



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

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

Date: Monday 5th October 2015

Weather & tide conditions: Conditions were fine with up to 90% cloud cover and a predominantly south westerly breeze of up to 14 knots. The predicted tides at Guildford were 0.89 m (high tide) at 03:26 and 0.56 m (low tide) at 16:10. Perth recorded 1.4 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 mostly well oxygenated with oxygenated bottom water at ARM and NAR and low oxygen at HEA. Water temperature ranged from 17.7 to 21.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout. Surface water was oxygenated at NIL and well oxygenated STJ, MAY and RON. Bottom water had low oxygen at NIL and STJ and was hypoxic at MAY and RON. Water temperature ranged from 21.7 to 22.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated over oxygenated bottom water at all sites from BWR10 to MULB with the exception of near anoxic bottom water at KIN. Water was oxygenated throughout at WMP to REG and had low oxygen throughout at MSB to POL. Water temperature ranged from 21.5 to 22.7 °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 - 5th October 2015

