



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

19<sup>th</sup> July 2021

Prepared by

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Department of Biodiversity, Conservation and Attractions



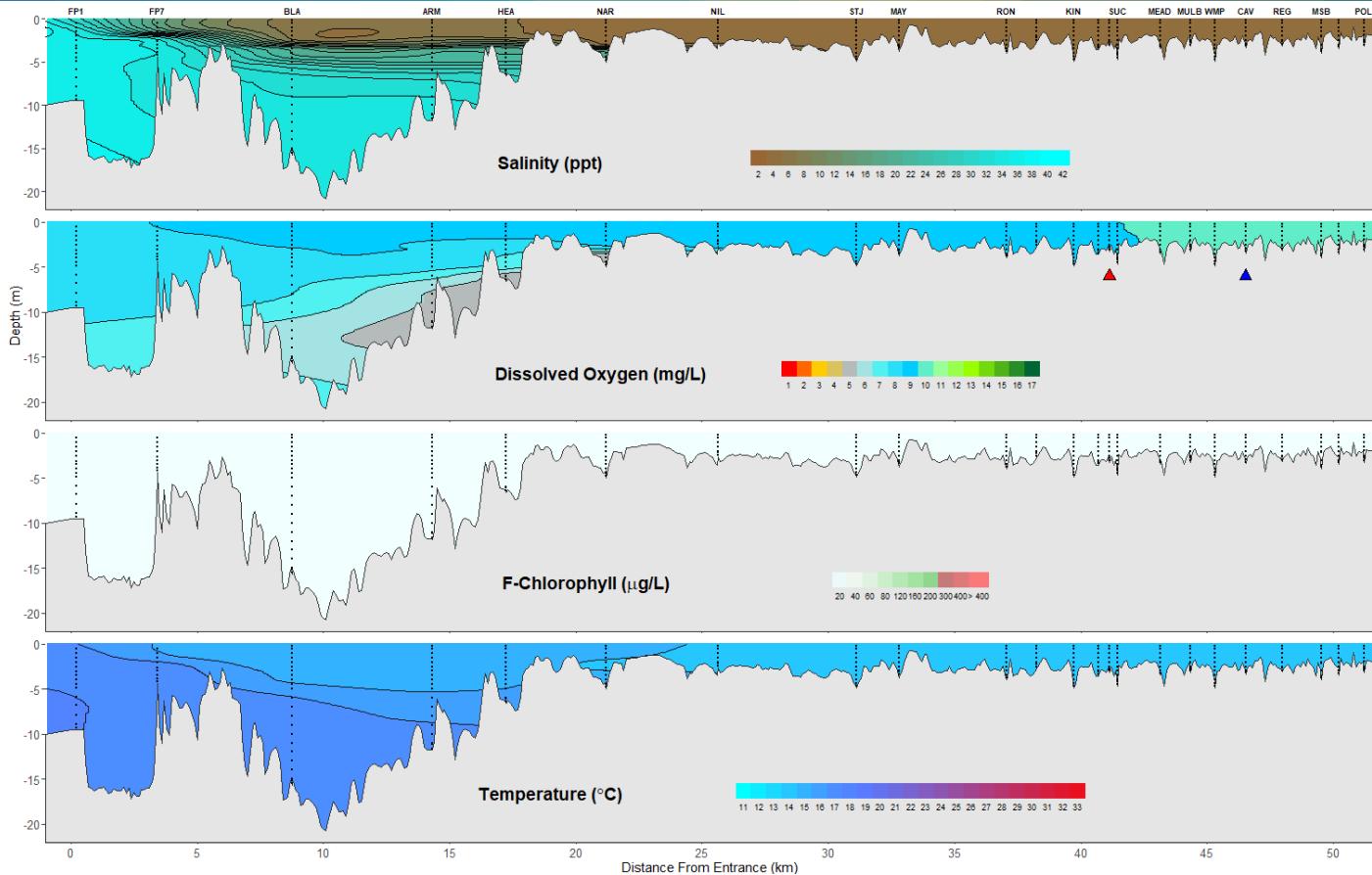
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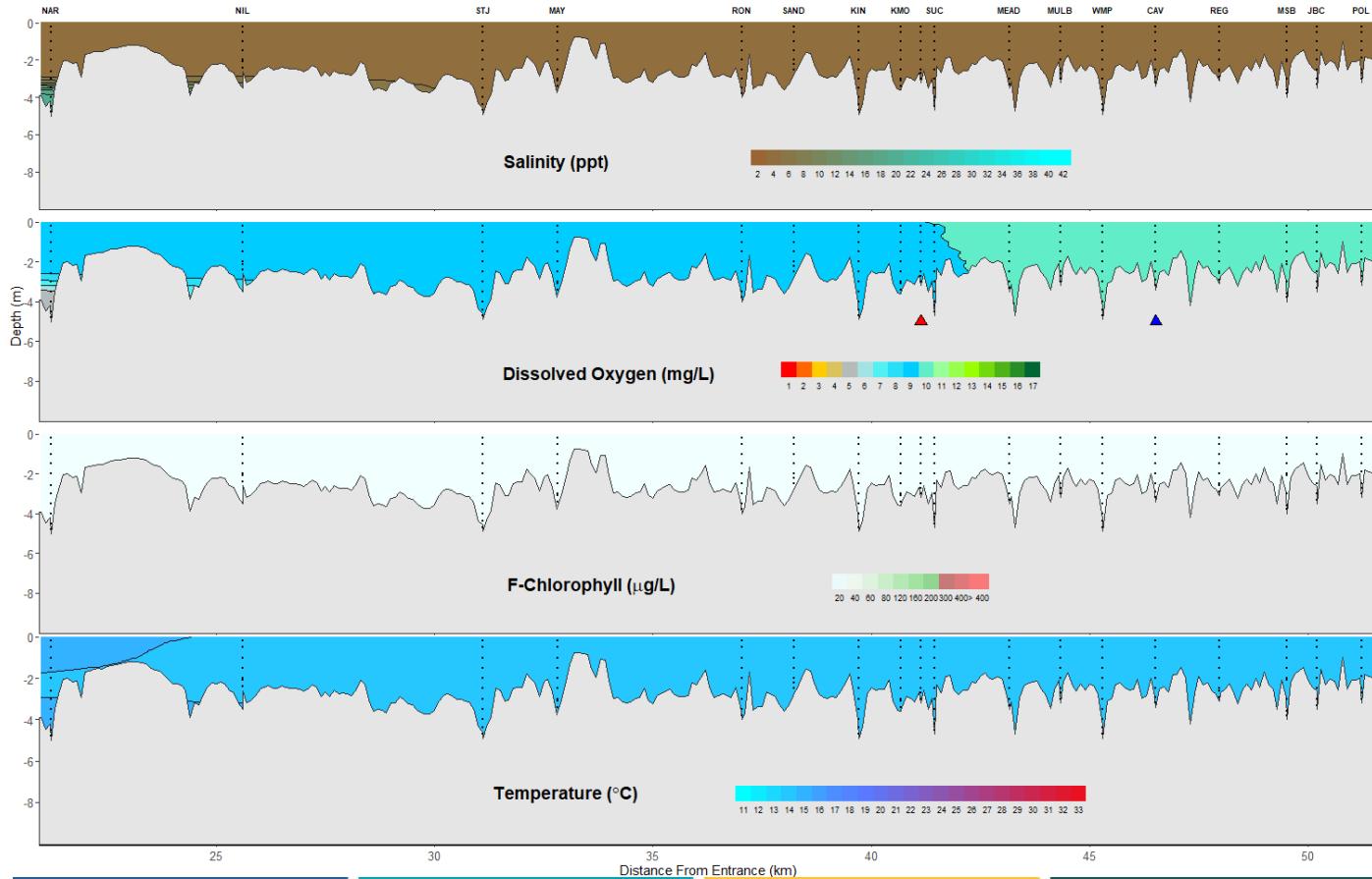
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## Swan Canning Estuary- Water Quality Profiles- 19th July 2021





## Middle and Upper Swan Estuary- Water Quality Profiles- 19<sup>th</sup> July 2021





Date: 19<sup>th</sup> July 2021

Weather & tide conditions: Conditions were overcast with a northerly breeze of up to 5 knots. The predicted tides at Barrack St were 1.14 m at 7:05 pm (high tide) and 0.76 m at 6:38 pm (low tide). Perth recorded 50.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan Canning Estuary (FP1 to NAR): The Lower Swan Canning Estuary was saline between FP1 and FP2.2, brackish over saline from FP7 to BLA, fresh over saline from ARM to HEA and fresh over brackish at NAR. Waters were oxygenated or well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 13.8 to 17.0 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 13.7 to 13.9 °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 13.8 to 13.9 °C.

**NB:** Profile plots are visual interpolations of measured parameters only. Detailed data are available at [wir.water.wa.gov.au](http://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 19<sup>th</sup> July 2021. Rivers and Estuaries Science* (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)