

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

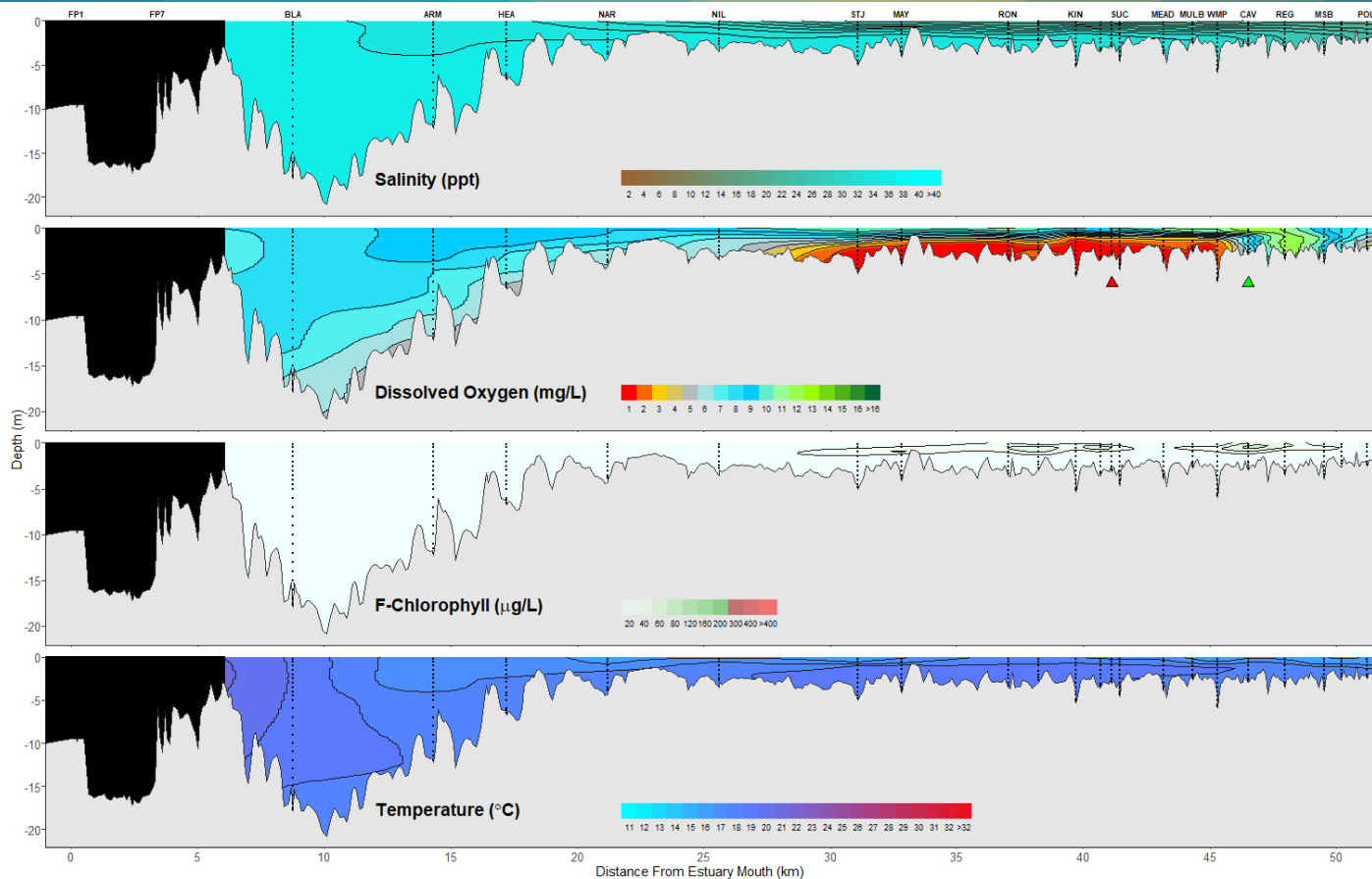
Lower Swan Canning Estuary to Upper Swan Estuary

9 June 2025

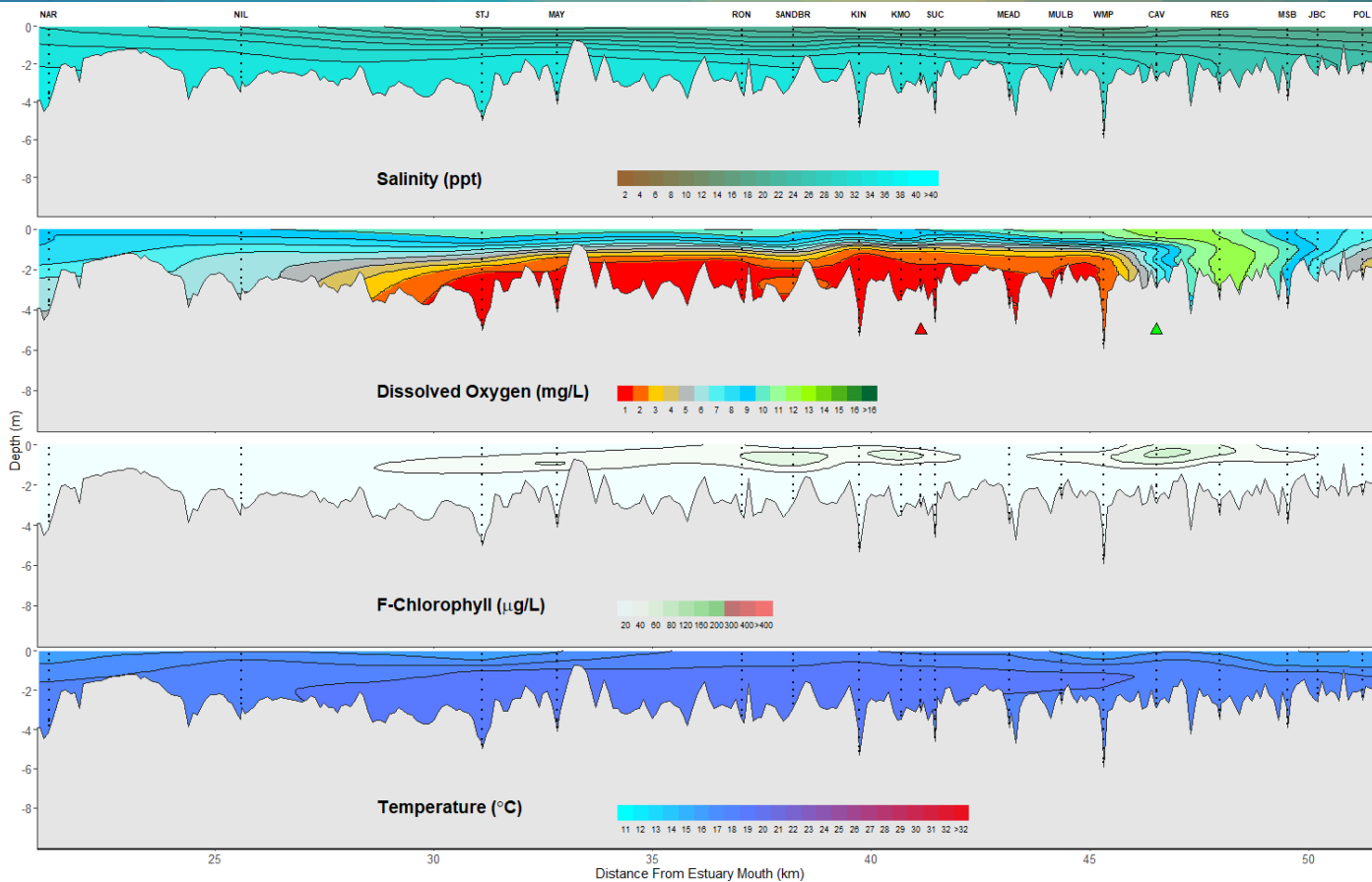
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Swan Canning Estuary - Water Quality Profiles – 9 June 2025



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Date: 9 June 2025

Weather & tide conditions: Conditions were mostly clear with a north-easterly breeze of up to 6.2 knots. The predicted tides at Barrack St were 1.3 m at 9:33 am (high tide) and 0.79 m at 8:11 pm (low tide). Perth recorded 61.8 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guilford oxygenation plant was offline and the Caversham oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (FPI to NAR): The Lower Swan Canning Estuary was saline, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 15.8 to 18.9 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL and brackish over saline from STJ to RON. Waters were oxygenated or well oxygenated, except for subsurface and bottom waters from STJ to RON which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 15.9 to 18.3 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was brackish over saline from SANDBR to REG and brackish from MSB to POL. Waters were oxygenated or well oxygenated, except for subsurface and bottom waters from SANDBR to WMP which were hypoxic. Chlorophyll fluorescence was moderate in surface waters at SANDBR, KMO and CAV. Water temperatures ranged from 15.1 to 18.4 °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 >36
Dissolved oxygen – 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 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg 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 9 June 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)