

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

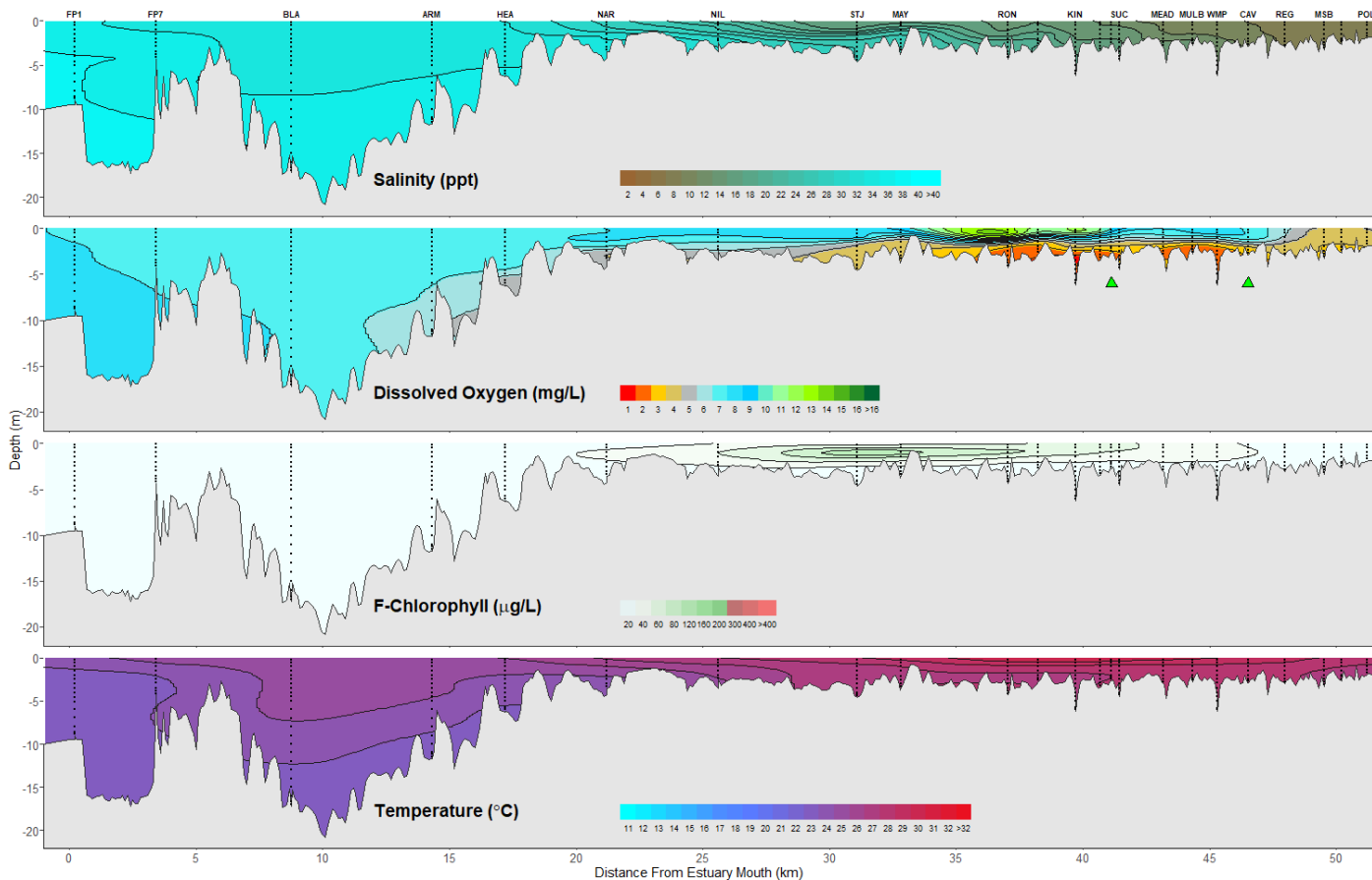
Lower Swan Canning Estuary to Upper Swan Estuary

15 December 2025

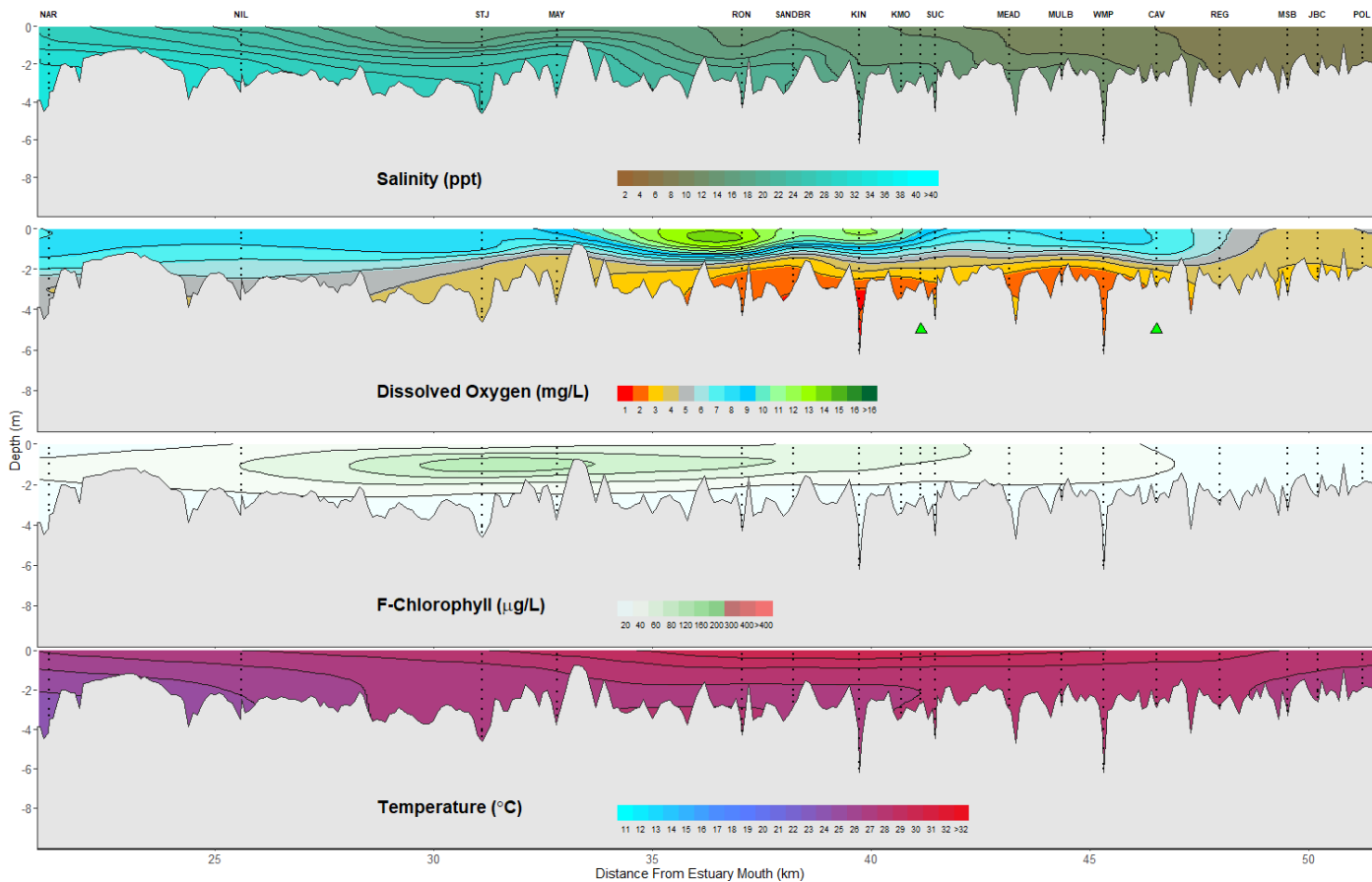
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Swan Canning Estuary - Water Quality Profiles – 15 December 2025



Middle and Upper Swan Estuary - Water Quality Profiles – 15 December 2025



Date: 15 December 2025

Weather & tide conditions: Conditions were clear with a northerly turning westerly breeze up to 8.5 knots. The predicted tides at Barrack St were 0.61 m at 7:30 am (low tide) and 1.09 m at 8:15 pm (high tide). Perth recorded 15.2 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.

Lower Swan Canning Estuary (FPI to NAR): The Lower Swan Canning Estuary was saline and oxygenated to well-oxygenated, except for bottom waters of HEA, which were low in oxygen. Chlorophyll fluorescence was low at all sites and water temperatures ranged from 22.2 to 26.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish, with saline bottom waters at NIL and STJ. Waters were oxygenated to well oxygenated, except for the bottom waters of STJ (low oxygen), MAY (low oxygen), and RON (hypoxic). Chlorophyll fluorescence was low, with moderate levels in sub-surface waters between STJ and RON. Water temperatures ranged from 24.9 to 29.8 °C.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was brackish throughout. From SANDBR to REG, surface waters were oxygenated to well oxygenated and bottom waters were low oxygen (VIT-SUC and CAV-REG) or hypoxic (SANDBR to KMO and from MEAD to WMP). MSB to POL was low in oxygen throughout the water column. Chlorophyll fluorescence was moderate in surface waters from SANDBR to SUC and low elsewhere. Water temperatures ranged from 26.7 to 29.9 °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
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