

## Swan Canning Estuary Water Quality Monitoring Project

**Weekly Water Quality Report** 

**Canning Estuary and Lower Canning River** 

18th June 2024

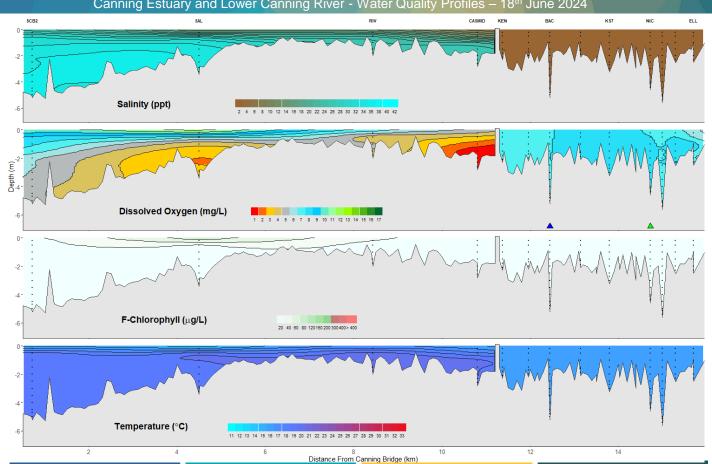
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We're working for Western Australia.

## Canning Estuary and Lower Canning River - Water Quality Profiles - 18th June 2024



*Date*: 18th June 2024

<u>Weather & tide conditions</u>: Conditions were cloudy with a light variable breeze of up to 3.4 knots. The predicted tides at Barrack St were 1.24 m at 8:33 am (high tide) and 0.82 m at 7:23 pm (low tide). Perth recorded 3 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Nicholson Rd oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling, whereas the Bacon St plant was operable but not triggered to provide oxygen during this window.

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was saline at SCB2, brackish over saline at SAL and CASMID, and brackish at RIV. SCB2 was oxygenated or well oxygenated, whereas bottom to sub-surface waters at SAL and RIVE were low in oxygen and mid-column water at CASMID was anoxic. Chlorophyll fluorescence was moderate in surface waters at SAL, and low elsewhere. Water temperatures ranged from 15.2 to 19.7 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh, and waters were oxygenated or well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 15 to 15.7 °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:

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

Dissolved oxygen – well oxygenated >6 mg L<sup>-1</sup>, oxygenated >4-6 mg L<sup>-1</sup>, low oxygen >2-4 mg L<sup>-1</sup>, hypoxic 0.5-2 mg L<sup>-1</sup>, anoxic <0.5 mg L<sup>-1</sup>

Chlorophyll fluorescence (low flow): 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 2024. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 18th June 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)