

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

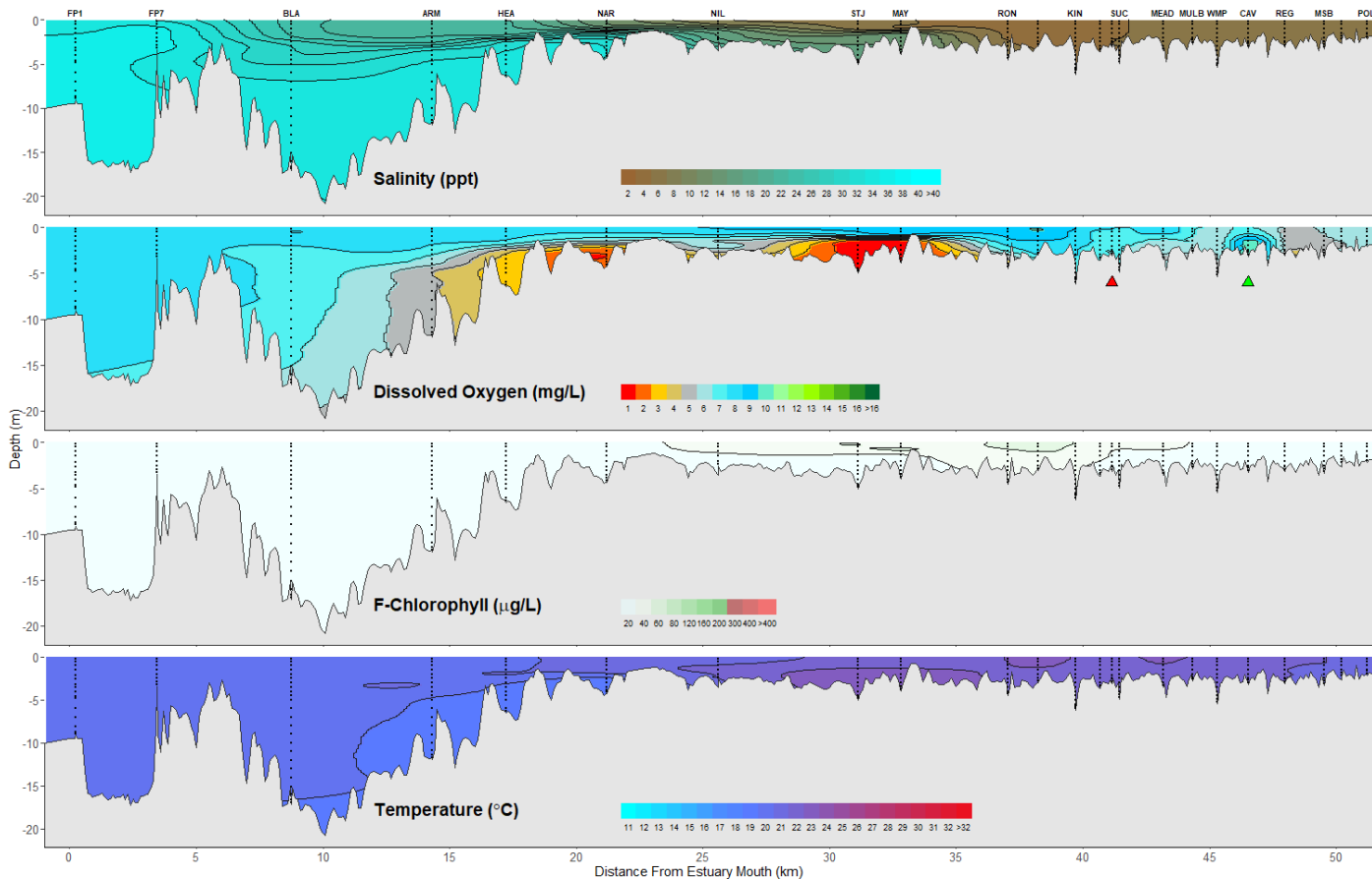
Lower Swan Canning Estuary to Upper Swan Estuary

20 October 2025

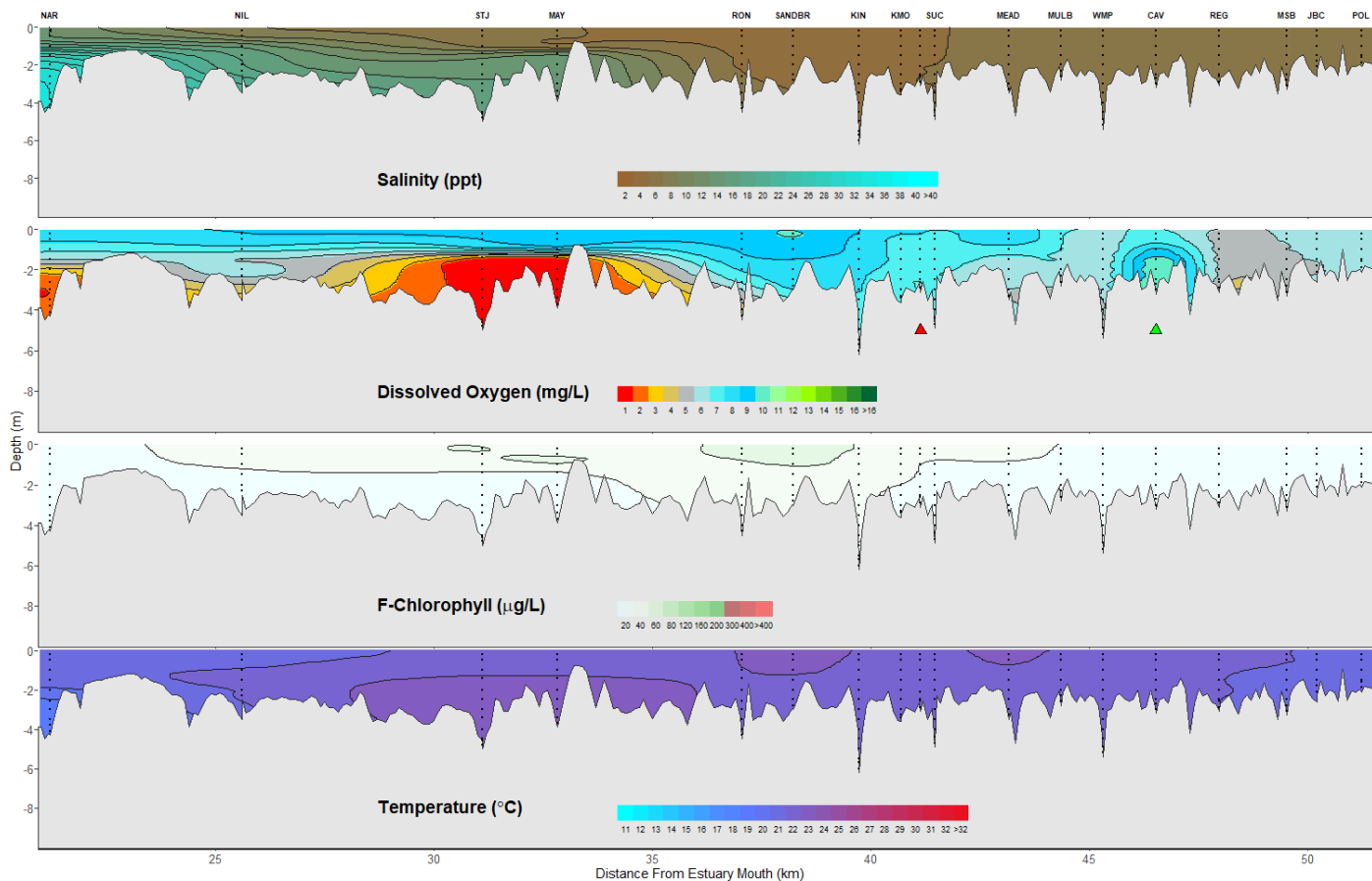
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Swan Canning Estuary - Water Quality Profiles – 20 October 2025



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Date: 20 October 2025

Weather & tide conditions: Conditions were cloudy with a north easterly breeze of up to 7.3 knots. The predicted tides at Barrack St were 0.69 m at 5:50 am (low tide), 0.8 m at 11:35 am (high tide), and 0.76 m at 3:21 pm (second low tide). Perth recorded 4.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham oxygenation plant was operable and triggered to provide oxygen in the 24 hours prior to sampling. The Guildford plant was not operable.

Lower Swan Canning Estuary (FP1 to NAR): The Lower Swan Canning Estuary was saline through FP1 to FP7 and brackish over saline from BLA to NAR. Waters were oxygenated to well-oxygenated except bottom waters at HEA (low oxygen) and NAR (hypoxic). Chlorophyll fluorescence was low through out and water temperatures ranged from 18.4 to 20.6 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish from NIL to STJ, and fresh over brackish from MAY to RON. Waters were oxygenated to well-oxygenated except in the bottom waters at STJ (anoxic-hypoxic), MAY (anoxic-hypoxic), and RON (low oxygen). Chlorophyll fluorescence was low and water temperatures ranged from 20.8 to 22.6 °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 low oxygen. Chlorophyll fluorescence was moderate at the surface of SANDBR and low elsewhere. Water temperatures ranged from 20.4 to 22.2 °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