

## Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

**Canning Estuary and Lower Canning River** 

29 October 2024

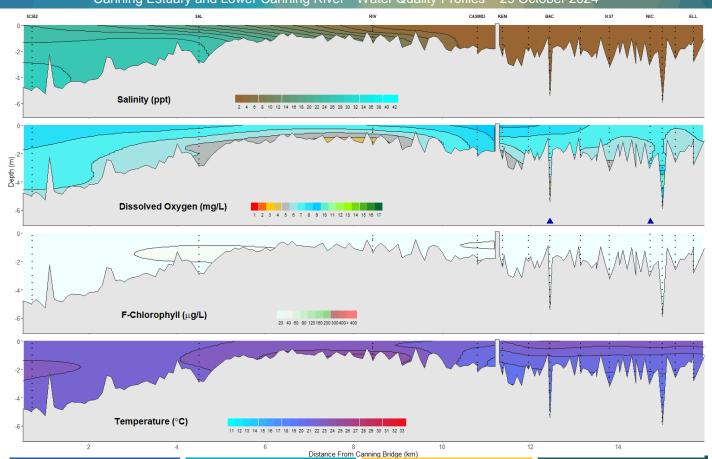
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We're working for Western Australia.

## Canning Estuary and Lower Canning River - Water Quality Profiles – 29 October 2024



Date: 29 October 2024

<u>Weather & tide conditions</u>: Conditions were clear with a variable breeze of up to 3.8 knots. The predicted tides at Barrack St were 0.73 m at 4:56 am (low tide), 0.79 m at 10:11 am (high tide) and 0.73 m at 3:08 pm (2<sup>nd</sup> high tide). Perth recorded 0.2 mm rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St and Nicholson Rd oxygenation plants were operable, but not triggered to provide oxygen in the 24 hours prior to sampling.

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was brackish over saline at SCB2, brackish at SAL, fresh over brackish at RIV and fresh at CASMID. Waters were oxygenated or well oxygenated, except bottom waters at RIV which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 20.2 to 24.2 °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 low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 18.7 to 24.5 °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 (mod/high flow): low < 60  $\mu$ g L<sup>-1</sup>, moderate 60-160  $\mu$ g L<sup>-1</sup>, high 160-400  $\mu$ 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 29 October 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)