

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

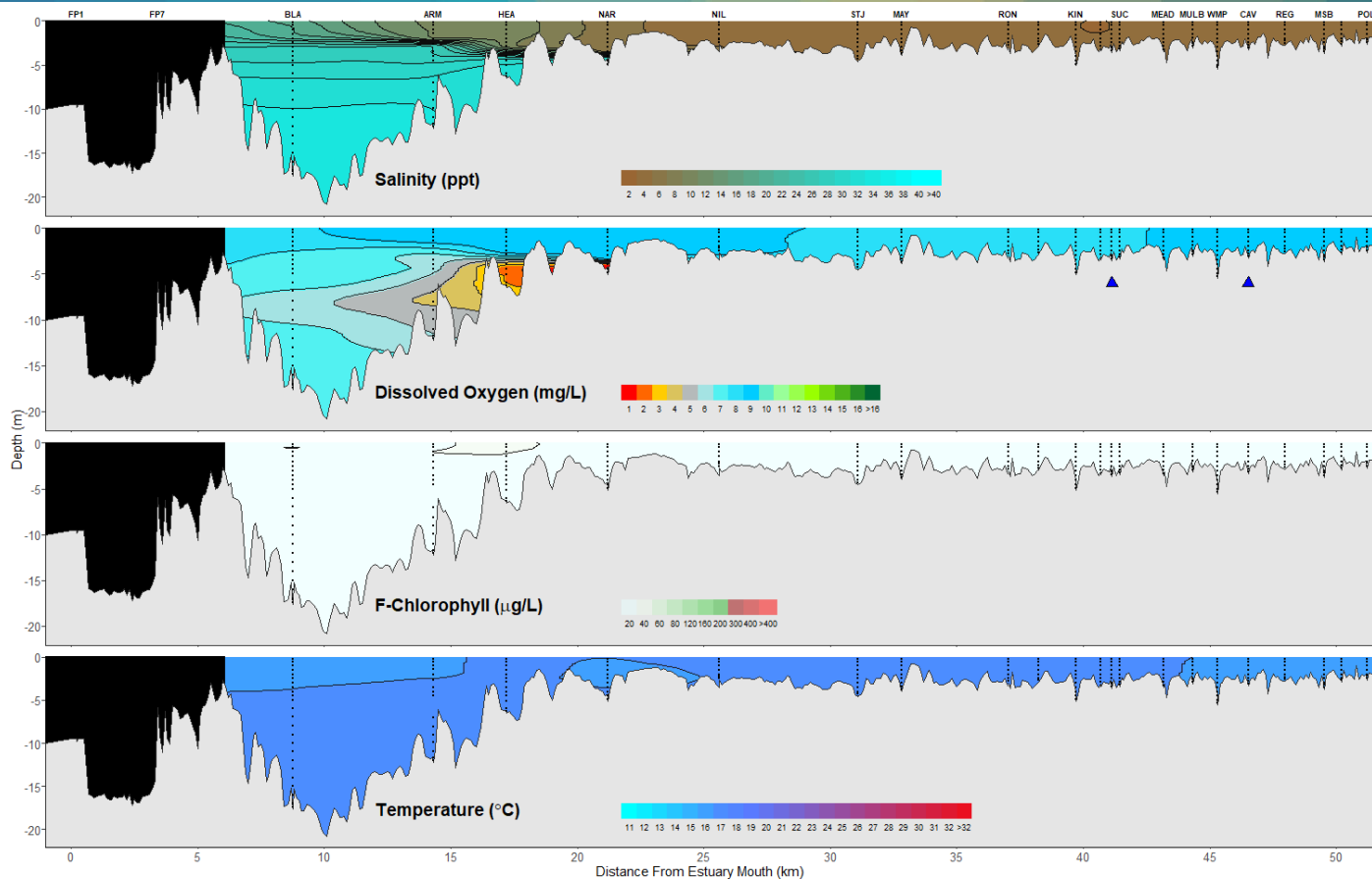
Lower Swan Canning Estuary to Upper Swan Estuary

15 September 2025

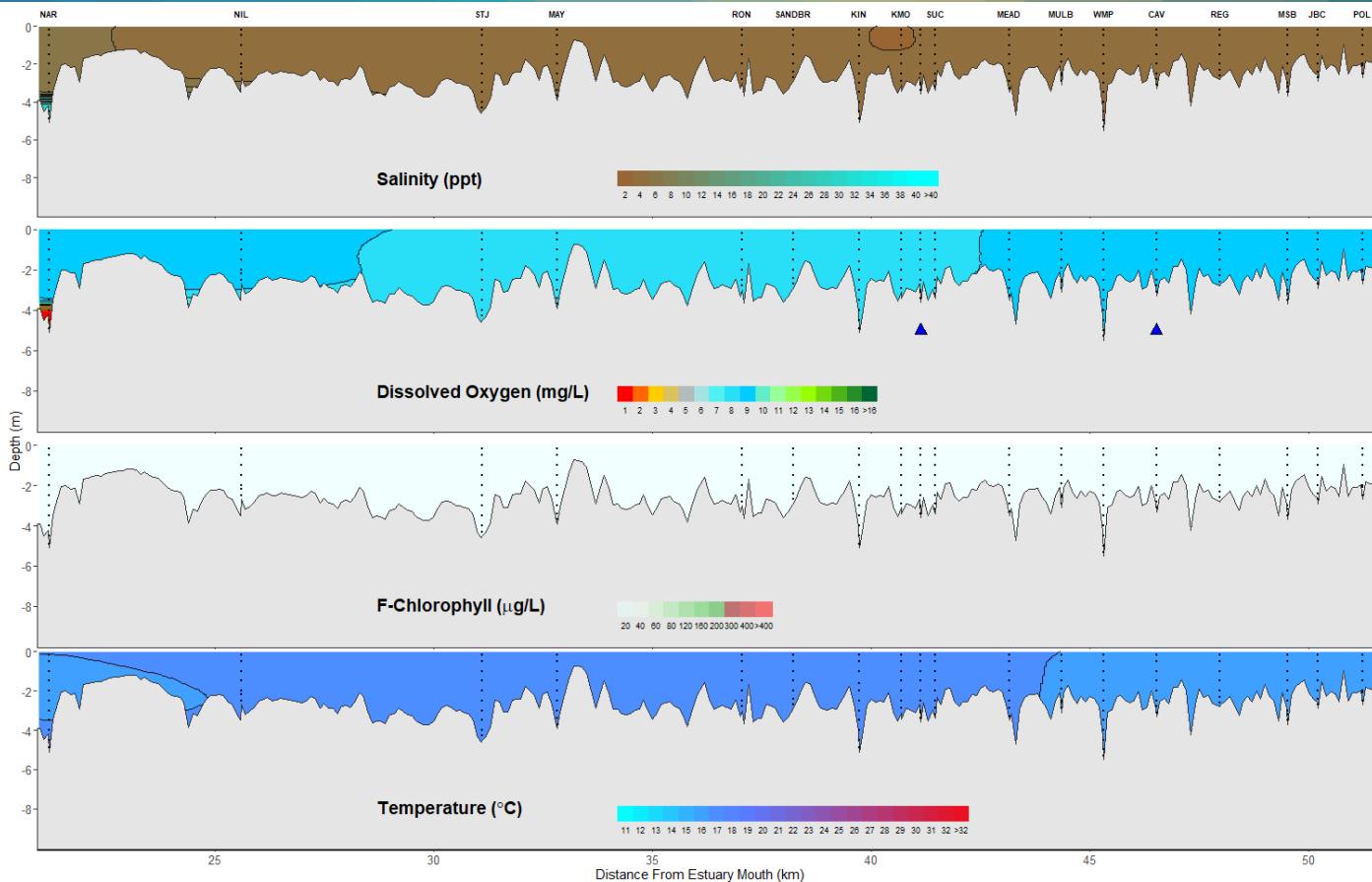
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Swan Canning Estuary - Water Quality Profiles – 15 September 2025



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Date: 15 September 2025

Weather & tide conditions: Conditions were cloudy with occasional showers and strong south-westerly winds of up to 15 knots. The predicted tides at Barrack St were 1.08 m at 3:55 am (high tide) and 0.55 m at 16:49 am (low tide). Perth recorded 22 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 (BLA to NAR): The Lower Swan Canning Estuary was brackish over saline throughout. Waters were oxygenated to well oxygenated, except for bottom waters at ARM which were low in oxygen, and HEA to NAR which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 15.5 to 16.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh and well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures ranged from 16.1 to 16.7 °C.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was fresh and well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures ranged from 15.6 to 16.6 °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 15 September 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)