



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

by  
Water Science Branch, Department of Water

Date: Monday 1<sup>st</sup> February 2016

Weather & tide conditions: Conditions were fine with up to 80% cloud cover and a south or westerly breeze of up to 10 knots. The predicted tides at Guildford were 0.59 m (low tide) at 08:13 and 0.93 m (high tide) at 18:24. Perth recorded 7.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham oxygenation plant was operational the week prior to sampling. The Guildford oxygenation plant was not operational the week prior to sampling.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was hyper saline throughout with the exception of saline surface water at BLA. Water was mostly well oxygenated with the exception of oxygenated bottom water at NAR. HEA was oxygenated throughout. Water temperature ranged from 21.9 to 24.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout. NIL was well oxygenated throughout. Surface water was well oxygenated over low oxygen bottom water at STJ and MAY. Surface water at RON was oxygenated over low oxygen bottom water. Water temperature ranged from 23.0 to 25.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout with the exception of saline bottom water at BWR10. At sites from BWR10 to MEA surface water was well oxygenated over low oxygen bottom water. Surface water at MULB FARM was well oxygenated over oxygenated bottom water. At sites from CAV to JBC surface water had low oxygen, over well oxygenated bottom water at CAV and hypoxic bottom water at REG, MSB and JBC. Water at POL had low oxygen throughout. Water temperature ranged from 24.0 to 26.8 °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 - 1st February 2016

