



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by
Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 11th September 2017

Weather & tide conditions: Conditions were fine with up to 85% cloud cover and a north to south easterly breeze of up to 11 knots. The predicted tides at Guildford were 0.91 m (high tide) at 02:39 and 0.69 m (low tide) at 14:01. Perth recorded 6.8 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary surface water was brackish and the bottom water was saline at all sites. Water was mostly well oxygenated with the exception of oxygenated bottom water at ARM, low oxygen bottom water at HEA and hypoxic bottom water at NAR. Water temperature ranged from 16.3 to 19.1 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout with the exception of fresh surface water at STJ and MAY. Water was mostly well oxygenated with the exception of hypoxic bottom water at NIL and STJ and low oxygen bottom water at MAY. Water temperature ranged from 17.1 to 18.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish and well oxygenated throughout with the exception of fresh surface water at KMO. Water temperature ranged from 17.1 to 18.8 °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 - 11th September 2017

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