



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

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 23<sup>rd</sup> October 2017

Weather & tide conditions: Conditions were overcast with up to 100% cloud cover and a south westerly breeze of up to 6 knots. The predicted tides at Guildford were 0.54 m (low tide) at 06:40 and 0.99 m (high tide) at 23:03. Perth recorded 18 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational from 18<sup>th</sup> October to 23<sup>rd</sup> October, while the Caversham oxygenation plant was not operational the week prior to sampling.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline at BLA and brackish over saline from ARM to NAR. Water was well oxygenated to oxygenated at all sites. Water temperature ranged from 18.0 to 21.3 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish from NIL to MAY and fresh over brackish at RON. Surface water was well oxygenated at all sites while bottom water was oxygenated at NIL, low in oxygen at STJ and hypoxic at MAY and RON. Water temperature ranged from 20.1 to 22.2 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was fresh over brackish at BWR10, fresh from KIN to KMO and brackish from SUC to POL. Water was mostly well oxygenated throughout with the exception of low oxygen bottom water at BWR10. Water temperature ranged from 20.7 to 22.0 °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 Profile - 23rd October 2017

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