



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

by
Water Science Branch, Department of Water

Date: Tuesday 29th September 2015

Weather & tide conditions: Conditions were fine with up to 85% cloud cover and a west to north westerly breeze of up to 6 knots. The predicted tides at Guildford were 0.63 m (low tide) at 07:16 and 0.79 m (low tide) at 13:29. Perth recorded 0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were not operational the week prior to sampling.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline throughout all sites, with the exception of brackish surface water at NAR. Water was well oxygenated throughout at all sites. Water temperature ranged from 17.0 to 20.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout all sites. Surface water was well oxygenated and oxygenated at all sites, while bottom water was well oxygenated at NIL and low in oxygen from STJ to RON. Water temperature ranged from 20.3 to 21.5 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout all sites. Surface water was well oxygenated and oxygenated at all sites. Bottom water was hypoxic at BWR10, KMO, VIT and SUC, near anoxic at KIN and well oxygenated and oxygenated from MEA to POL. Water temperature ranged from 19.4 to 21.7 °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 - 29th September 2015

