



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

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 28th May 2018

Weather & tide conditions: Conditions were fine with up to 100% cloud cover and a predominantly north-easterly breeze of up to 5 knots. The predicted tides at Guildford were 0.85 m (low tide) at 01:52 and 1.18 m (high tide) at 11:03. Perth recorded 58 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 (FP7 to NAR): The Lower Swan Estuary was hypersaline to saline throughout. Water was well oxygenated throughout all sites. Water temperature ranged from 16.1 to 18.3 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL and brackish over saline from STJ to RON. Water was well oxygenated to oxygenated throughout, with the exception of low in oxygen bottom water at STJ and MAY and hypoxic bottom water at RON. Water temperature ranged from 16.3 to 18.3 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish over saline from BWR10 to KIN and brackish from KMO to POL, with the exception of WMP which was fresh over saline. Water was well oxygenated to oxygenated throughout, with the exception of low oxygen bottom water from BWR10 to KIN and hypoxic bottom water from REG to JBC and at WMP. Water temperature ranged from 15.8 to 18.4 °C.

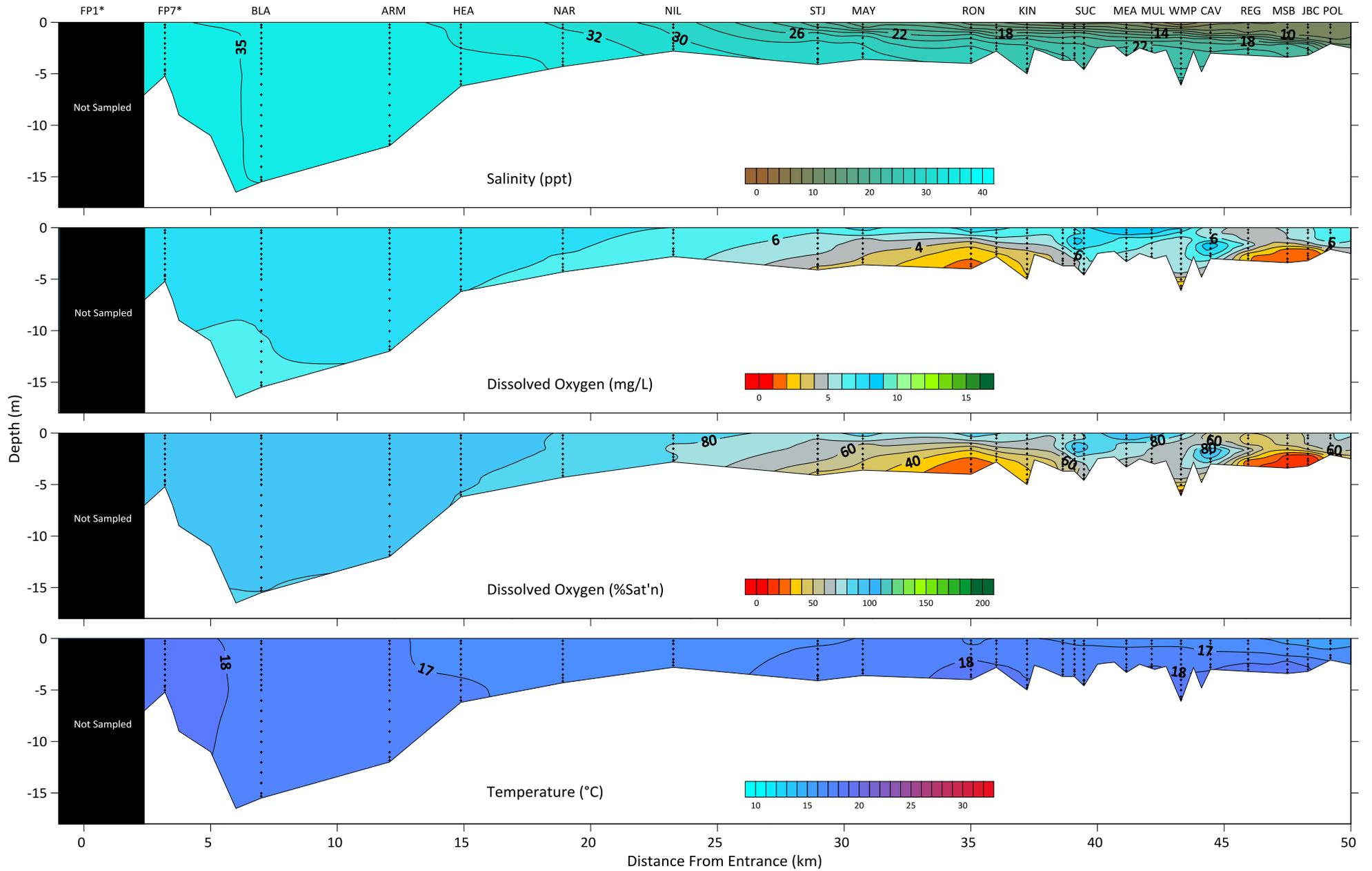
### Definitions:

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

# Swan River Estuary - Physical-Chemical Profile - 28th May 2018

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