## Swan Canning Estuary Water Quality Monitoring Project

**Weekly Water Quality Report** 

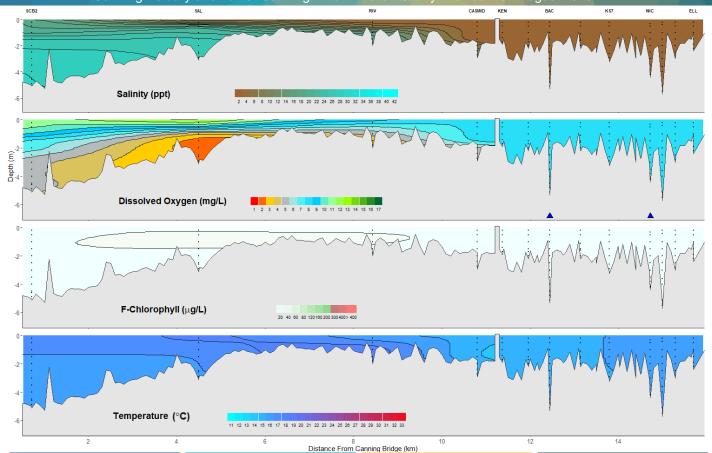
**Canning Estuary and Lower Canning River** 

8th August 2023

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## Canning Estuary and Lower Canning River - Water Quality Profiles — 8<sup>th</sup> August 2023



Date: 8th August 2023

<u>Weather & tide conditions</u>: Conditions were sunny with a predominantly north westerly breeze of up to 8.4 knots. The predicted tides at Barrack St were 1.03 m at 4:13 am (high tide) and 0.71 m at 6 pm (low tide). Perth recorded 3.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St and Nicholson Rd oxygenation plants were both 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 from SCB2 to SAL and fresh over brackish between RIV and CASMID. Waters were oxygenated or well oxygenated, except for bottom waters at RIV which were low in oxygen and SAL which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 14.2 °C to 17.1 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh and waters were well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 14.4 °C 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:

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

<u>Dissolved oxygen</u> – 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>

<u>Chlorophyll fluorescence (mod/high 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 2023. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 8th August 2023. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)