

# Swan Canning Estuary Water Quality Monitoring Project

**Weekly Water Quality Report** 

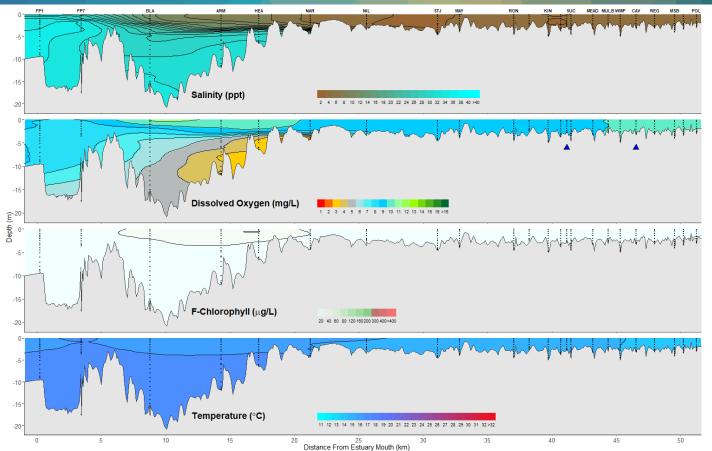
**Lower Swan Canning Estuary to Upper Swan Estuary** 

8 September 2025

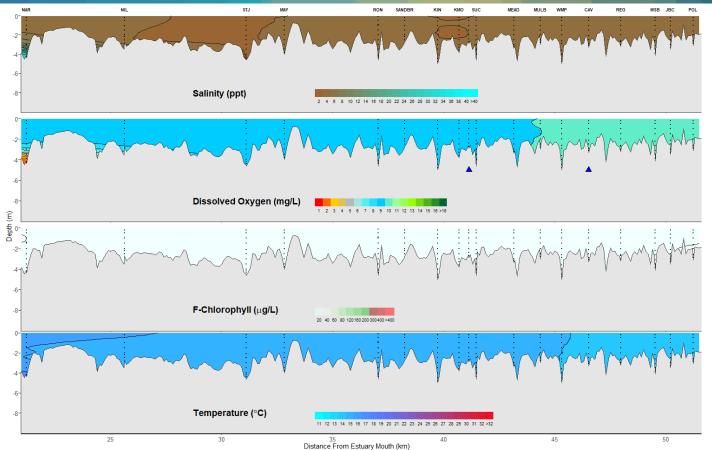
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# Swan Canning Estuary - Water Quality Profiles – 8 September 2025



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Date: 8 September 2025

<u>Weather & tide conditions</u>: Conditions were mostly clear with a variable breeze of up to 6.4 knots. The predicted tides at Barrack St were 0.76 m at 4:46 am (low tide), 1.04 m at 11:47 am (high tide) and 0.76 at 6:49pm (second low tide). Perth recorded 55.8 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were operable but not triggered to provide oxygen in the 24 hours prior to sampling.

<u>Lower Swan Canning Estuary (FP1 to NAR)</u>: The Lower Swan Canning Estuary was saline between FP1 and FP7, brackish over saline from BLA to HEA and fresh over saline at NAR. Waters were oxygenated or well oxygenated except for bottom waters at HEA, ARM and NAR which were either low in oxygen (ARM and HEA) or hypoxic (NAR). Chlorophyll fluorescence was low throughout, and water temperatures ranged from 15 to 16.7 °C.

<u>Middle Swan Estuary (NIL to RON)</u>: The Middle Swan Estuary was fresh and well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures ranged from 14.2 to 15.1 °C.

<u>Upper Swan Estuary (SANDBR to POL)</u>: The Upper Swan Estuary was fresh and well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures ranged from 13.7 to 14.5 °C.

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 ppt

<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, 2025. Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 8 September 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)