# Swan Canning Estuary Water Quality Monitoring Project

**Weekly Water Quality Report** 

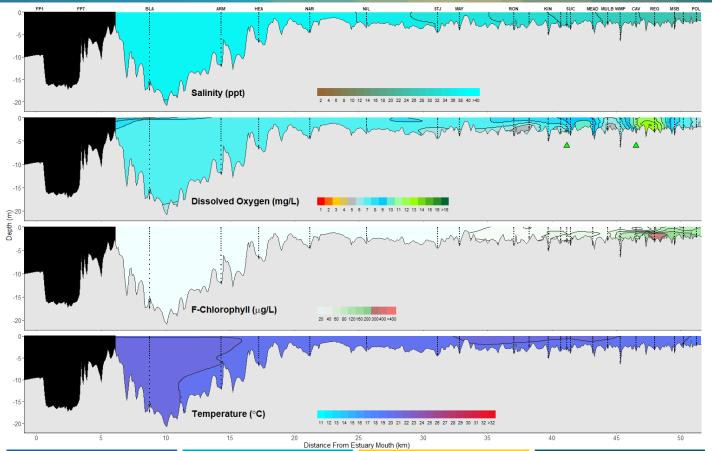
**Lower Swan Canning Estuary to Upper Swan Estuary** 

28 April 2025

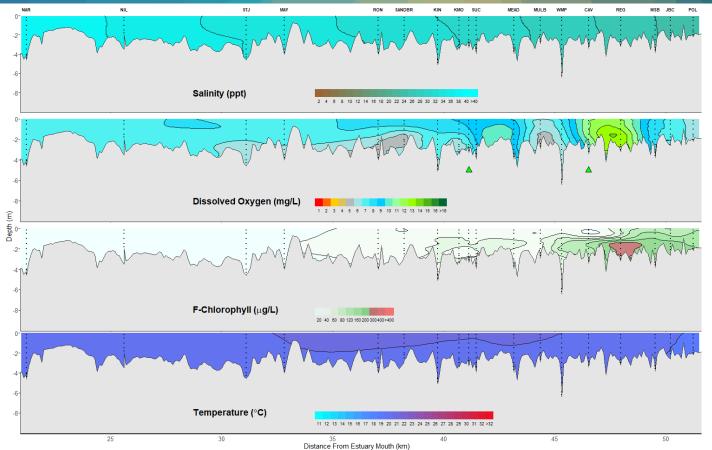
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# Swan Canning Estuary - Water Quality Profiles – 28 April 2025



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Date: 28 April 2025

<u>Weather & tide conditions</u>: Conditions were clear with a predominately easterly breeze of up to 6.9 knots. The predicted tides at Barrack St were 0.88 m at 2:34 am (low tide) and 1.26 m at 11:32 am (high tide). Perth recorded 2.8 mm rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Guilford and Caversham oxygenation plants were triggered to provide oxygen in the 24 hours prior to sampling.

<u>Lower Swan Canning Estuary (BLA to NAR)</u>: The Lower Swan Canning Estuary was hypersaline, waters were well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 19.2 to 20.2 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 19.4 to 20.8 °C at the time of sampling.

<u>Upper Swan Estuary (SANDBR to POL)</u>: The Upper Swan Estuary was saline from SANDBR to REG and brackish from MSB to POL. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was moderate at MEAD and from WMP to POL and high in subsurface and/or bottom waters from REG to POL. Water temperatures ranged from 18.8 to 20.8 °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 >36

<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>, by payin 0.5 -2 mg L<sup>-1</sup> appears 0.5 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, 2025. Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 28 April 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)