

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

Swan Canning Estuary Water Quality Monitoring Project

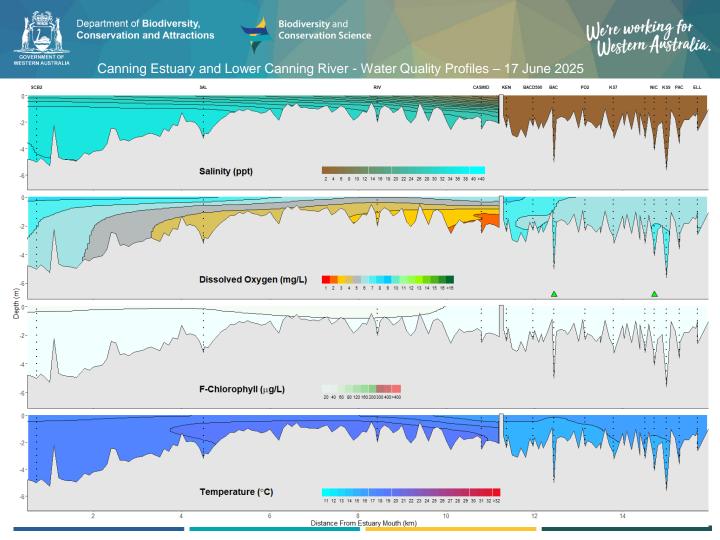
Weekly Water Quality Report

Canning Estuary and Lower Canning River

17 June 2025

Prepared by

Rivers and Estuaries Science Biodiversity and Conservation Science Department of Biodiversity, Conservation and Attractions





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Date: 17 June 2025

<u>Weather & tide conditions</u>: Conditions were overcast with a variable breeze of up to 4.5 knots. The predicted tides at Barrack St were 0.79 m at 12:12 am (low tide) and 1.19 m at 1:58 pm (high tide). Perth recorded 4.2 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was saline at SCB2 and SAL and brackish over saline at RIV and CASMID. Waters were oxygenated or well oxygenated, except for bottom waters from SAL to RIV which were low in oxygen and CASMID which were hypoxic. Chlorophyll fluorescence was low and temperature ranged from 15.6 to 18.9 °C.

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 14.3 to 15.4 °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:

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

Recommended reference: Department of Biodiversity, Conservation and Attractions 2025. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 17 June 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)