



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

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

Date: Tuesday 3rd March 2015

Weather & tide conditions: Conditions were fine with up to 20% cloud cover and a south easterly to easterly breeze of up to 6 knots. Tide predictions at Guildford were 0.61 m (low tide) at 07:27 and 1.00 m (high tide) at 22:34. Perth recorded 0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was hypersaline throughout with the exception of saline surface water at BLA. Water was well oxygenated throughout except for oxygenated bottom water at HEA and NAR. Water temperature ranged from 23.4 to 24.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout. Water was well oxygenated on the surface and oxygenated on the bottom at NIL and STJ, then oxygenated throughout at MAY and RON. Water temperature ranged from 24.3 to 26.2 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout with the exception of saline bottom water at BWR10. Surface water was well oxygenated to oxygenated at all sites with the exception of JBC where it was low in oxygen. Bottom water was oxygenated from BWR10 to WMP, well oxygenated at CAV, oxygenated again at REG, then low in oxygen from MSB to POL. Water temperature ranged from 24.6 to 26.4 °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 - 3rd March 2015

