



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

by
Water Science Branch, Department of Water

Date: Monday 9th November 2015

Weather & tide conditions: Conditions were fine with up to 20% cloud cover and predominantly a south to south easterly breeze of up to 7 knots. The predicted tides at Guildford were 0.63 m (low tide) at 06:32 and 0.71 m (high tide) at 12:02. Perth recorded 0.6 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline throughout. Water was well oxygenated on the surface and oxygenated on the bottom with the exception of well oxygenated bottom water at NAR. Water temperature ranged from 20.3 to 21.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout with the exception of saline bottom water at NIL. Surface water was well oxygenated at all sites. Bottom water was oxygenated at NIL, near anoxic at STJ, low in oxygen at MAY and hypoxic at RON. Water temperature ranged from 23.0 to 26.6 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated to oxygenated at all sites with the exception of MSB and JBC which were low in oxygen. Bottom water was hypoxic at BWR10, low in oxygen at KIN and KMO, oxygenated from VIT to MULB FARM, then low in oxygen again from WMP to POL. Water temperature ranged from 22.7 to 25.6 °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 - 9th November 2015

