



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

by
Water Science Branch, Department of Water

Date: Monday 19th December 2016

Weather & tide conditions: Conditions were fine with 0% cloud cover and a south to south easterly breeze of up to 5 knots. The predicted tides at Guildford were 0.92 m (high tide) at 00:43 and 0.58 m (low tide) at 11:36. Perth recorded 0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline to hypersaline and well oxygenated to oxygenated throughout all sites. Water temperature ranged from 22.4 to 23.5 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish at all sites, with the exception of saline bottom water at NIL. Water was well oxygenated to oxygenated, with the exception of low oxygen bottom water at STJ. Water temperature ranged from 24.5 to 25.8 °C.

Upper Swan Estuary (RON to POL): The Upper Swan Estuary was brackish throughout all sites. Water was well oxygenated to oxygenated throughout, with the exception of low oxygen bottom water at REG, MSB and POL, and throughout JBC. Water temperature ranged from 25.7 to 27.7 °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 - 19 December 2016

