



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by
Aquatic Science Branch, Department of Water and Environmental Regulation

Date: Monday 19th November 2018

Weather & tide conditions: Conditions were overcast and with up to 100% cloud cover and a predominantly south westerly breeze of up to 10 knots. The predicted tides at Guildford were 0.72 m (high tide) at 09:13 and 0.68 m (low tide) at 14:39. 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): The Lower Swan Estuary was saline throughout with the exception of brackish surface water at NAR. Water was mostly well oxygenated to oxygenated throughout with the exception of bottom water that was low in oxygen at HEA. Water temperature ranged from 19.8 to 22.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated on the surface of all sites and throughout NIL. Bottom water was near anoxic from STJ to RON. Water temperature ranged from 23.0 to 26.0 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish at BWR10, fresh over brackish at KIN, and fresh from KMO to POL. Water was mostly well oxygenated to oxygenated throughout with the exception of bottom water that was low in oxygen at BWR10 and near anoxic at KIN. Water temperature ranged from 24.4 to 25.4 °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

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