



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

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 22nd January 2018

Weather & tide conditions: Conditions were fine with 0% cloud cover and an easterly breeze of up to 10 knots. The predicted tides at Guildford were 0.92 m (high tide) at 01:03 and 0.59 m (low tide) at 09:44. Perth recorded 99 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 (FP1 to NAR): The Lower Swan Estuary was hyper saline to saline from FP1 to HEA and brackish over saline at NAR. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 23.4 to 27.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was mostly brackish throughout with the exception of saline bottom water at STJ. Surface water was well oxygenated to oxygenated at all sites while bottom water was hypoxic at NIL and near anoxic from STJ to RON. Water temperature ranged from 25.0 to 29.1 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was mostly well oxygenated to oxygenated throughout all sites with the exception of near anoxic bottom water at BWR10. Water temperature ranged from 25.4 to 29.0 °C.

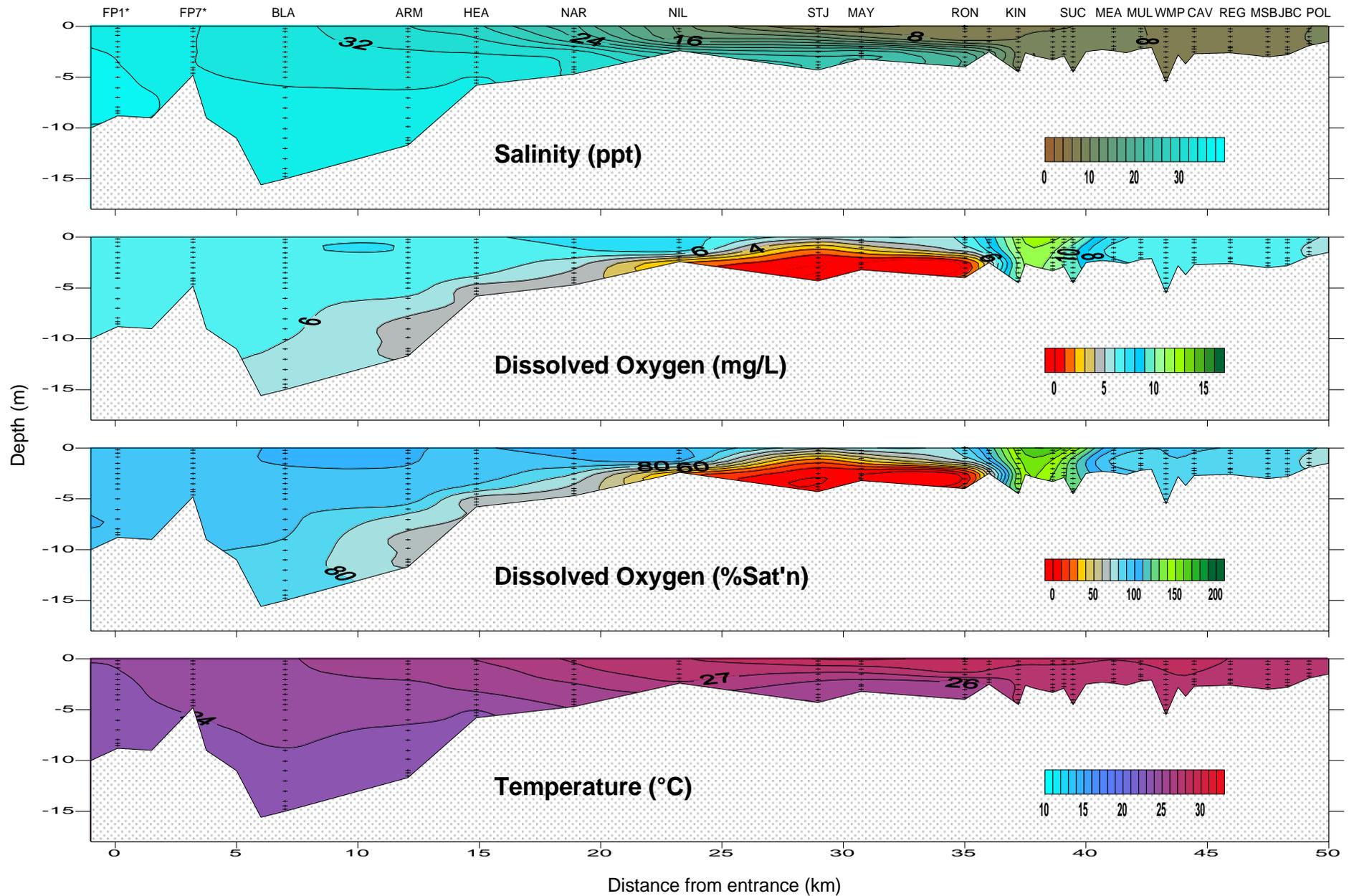
Definitions:

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 - 22nd January 2018

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*Data for sites FP1 (Harbour entrance) and FP7 (Fremantle Bridge) are supplied courtesy of the Fremantle Port Authority