

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

Swan Canning Estuary Water Quality Monitoring Project

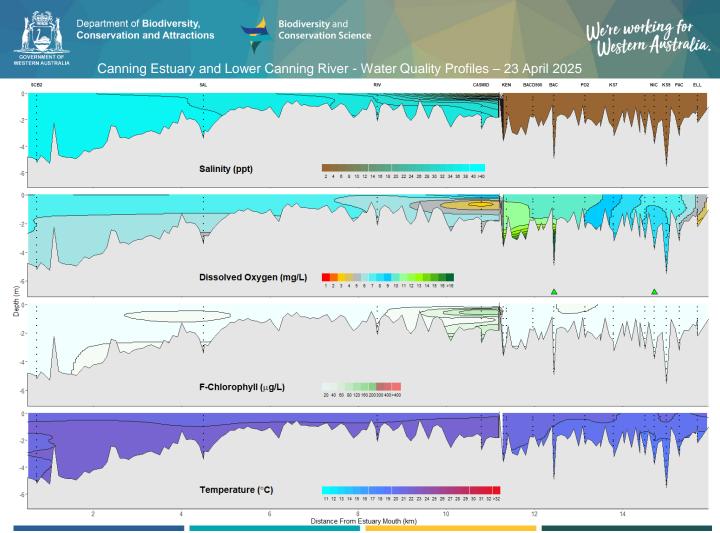
Weekly Water Quality Report

Canning Estuary and Lower Canning River

23 April 2025

Prepared by

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Date: 23 April 2025

<u>Weather & tide conditions</u>: Conditions were cloudy with a northerly breeze of up to 5.1 knots. The predicted tides at Barrack St were 0.72 m at 4:00 am (low tide) and 1.11 m at 7:35 pm (high tide). Perth recorded 0.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

<u>Canning Estuary (SCB2 to CASMID)</u>: 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 surface waters at CASMID which were low in oxygen. Chlorophyll fluorescence was moderate in bottom waters at SAL and in surface and bottom waters at CASMID. Water temperatures ranged from 20.9 to 21.8 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh. Waters were oxygenated or well oxygenated, except for bottom water at ELL which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 18.7 to 20.6 °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.

- 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 23 April 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)