

## Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

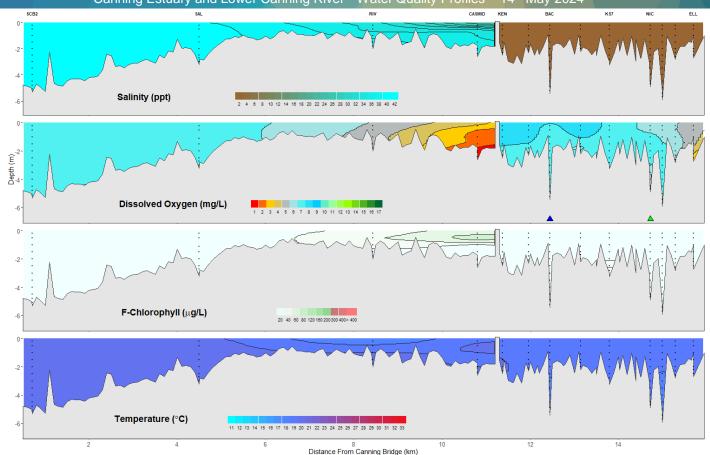
**Canning Estuary and Lower Canning River** 

14th May 2024

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## Canning Estuary and Lower Canning River - Water Quality Profiles - 14th May 2024



Date: 14th May 2024

<u>Weather & tide conditions</u>: Conditions were cloudy with a predominately easterly breeze of up to 3.3 knots. The predicted tides at Barrack St were 0.72 m at 1:57 am (low tide), 1.19 m at 2:06 am (high tide). Perth recorded zero rainfall in the week prior to sampling (Bureau of Meteorology).

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

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was hypersaline from SCB2 to SAL and saline over hypersaline at RIV and CASMID. Waters were oxygenated or well oxygenated, except at CASMID where oxygen ranged from low at the surface to anoxic at depth. Chlorophyll fluorescence was low except at CASMID where moderate levels were measured at the surface. Water temperatures ranged from 17.3 to 19.4 °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 17.7 to 19.1 °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  $L^{-1}$ 

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 14th May 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)