at 6:02 am (low tide) and 0.87 m 12:17 pm (high tide). Perth recorded 19.8 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 CASMID): The Canning Estuary was brackish over saline at SCB2, brackish at SAL, and fresh from RIV to CASMID. Waters were oxygenated to well oxygenated except for bottom waters of SCB2 and SAL, which were hypoxic. Chlorophyll fluorescence was moderate at the bottom of RIV, and water temperatures ranged from 18.1 to 22.7 °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 18.6 to 20.8 °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 14 October 2025.* Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)