



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 20th November 2017

Weather & tide conditions: Conditions were fine with up to 85% cloud cover and a predominantly south westerly breeze of up to 9 knots. The predicted tides at Guildford were 0.48 m (low tide) at 07:53 and 1.05 m (high tide) at 22:12. Perth recorded 2.4 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational the week prior to sampling, while the Caversham oxygenation plant was not.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline throughout. Water well oxygenated to oxygenated at all sites. Water temperature ranged from 20.6 to 23.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout. Surface water was well oxygenated at all sites while bottom water was oxygenated at NIL, near anoxic at STJ, hypoxic at MAY and low in oxygen at RON. Water temperature ranged from 23.5 to 26.4 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was mostly well oxygenated to oxygenated at all sites with the exception of bottom water that was low in oxygen at BWR10 and KIN. Water temperature ranged from 24.1 to 26.2 °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 - 20th November 2017

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