



Department of Biodiversity,
Conservation and Attractions



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Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

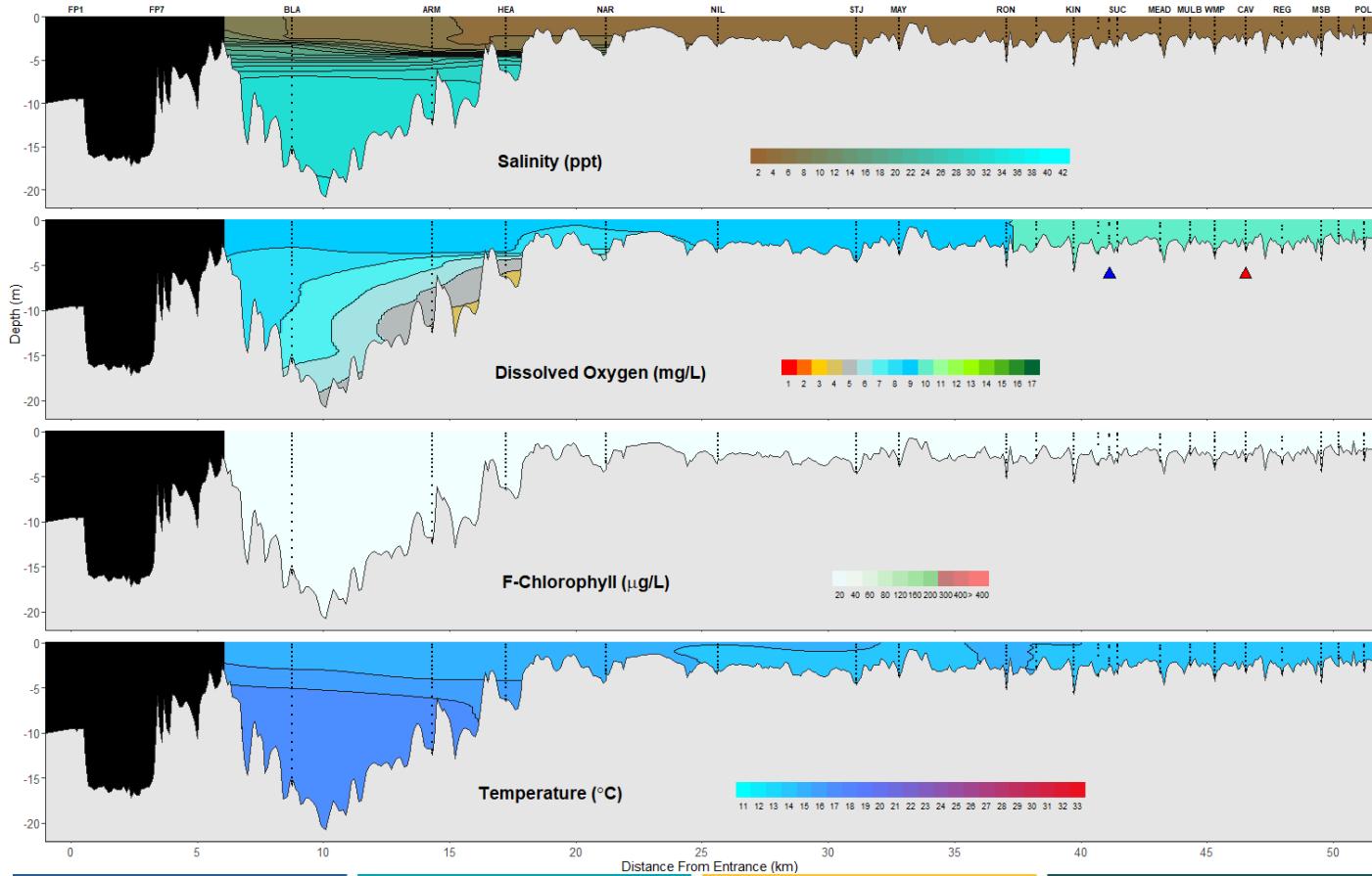
Lower Swan Canning Estuary to Upper Swan Estuary

26 July 2021

Prepared by

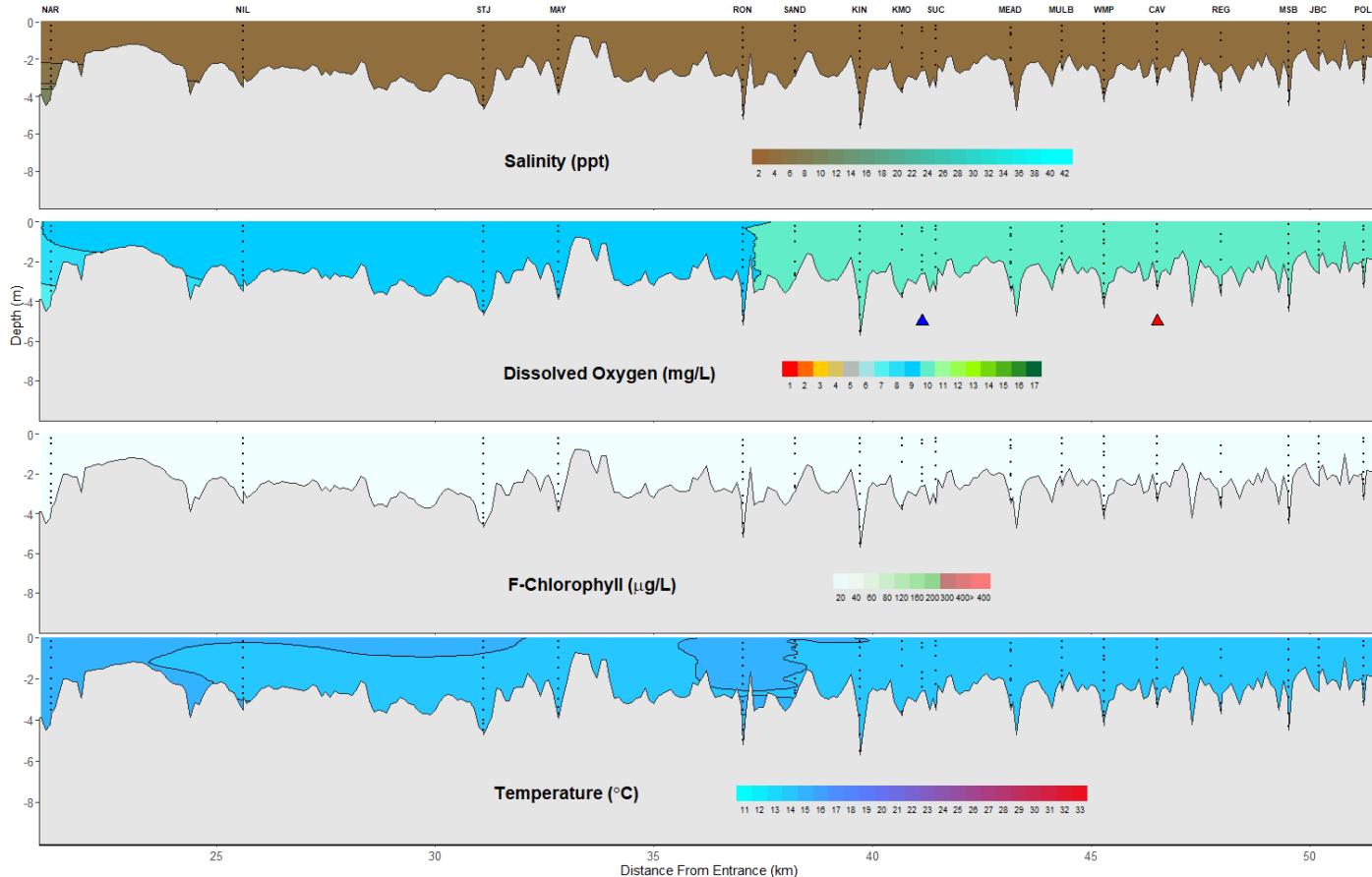
Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Swan Canning Estuary- Water Quality Profiles- 26 July 2021





Middle and Upper Swan Estuary- Water Quality Profiles- 26 July 2021





Date: 26 July 2021

Weather & tide conditions: Conditions were overcast with a north easterly breeze of up to 12 knots. The predicted tides at Barrack St were 1.2 m at 12:22 pm (high tide) and 0.72 m at 10:43 pm (low tide). Perth recorded 35.8 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan Canning Estuary (BLA to NAR): The Lower Swan Canning Estuary was brackish over saline at BLA, fresh over saline from ARM to HEA and fresh over brackish at NAR. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen between ARM and HEA. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 14.1 to 16.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh, waters were well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 13.9 to 14.0 °C.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was fresh, waters were well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 13.7 to 14.0 °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 >35
- Dissolved oxygen** – well oxygenated >6mg/L, oxygenated >4-6mg/L, low oxygen >2-4mg/L, hypoxic 0.5-2mg/L, anoxic <0.5mg/L

Recommended reference: Department of Biodiversity, Conservation and Attractions 2021. *Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 26 July 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)