



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

by
Aquatic Science Branch, Department of Water and Environmental Regulation

Date: Monday 8th October 2018

Weather & tide conditions: Conditions were fine with up to 75% cloud cover and a north-easterly to easterly breeze of up to 9 knots. The predicted tides at Guildford were 0.66 m (low tide) at 05:30 and 0.86 m (high tide) at 11:43. Perth recorded 9.2 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 operational.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was brackish over saline throughout. Water was well oxygenated to oxygenated throughout, with the exception of bottom water low in oxygen at HEA and hypoxic at NAR. Water temperature ranged from 16.9 to 19.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish at NIL and STJ, and fresh over brackish at MAY and RON. Water was well oxygenated to oxygenated throughout, with the exception of bottom water low in oxygen at MAY and RON, and hypoxic at STJ. Water temperature ranged from 18.4 to 21.5 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was fresh over brackish at BWR10 and fresh from KIN to POL. Water was well oxygenated throughout, with the exception of hypoxic bottom water at BWR10. Water temperature ranged from 18.8 to 22.2 °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 Profiles 8th October 2018

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