



# Swan Canning Estuary Water Quality Monitoring Project

**Weekly Water Quality Report** 

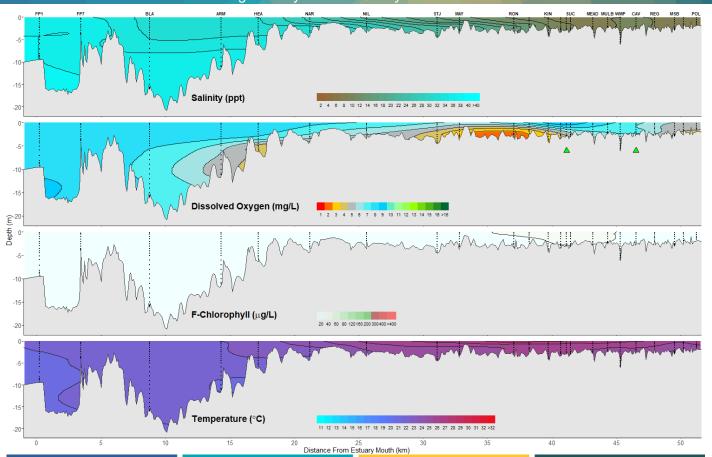
**Lower Swan Canning Estuary to Upper Swan Estuary** 

1 December 2025

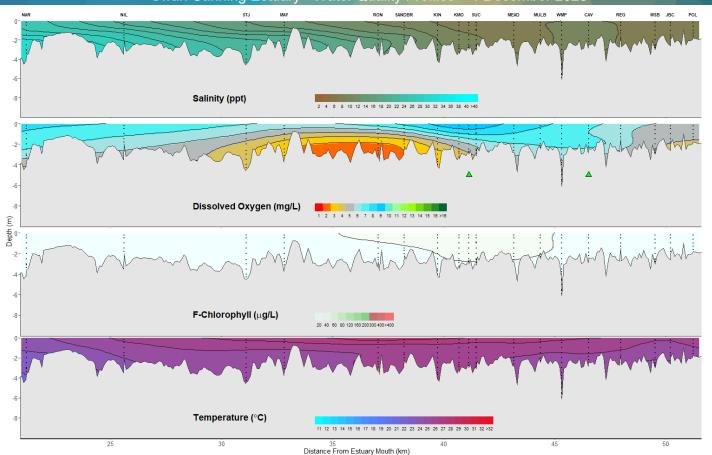
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# Swan Canning Estuary - Water Quality Profiles – 1 December 2025



## Swan Canning Estuary - Water Quality Profiles – 1 December 2025







Date: 1 December 2025

<u>Weather & tide conditions</u>: Conditions were clear with a northerly breeze of up to 8.5 knots. The predicted tides at Barrack St were 0.69 m at 5:30 am (low tide) and 1.07 m at 8:37 pm (high tide). Perth recorded 1.2 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: 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. Waters were oxygenated to well-oxygenated except for low oxygen bottom waters at HEA. Chlorophyll fluorescence was low at all sites and water temperatures ranged from 20.5 to 23.5 °C.

<u>Middle Swan Estuary (NIL to RON)</u>: The Middle Swan Estuary was brackish over saline at NIL and brackish elsewhere. Surface waters were well oxygenated, except bottom waters were low in oxygen at STJ and MAY, and hypoxic at RON. Chlorophyll fluorescence was low throughout and water temperatures ranged from 24.2 to 27.6 °C.

<u>Upper Swan Estuary (SANDBR to POL)</u>: The Upper Swan Estuary was brackish. Waters were oxygenated to well oxygenated, except bottom waters of KIN, VIT, MSB and JBC were low in oxygen, and SANDBR and KMO were hypoxic. Chlorophyll fluorescence was moderate in surface waters of SUC and low elsewhere. Water temperatures ranged from 23.9 to 27.1 °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  $\mu$ g L<sup>-1</sup>, moderate 50-150  $\mu$ g L<sup>-1</sup>, high 150-400  $\mu$ g L<sup>-1</sup>, extreme > 400  $\mu$ g L<sup>-1</sup>

Recommended reference: Department of Biodiversity, Conservation and Attractions, 2025. Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 1 December 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)