



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

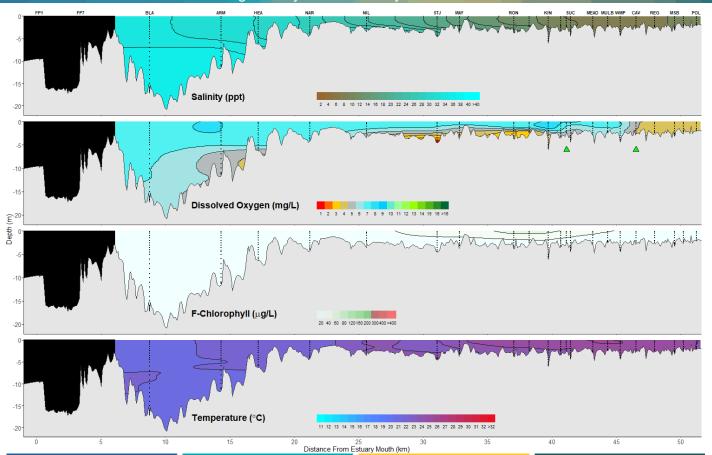
Lower Swan Canning Estuary to Upper Swan Estuary

24 November 2025

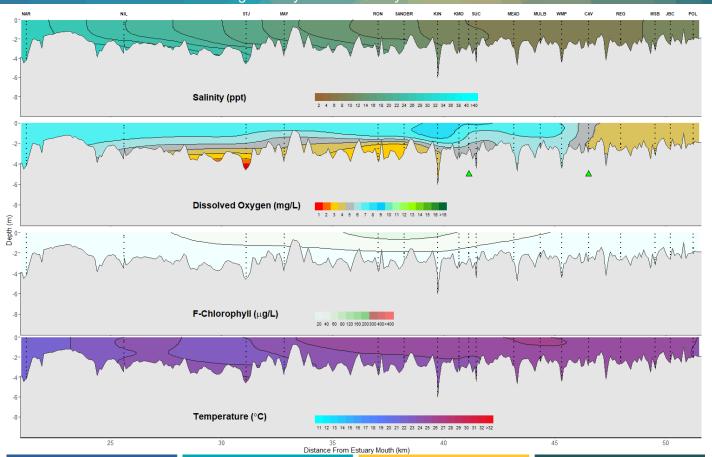
Prepared by

Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Swan Canning Estuary - Water Quality Profiles – 24 November 2025



Swan Canning Estuary - Water Quality Profiles - 24 November 2025







Date: 24 November 2025

<u>Weather & tide conditions</u>: Conditions were cloudy with south westerly winds of up to 12.4 knots. The predicted tides at Barrack St were 1.12 m at 12:05 am (high tide) and 0.54 m at 10:48 pm (low tide). Perth recorded 1 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Caversham and Guildford oxygenation plants were operable and triggered to provide oxygen in the 24 hours prior to sampling.

<u>Lower Swan Canning Estuary (FP1 to NAR)</u>: The Lower Swan Canning Estuary was saline throughout and waters were oxygenated to well-oxygenated. Chlorophyll fluorescence was low at all sites and water temperatures ranged from 20.6 to 21.8 °C.

<u>Middle Swan Estuary (NIL to RON)</u>: The Middle Swan Estuary was brackish throughout. Surface waters were well oxygenated, whereas bottom waters were low oxygen at MAY and RON, and hypoxic at STJ. Chlorophyll fluorescence was low throughout, but moderate in surface waters of RON. Water temperatures ranged from 22.5 to 24.5 °C.

<u>Upper Swan Estuary (SANDBR to POL)</u>: The Upper Swan Estuary was brackish. Waters were oxygenated to well oxygenated from KMO to WMP, low in oxygen from REG to POL. Bottom waters of SANDBR, KIN and CAV were low oxygen to hypoxic. Chlorophyll fluorescence was low, except in surface waters of KIN and SUC which were moderate. Water temperatures ranged from 23.7 to 25.1 °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

<u>Dissolved oxygen</u> – 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 μ g L⁻¹, moderate 50-150 μ g L⁻¹, high 150-400 μ g L⁻¹, extreme > 400 μ g 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 24 November 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)