



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

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 17<sup>th</sup> July 2017

Weather & tide conditions: Conditions were fine with up to 50% cloud cover and an east to north easterly breeze of up to 4 knots. The predicted tides at Guildford were 0.99m (high tide) at 07:09 and 0.81 m (low tide) at 21:24. Perth recorded 13.6 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were operational the week prior to sampling.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline throughout, with the exception of brackish surface water at NAR. Water was mostly well oxygenated with oxygenated bottom water at HEA and ARM. Water temperature ranged from 14.2 to 16.7 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout, with the exception of saline bottom water at NIL and STJ. Surface water was well oxygenated at all sites. Bottom water had low oxygen at NIL, was hypoxic at STJ and MAY and was near anoxic at RON. Water temperature ranged from 14.4 to 16.3 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated throughout all sites with the exception of low oxygen bottom water at SUC, hypoxic bottom water at KMO and BWR10 and near anoxic bottom water at KIN. Water temperature ranged from 14.3 to 15.9 °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 - 17th July 2017

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