



## Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by  
Aquatic Science Branch, Department of Water and Environmental Regulation

Date: Monday 22<sup>nd</sup> October 2018

Weather & tide conditions: Conditions were overcast with up to 100% cloud cover and a predominantly south-westerly breeze of up to 8 knots. The predicted tides at Guildford were 0.69 m (low tide) at 04:53 and 0.81 m (high tide) at 10:46. Perth recorded 7.4 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational the week prior to sampling, while the Caversham oxygenation plant was operational from 20/10/18.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline from BLA to ARM and brackish over saline from HEA to NAR. Water was well oxygenated to oxygenated throughout, with the exception of low oxygen bottom water at HEA and NAR. Water temperature ranged from 18.1 to 19.0 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish at NIL and fresh over brackish from STJ to RON. Surface water was well oxygenated to oxygenated throughout while bottom water was near anoxic from STJ to RON. Water temperature ranged from 19.3 to 20.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was fresh throughout. Water was well oxygenated throughout. Water temperature ranged from 18.5 to 20.0 °C.

**Definitions:**

Salinity – fresh <5ppt, brackish 5-25ppt, saline 25-35ppt, hypersaline >35ppt

Dissolved oxygen – well oxygenated >6 mg/L  
oxygenated >4 to 6 mg/L, low oxygen >2 to 4 mg/L,  
hypoxic >0.5 to 2.0 mg/L, near anoxic <0.5 mg/L

# Swan River Estuary - Physical-Chemical Profiles 22<sup>nd</sup> October 2018

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