



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

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

Date: Monday 5th January 2015

Weather & tide conditions: Conditions were fine with 0% cloud cover and a predominantly north easterly wind of up to 12 knots. The predicted tides at Guildford were 0.51 m (low tide) at 09:29 and 1.05 m (high tide) at 23:30. 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 saline throughout with the exception of hypersaline bottom water at BLA. Water was well oxygenated at all sites except for oxygenated bottom water from ARM to NAR. Water temperature ranged from 23.2 to 25.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL, brackish over saline at STJ, then brackish throughout from MAY to RON. Water was well oxygenated at the surface over oxygenated bottom water throughout all sites. Water temperature ranged from 26.0 to 27.9 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was low in oxygen from REG to JBC and was oxygenated to well oxygenated at all other sites. Bottom water was oxygenated to well oxygenated at all sites with the exception of low oxygen bottom water at MULB FARM, WMP and from REG to POL. Water temperature ranged from 26.5 to 28.2 °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 - 5th January 2015

