

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

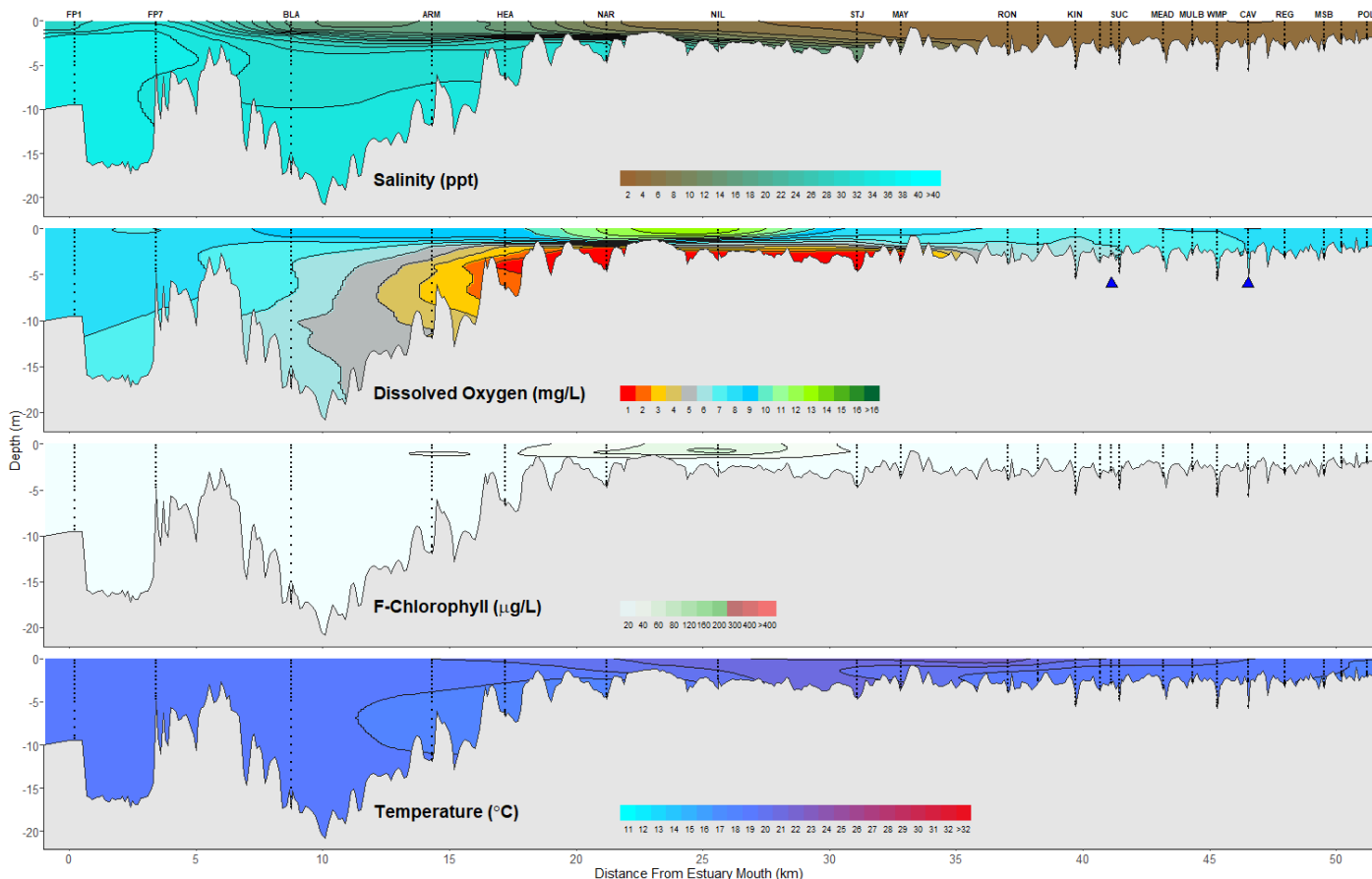
Lower Swan Canning Estuary to Upper Swan Estuary

6 October 2025

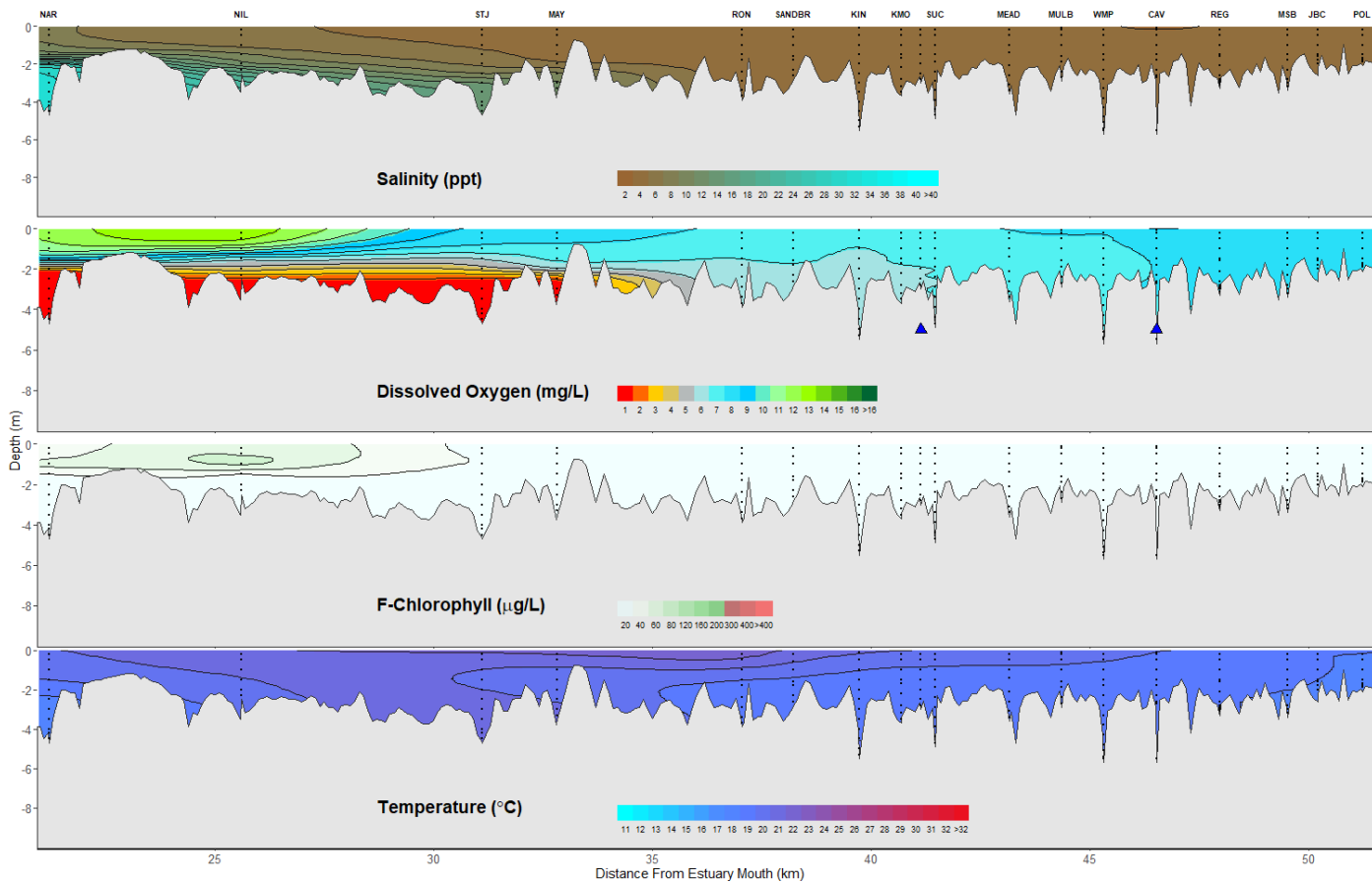
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Swan Canning Estuary - Water Quality Profiles – 6 October 2025



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Date: 6 October 2025

Weather & tide conditions: Conditions were mostly clear with a south westerly breeze of up to 8.4 knots. The predicted tides at Barrack St were 0.71 m at 4:52 am (low tide), 0.93 m at 11:15 am (high tide), and 0.76 m at 4:57 pm (2nd low high). Perth recorded 20 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.

Lower Swan Canning Estuary (FPI to NAR): The Lower Swan Canning Estuary was saline at FP1 and FP7, and brackish over saline from BLA to NAR. Waters were oxygenated to well oxygenated, except for bottom waters upstream of BLA, which were low in oxygen at ARM, hypoxic at HEA and anoxic at NAR. Chlorophyll fluorescence was low and water temperatures ranged from 17.1 to 19.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh over brackish from NIL to MAY and fresh at RON. Waters were oxygenated to well oxygenated, except for bottom waters of STJ which were anoxic, and those of NIL and MAY which were hypoxic. Chlorophyll fluorescence was moderate in surface waters at NIL and low elsewhere. Water temperatures ranged from 18.5 to 22.3 °C.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was fresh and oxygenated to well oxygenated throughout. Chlorophyll fluorescence was low, and water temperatures ranged from 16.9 to 20.7 °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
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 6 October 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)