



Department of Biodiversity,
Conservation and Attractions



Biodiversity and
Conservation Science

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Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

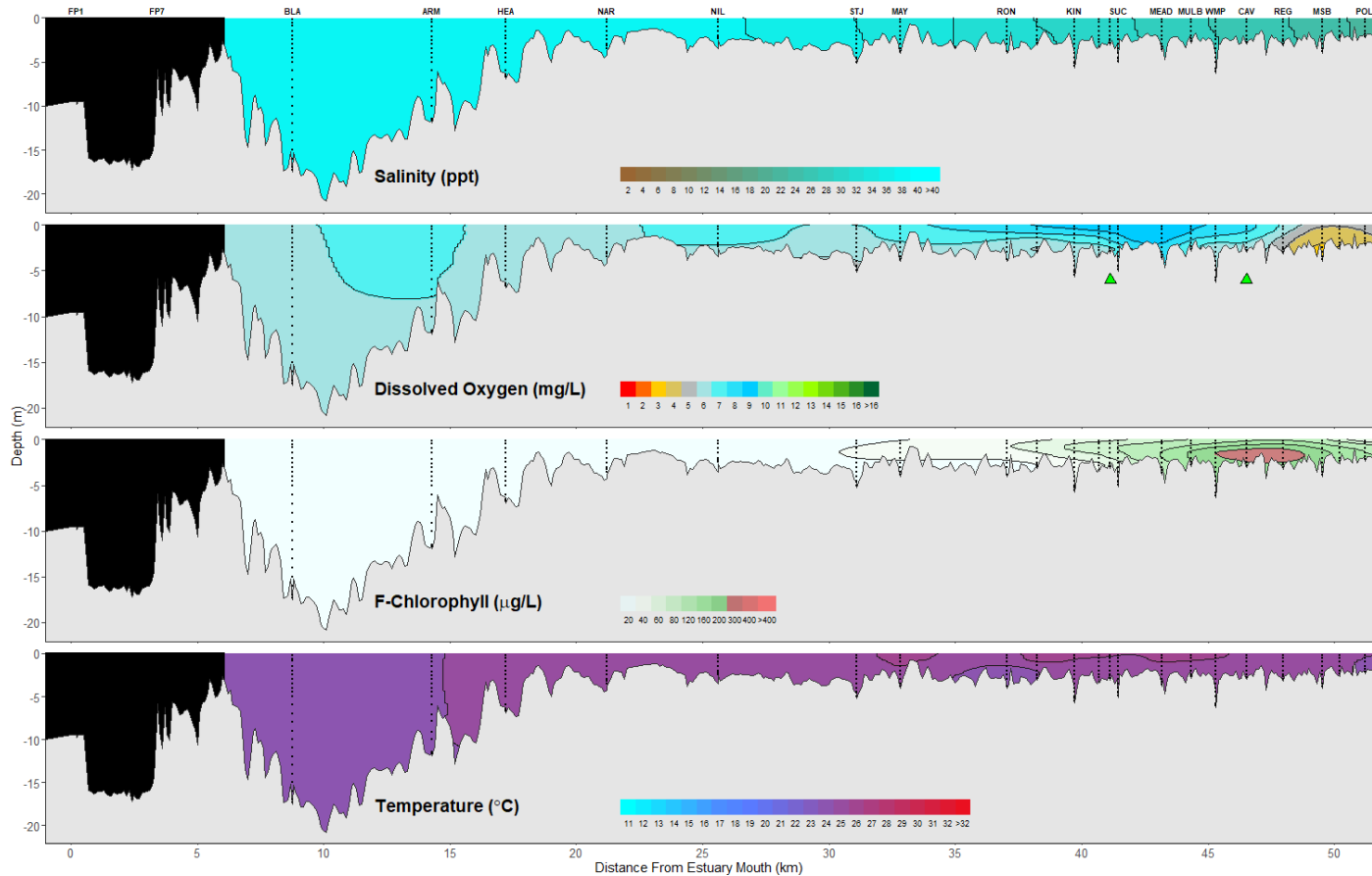
Lower Swan Canning Estuary to Upper Swan Estuary

31 March 2025

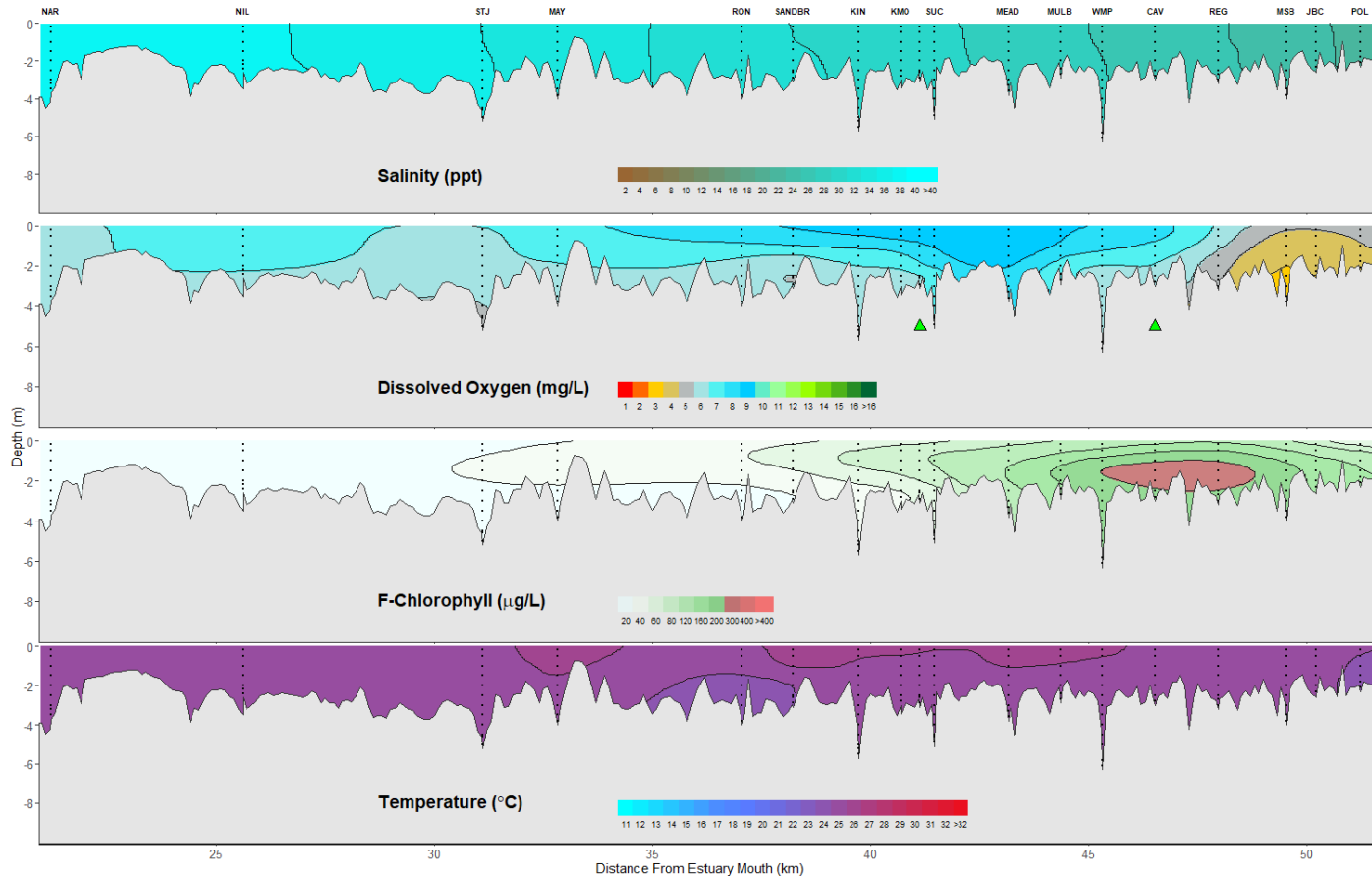
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Swan Canning Estuary - Water Quality Profiles – 31 March 2025



Swan Canning Estuary - Water Quality Profiles –31 March 2025



Date: 31 March 2025

Weather & tide conditions: Conditions were clear with a north easterly breeze of up to 13.3 knots. The predicted tides at Barrack St were 0.81 m at 4:55 am (low tide), 1.14 m at 12:47 pm (high tide) and 0.73 m at 10:04 pm (second low tide). Perth recorded 3.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guilford and Caversham oxygenation plants were triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (BLA to NAR): The Lower Swan Canning Estuary was hypersaline, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 23.6 to 24.2 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was hypersaline at NIL and saline from STJ to RON. Water were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 23.6 to 25.2 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was saline from SANDBR to CAV and brackish from REG to POL. Waters were oxygenated or well oxygenated, except for surface waters at MSB and bottom waters from REG to POL which were low in oxygen. Chlorophyll fluorescence was moderate from SANDBR to CAV and MSB to POL and high in surface and bottom waters at REG, subsurface waters at POL and subsurface and bottom waters at MULB, WMP, CAV and MSB. Water temperatures ranged from 24.4 to 27.1 °C at the time of sampling.

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
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 31 March 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)