



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

by
Water Science Branch, Department of Water

Date: Monday 8th May 2017

Weather & tide conditions: Conditions were overcast with up to 80% cloud cover and a north easterly breeze of up to 4 knots. Predicted tides at Guildford were 0.82 m (low tide) at 03:47 and 1.06 m (high tide) at 11:04. Perth recorded 8 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): The Lower Swan Estuary was saline with the exception of hypersaline bottom water at BLA, ARM and HEA. Surface water was well oxygenated with well oxygenated bottom water at BLA, oxygenated bottom water at ARM and low oxygen bottom water at HEA and NAR. Water temperature ranged from 19.8 to 20.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline with the exception of brackish surface water at STJ, MAY and RON. Surface water was well oxygenated at all sites. Bottom water was oxygenated at NIL, hypoxic at STJ and near anoxic at MAY and RON. Water temperature ranged from 20.2 to 21.4 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish with the exception of saline bottom water at BWR10, KIN and KMO. Surface water was well oxygenated over near anoxic bottom water from BWR10 to KMO and SUC, low oxygen at MEA and MULB FARM, and hypoxic at WMP. CAV was oxygenated throughout. Water at sites between REG and POL was low oxygen with hypoxic bottom water at MSB and JBC. Water temperature ranged from 18.5 to 20.8°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 - 8th May 2017

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