



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

by
Water Science Branch, Department of Water

Date: Monday 7th November 2016

Weather & tide conditions: Conditions were fine with 0% cloud cover and a predominantly south easterly breeze of up to 8 knots. The predicted tides at Guildford were 0.91 m (high tide) at 02:14 and 0.57 m (low tide) at 13:48. Perth recorded 0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (BLA to NAR): BLA was well oxygenated with saline surface water over hypersaline bottom water. ARM and HEA were saline throughout with well oxygenated surface water over oxygenated bottom water. NAR was well oxygenated and brackish throughout. Water temperature ranged from 18.2 to 22.5 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout. Surface water was well oxygenated over oxygenated bottom water at NIL, hypoxic bottom water at STJ and low oxygen bottom water at MAY. RON was well oxygenated throughout. Water temperature ranged from 22.7 to 24.5 °C.

Upper Swan Estuary (KIN to POL): The Upper Swan Estuary was brackish throughout with the exception of fresh surface water at KIN and KMO. Water was well oxygenated to oxygenated. Water temperature ranged from 22.7 to 24.2 °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 - 7th November 2016

