

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

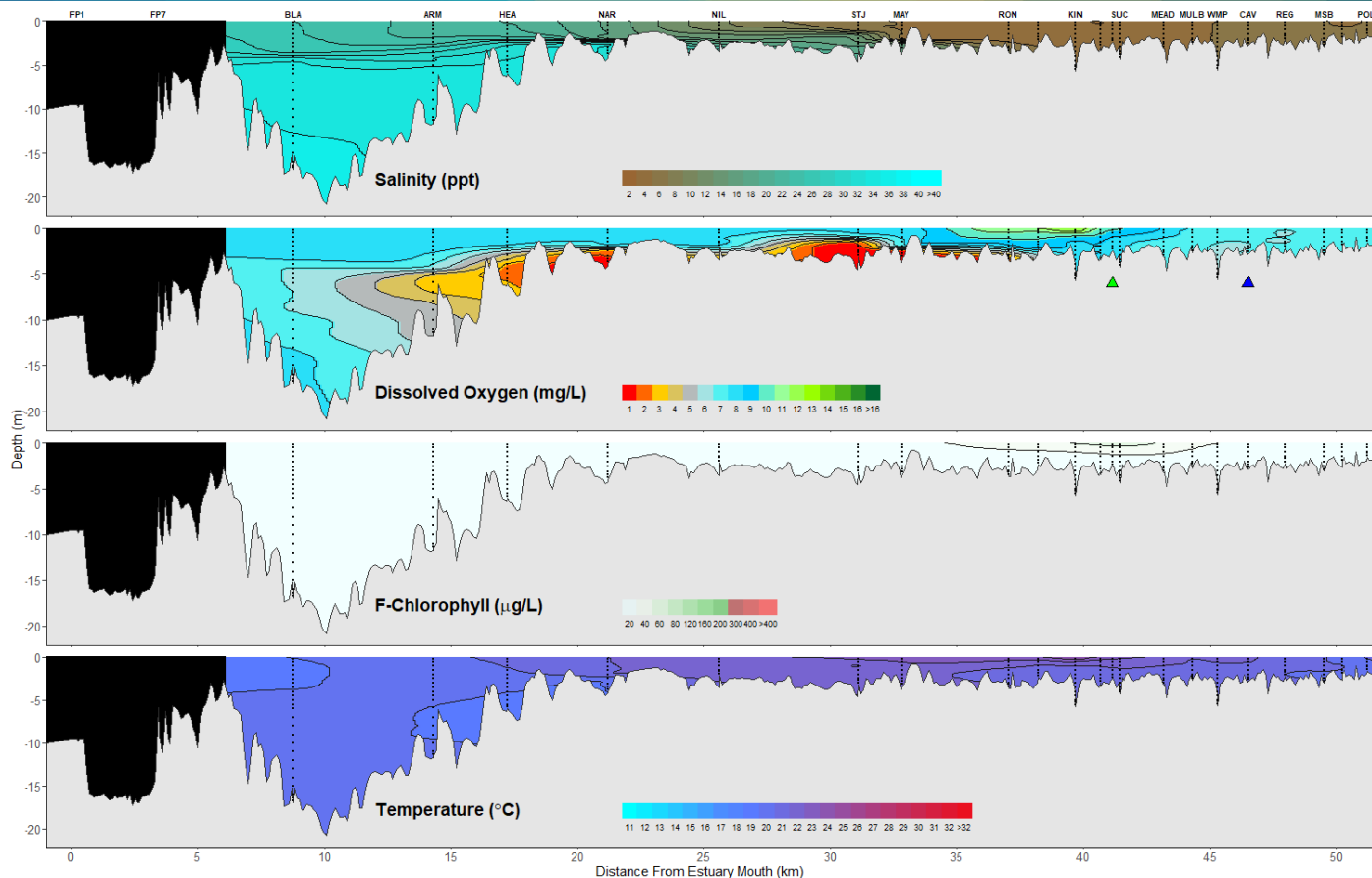
Lower Swan Canning Estuary to Upper Swan Estuary

27 October 2025

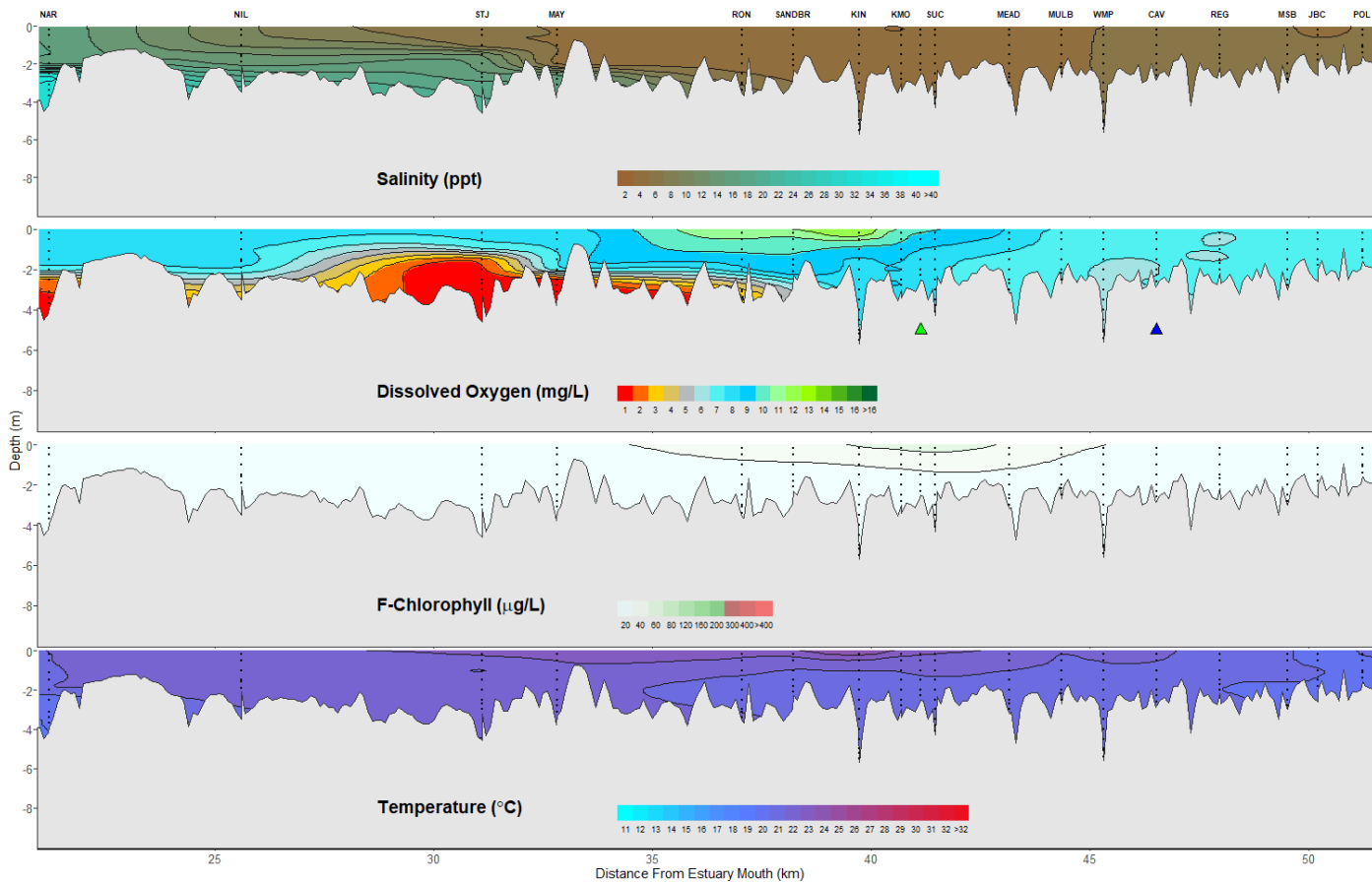
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Swan Canning Estuary - Water Quality Profiles – 27 October 2025



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Date: 27 October 2025

Weather & tide conditions: Conditions were clear with a north easterly breeze of up to 12.4 knots. The predicted tides at Barrack St were 1.07 m at 12:55 am (high tide) and 0.58 m at 12:18 am (low tide). Perth recorded 23.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham oxygenation plant was operable but not triggered prior to sampling. The Guildford plant was operable and 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. Waters were oxygenated to well-oxygenated except for mid-bottom waters at ARM (low oxygen), HEA (hypoxic), and NAR (hypoxic). Chlorophyll fluorescence was low through out and water temperatures ranged from 18.7 to 20.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish at NIL and fresh over brackish from STJ to RON. Waters were oxygenated to well oxygenated except for the mid-bottom waters at STJ (anoxic-hypoxic), MAY (anoxic), and RON (low oxygen). Chlorophyll fluorescence was low and water temperatures ranged from 20.6 to 22.3 °C.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was fresh and well oxygenated at all sites, except for the bottom waters at KIN which were brackish and oxygenated. Chlorophyll fluorescence was moderate at the surface at KIN, VIT and SUC. Water temperatures ranged from 19.4 to 23.3 °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 27 October 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)