

Department of **Biodiversity**, **Conservation and Attractions** Biodiversity and Conservation Science We're working for Western Anstralia.

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

5 March 2025

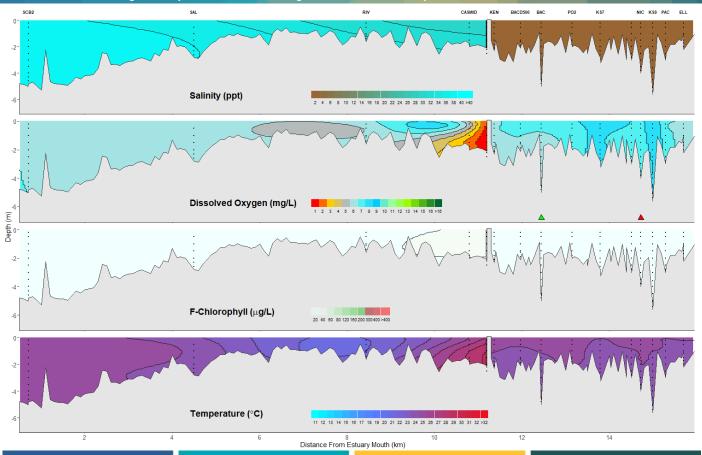
Prepared by

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Canning Estuary and Lower Canning River - Water Quality Profiles - 5 March 2025





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Date: 5 March 2025

<u>Weather & tide conditions</u>: Conditions were clear with an easterly breeze of up to 8.2 knots. The predicted tides at Barrack St were 0.65 m at 4:43 am (low tide) and 1.12 m at 3:07 pm (high tide). Perth recorded 2.2 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling and the Nicholson Rd oxygenation plant was offline.

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was hypersaline from SCB2 to SAL, saline at RIV and brackish over saline at CASMID. Waters were oxygenated or well oxygenated, except for bottom waters at CASMID which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 20.7 to 27.7 °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 23.2 to 24.7 °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:

 $\begin{array}{l} \underline{Salinity} - fresh < 5, \ brackish 5-25, \ saline 25-35, \ hypersaline > 35 \\ \underline{Dissolved \ oxygen} - \ well \ oxygenated > 6 \ mg \ L^1, \ oxygenated > 4-6 \ mg \ L^1, \ low \ oxygen > 2-4 \ mg \ L^1, \ hypoxic \ 0.5-2 \ mg \ L^1, \ anoxic < 0.5 \ mg \ L^1 \\ \underline{Chlorophyll \ fluorescence} (low \ flow): \ low < 50 \ \mug \ L^1, \ moderate \ 50-150 \ \mug \ L^1, \ high \ 150-400 \ \mug \ L^1, \ extreme > 400 \ \mug \ L^1 \end{array}$

Recommended reference: Department of Biodiversity, Conservation and Attractions 2025. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 5 March 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)