



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

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 19th March 2018

Weather & tide conditions: Conditions were fine with up to 20% cloud cover and a south-easterly to north-easterly breeze of up to 7 knots. The predicted tides at Guildford were 0.70 m (low tide) at 07:10 and 0.92 m (high tide) at 13:46. Perth recorded 1.6 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 was operational up to 16/03/18.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was hyper-saline to saline throughout. Water was well oxygenated to oxygenated throughout. Water temperature ranged from 22.1 to 22.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL, brackish over saline at STJ and MAY and brackish throughout RON. Water was well oxygenated to oxygenated throughout with the exception of low oxygen bottom water at MAY and RON. Water temperature ranged from 23.2 to 24.8 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated throughout BWR10 to REG with the exception of and hypoxic bottom water at BWR10 and KIN, and low oxygen bottom water at KMO, VIT, and SUC. Water had low oxygen from MSB to POL with the exception of hypoxic bottom water at JBC. Water temperature ranged from 23.2 to 25.1 °C.

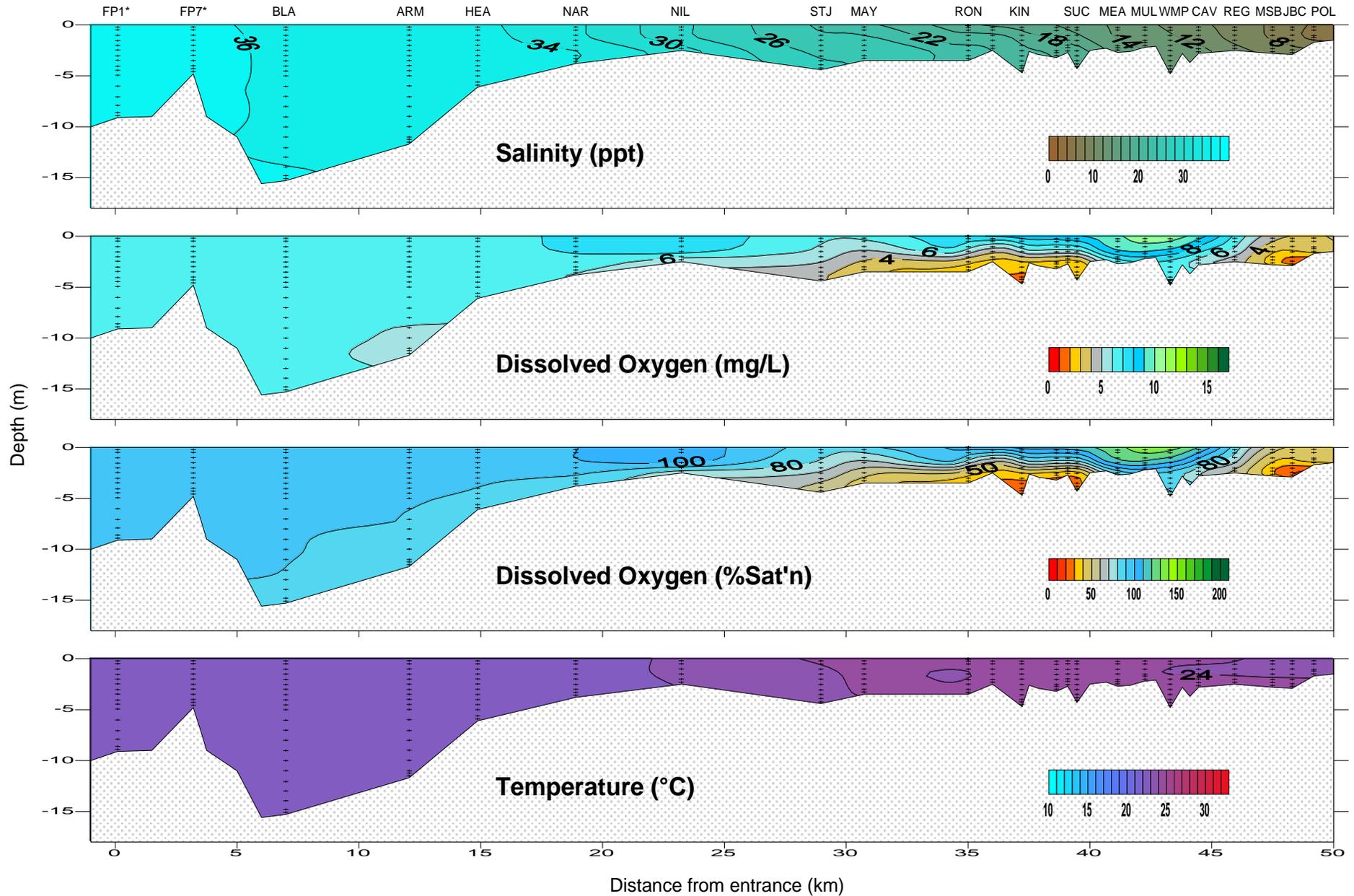
### Definitions:

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 - 19th March 2018

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