



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

by  
**Water Science Branch, Department of Water**

Date: Monday 4<sup>th</sup> January 2016

Weather & tide conditions: Conditions were fine with up to 100% cloud cover and a predominantly south westerly breeze of up to 4.8 knots. The predicted tides at Guildford were 0.89 m (high tide) at 20:22 and 0.60 m (low tide) at 08:46. Perth recorded 0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was hyper saline throughout BLA to HEA and saline over hyper saline bottom water at NAR. Water was mostly well oxygenated to oxygenated throughout all sites. Water temperature ranged from 23.7 to 26.7 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout NIL, brackish over saline at STJ to MAY and brackish throughout RON. Surface water was well oxygenated with low oxygenated bottom water throughout all sites. Water temperature ranged from 27.0 to 28.2 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated to oxygenated throughout. Bottom water was oxygenated at KMO, SCO to MULB, CAV and POL, low oxygenated from BWR10 to KIN, WMP, REG and JBC and hypoxic at MSB. Water temperature ranged from 26.8 to 28.3 °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 - 4th January 2016

