



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

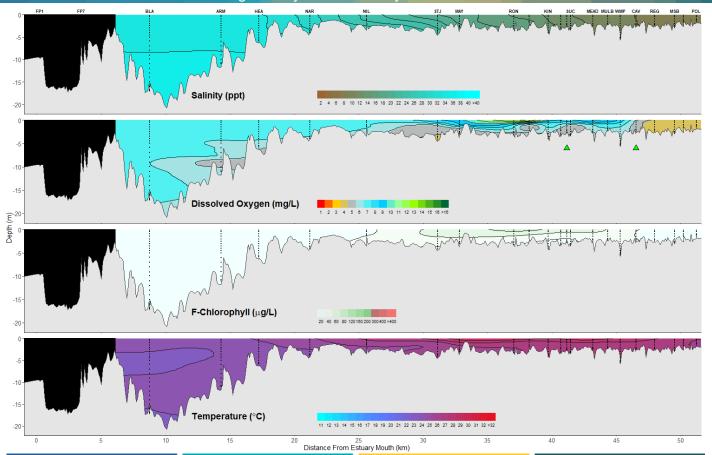
Lower Swan Canning Estuary to Upper Swan Estuary

22 December 2025

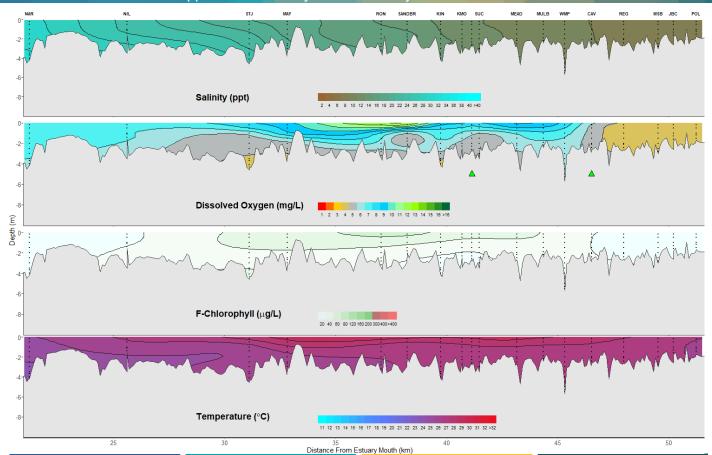
Prepared by

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

Swan Canning Estuary - Water Quality Profiles – 22 December 2025



Middle and Upper Swan Estuary - Water Quality Profiles - 22 December 2025







Date: 22 December 2025

<u>Weather & tide conditions</u>: Conditions were clear with a south-easterly breeze up to 9.5 knots. The predicted tides at Barrack St were 0.53 m at 9:56 am (low tide) and 1.14 m at 11:55 pm (high tide). Perth recorded 0 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.

Lower Swan Canning Estuary (FP1 to NAR): The Lower Swan Canning Estuary was saline with oxygenated to well-oxygenated waters and low chlorophyll fluorescence throughout. Water temperatures ranged from 22.9 to 24.8 °C.

<u>Middle Swan Estuary (NIL to RON)</u>: The Middle Swan Estuary was brackish with oxygenated to well-oxygenated waters, except for low oxygen in the bottom of STJ. Chlorophyll fluorescence was low, with moderate levels at the surface from RON – STJ, and also at the bottom at STJ. Water temperatures ranged from 25.2 to 28.1 °C.

<u>Upper Swan Estuary (SANDBR to POL)</u>: The Upper Swan Estuary was brackish throughout. Waters were oxygenated to well-oxygenated from SANDBR to CAV, with low oxygen in the bottom waters of SANDBR, KIN and SUC and throughout the water column from REG to POL. Chlorophyll fluorescence was low, with moderate levels in surface waters from SANDBR to KIN, from VIT to MULB, and also at the bottom of WMP. Water temperatures ranged from 25.7 to 28.2 °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

<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 22 December 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)