



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

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 11<sup>th</sup> June 2018

Weather & tide conditions: Conditions were overcast and with up to 100% cloud cover and a north-easterly breeze of up to 7 knots. The predicted tides at Guildford were 1.18 m (high tide) at 10:07 and 0.80 m (low tide) at 19:49. Perth recorded 66.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham oxygenation plant was operational the week prior to sampling, while the Guildford oxygenation plant operated intermittently.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was hypersaline to saline throughout with the exception of brackish surface water at NAR. Water was well oxygenated at all sites. Water temperature ranged from 14.7 to 18.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish over saline throughout. Surface water was well oxygenated at all sites while bottom water was oxygenated at NIL, hypoxic at STJ and MAY and near anoxic at RON. Water temperature ranged from 14.9 to 17.4 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was fresh over saline from BWR10 to SUC and at WMP, and brackish from MEAD to MULB FARM and from CAV to POL. Surface water was well oxygenated at all sites while bottom water was hypoxic at BWR10, KMO, SUC, MEAD and WMP, near anoxic at KIN, low in oxygen at VIT and MULB FARM and well oxygenated to oxygenated from CAV to POL. Water temperature ranged from 13.8 to 17.7 °C.

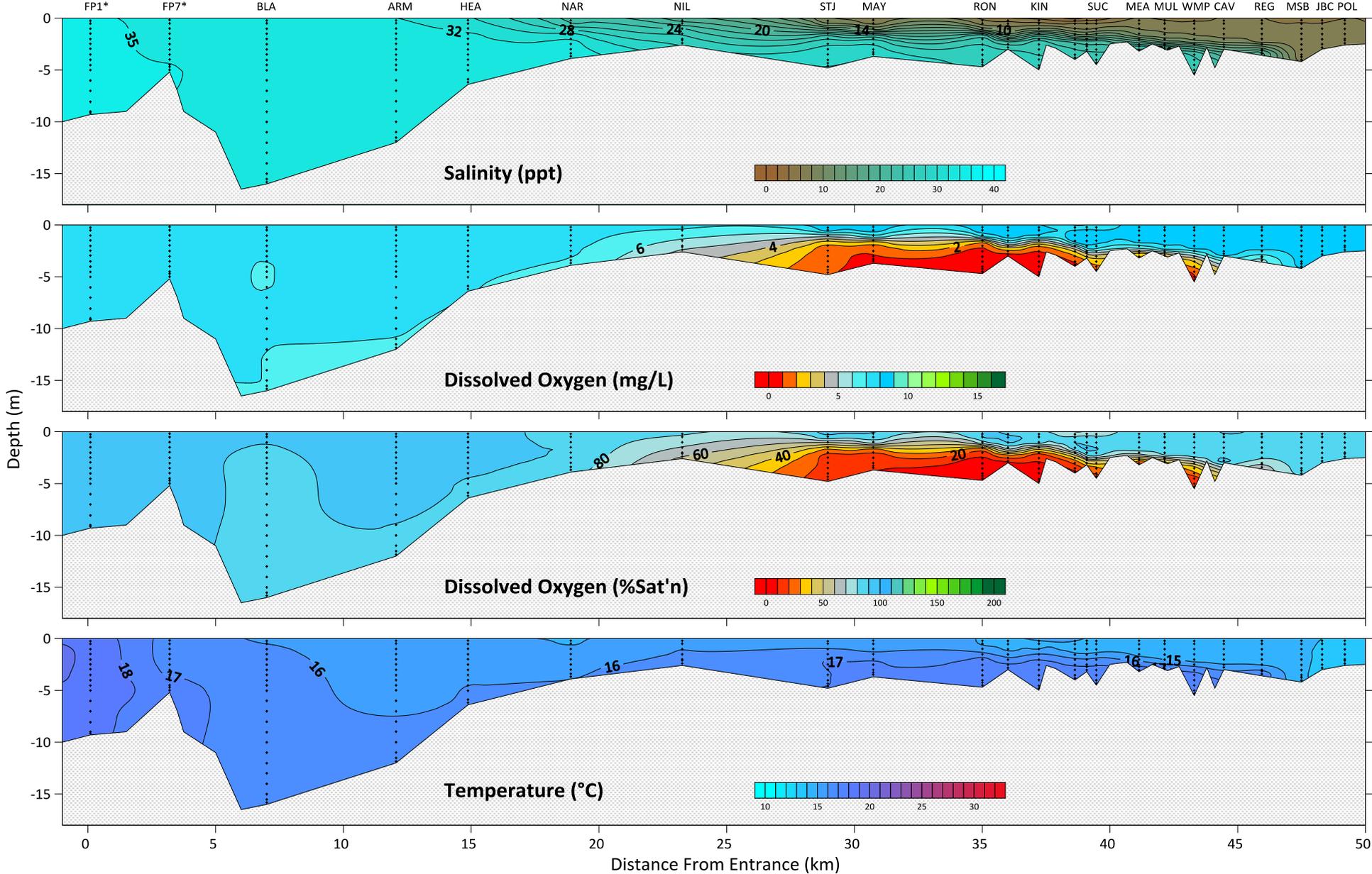
**Definitions:**

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 June 2018

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