



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

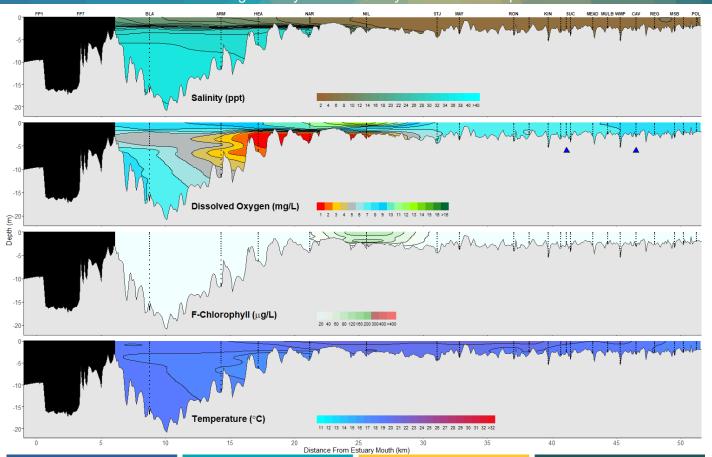
Lower Swan Canning Estuary to Upper Swan Estuary

30 September 2025

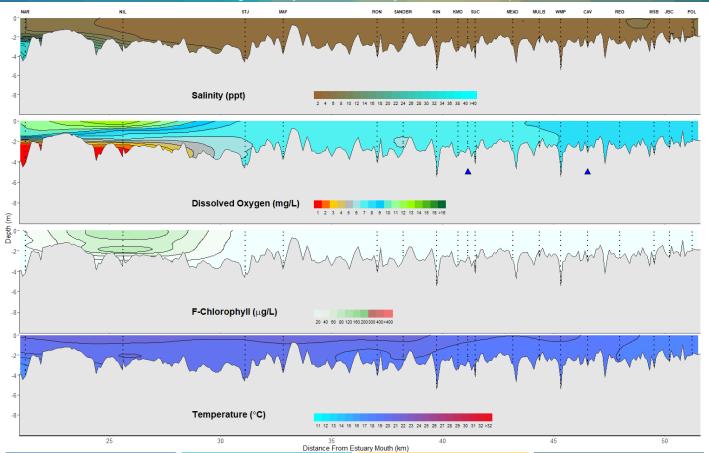
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Swan Canning Estuary - Water Quality Profiles - 30 September 2025



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Date: 30 September 2025

<u>Weather & tide conditions</u>: Conditions were partly cloudy with a south westerly breeze of up to 8 knots. The predicted tides at Barrack St were 1.02 m at 2:53 am (high tide) and 0.6 m at 3:37 pm (low tide). Perth recorded 2.4 mm of rainfall in the 8 days 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 (BLA to NAR)</u>: The Lower Swan Canning Estuary was brackish over saline from BLA to NAR. Surface waters were oxygenated to well oxygenated, while subsurface and bottom waters from ARM to NAR ranged from low in oxygen to hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 16.7 to 20.1 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh over brackish at NIL and fresh throughout from STJ to RON. Waters were well oxygenated, except for NIL bottom waters which were low in oxygen. Chlorophyll fluorescence was moderate at NIL and low elsewhere. Water temperatures ranged from 18.8 to 20.6 °C.

<u>Upper Swan Estuary (SANDBR to POL)</u>: The Upper Swan Estuary was fresh and oxygenated to well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures ranged from 16.7 to 20.2 °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}

<u>Chlorophyll fluorescence (low flow)</u>: low < 50 μ g L⁻¹, moderate 50-150 μ g L⁻¹, high 150-400 μ g L⁻¹, extreme > 400 μ g L⁻¹

Recommended reference: Department of Biodiversity, Conservation and Attractions, 2025. Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 30 September 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)