



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

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 8<sup>th</sup> January 2018

Weather & tide conditions: Conditions were fine with 0% cloud cover and an east to south-easterly breeze of up to 10 knots. The predicted tides at Guildford were 0.62 m (low tide) at 09:37 and 0.85 m (high tide) at 22:20. Perth recorded 0 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 operational from 3/1/18.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was saline throughout. Water was well oxygenated to oxygenated throughout. Water temperature ranged from 22.6 to 24.4 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout NIL, brackish over saline at STJ and brackish throughout MAY and RON. Water was well oxygenated at NIL. Water was well oxygenated with low oxygen bottom water at STJ through to RON with the exception of hypoxic bottom water at May. Water temperature ranged from 25.5 to 27.6 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated, with the exception of JBC and WMP which had low oxygen bottom water, MSB and REG which had low oxygen throughout, and BWR10 which had hypoxic bottom water. Water temperature ranged from 25.8 to 28.5 °C.

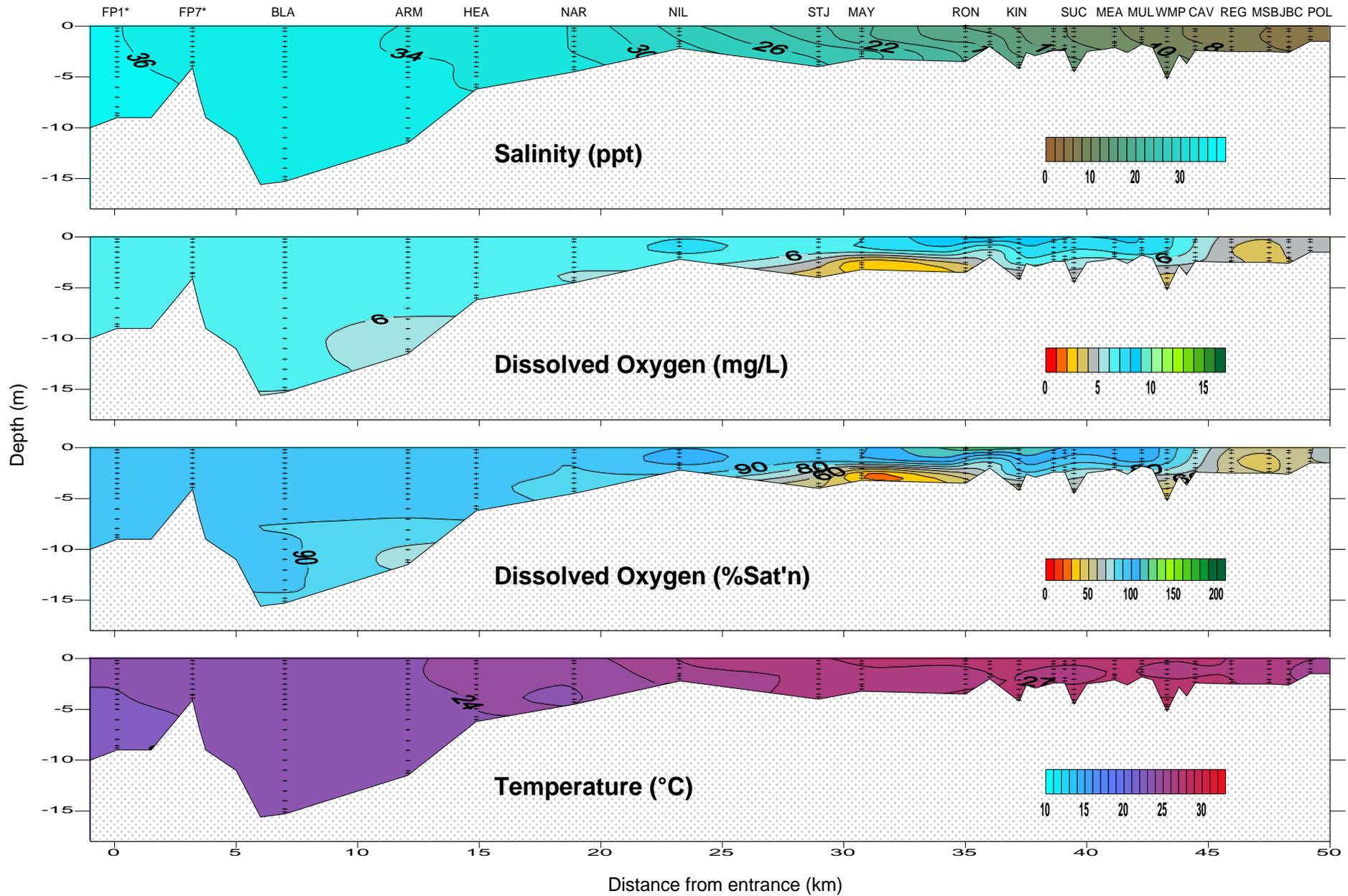
**Definitions:**

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 - 8th January 2018

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