



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

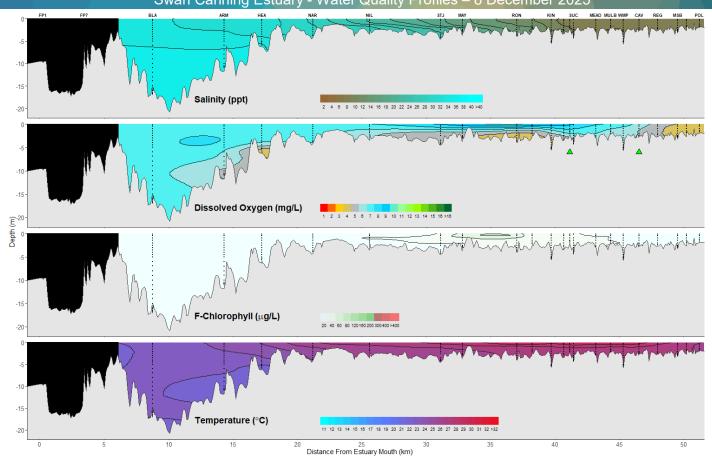
Lower Swan Canning Estuary to Upper Swan Estuary

8 December 2025

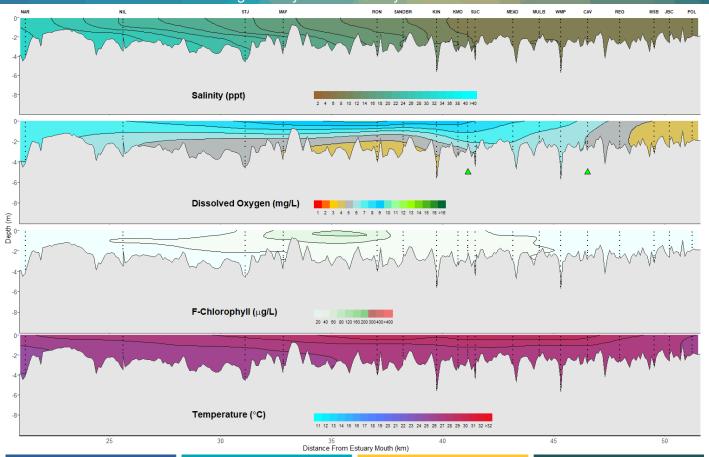
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Swan Canning Estuary - Water Quality Profiles – 8 December 2025



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Date: 8 December 2025

<u>Weather & tide conditions</u>: Conditions were sunny and clear with a westerly breeze reaching 10.3 knots. The predicted tides at Barrack St were 1.16 m at 12:26 am (high tide) and 0.48 m at 11:32 pm (low tide). Perth recorded 0 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham and Guildford oxygenation plants were operable and 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 saline throughout. Waters were oxygenated to well-oxygenated except for HEA bottom waters (low oxygen). Chlorophyll fluorescence was low at all sites and water temperatures ranged from 21.7 to 25.8 °C.

<u>Middle Swan Estuary (NIL to RON)</u>: The Middle Swan Estuary was brackish over saline at NIL and brackish elsewhere. Waters were oxygenated to well-oxygenated, except for low oxygen in the mid-column waters at STJ and bottom waters at RON. Chlorophyll fluorescence was generally low, with moderate levels in surface waters at MAY and RON. Water temperatures ranged from 25.5 to 28.7 °C.

<u>Upper Swan Estuary (SANDBR to POL)</u>: The Upper Swan Estuary was brackish throughout. Waters were oxygenated to well-oxygenated from SANDBR to REG, except for low oxygen bottom waters at SANDBR, KIN, and REG, while MSB to POL had low oxygen throughout. Chlorophyll fluorescence was low and water temperatures ranged from 25.7 to 28.7 °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 8 December 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)