

## Swan Canning Estuary Water Quality Monitoring Project

**Weekly Water Quality Report** 

**Canning Estuary and Lower Canning River** 

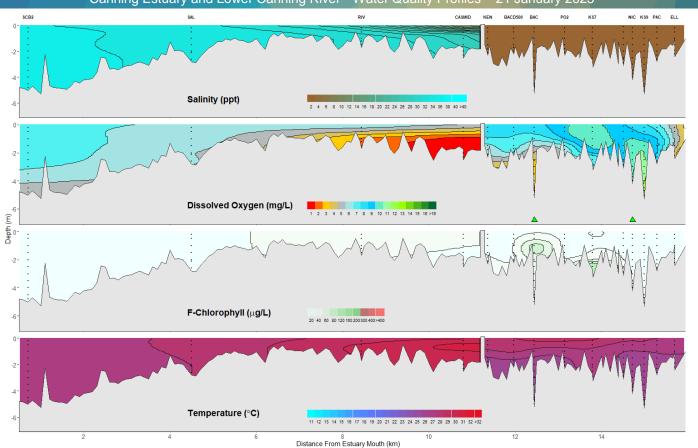
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## Canning Estuary and Lower Canning River - Water Quality Profiles – 21 January 2025



*Date*: 21 January 2025

<u>Weather & tide conditions</u>: Conditions were overcast with a slight easterly breeze of up to 4.9 knots. The predicted tides at Barrack St were 0.64 m at 7:44 am (low tide) and 0.99 m at 5:15 pm (high tide). Perth recorded 1.8 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 from SCB2 to RIV and brackish over saline at CASMID. Waters were oxygenated or well oxygenated, except for bottom waters at RIV which were hypoxic and CASMID which were anoxic. Chlorophyll fluorescence was low, except in subsurface waters of RIV which were moderate. Water temperatures ranged from 26.2 to 30.4 °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 waters at BAC which were hypoxic and ELL which were low in oxygen. Chlorophyll fluorescence was moderate in the subsurface waters at BAC and bottom waters at KS7. Water temperatures ranged from 24.9 to 28.1 °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:

Salinity – fresh <5, brackish 5-25, saline 25-35, hypersaline >35

<u>Dissolved oxygen</u> – 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  $L^{-1}$ 

<u>Chlorophyll fluorescence (low flow)</u>: low < 50  $\mu$ g L<sup>-1</sup>, moderate 50-150  $\mu$ g L<sup>-1</sup>, high 150-400  $\mu$ g L<sup>-1</sup>, extreme > 400  $\mu$ g L<sup>-1</sup>

Recommended reference: Department of Biodiversity, Conservation and Attractions 2025. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 21 January 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)