



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

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 21<sup>st</sup> August 2017

Weather & tide conditions: Conditions were overcast with up to 100% cloud cover and a south westerly breeze of up to 4 knots. The predicted tides at Guildford were 1.09 m (high tide) at 11:24 and 0.63 m (low tide) at 21:19. Perth recorded 35.2 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 but did not need to operate.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was saline over hyper saline bottom water at FP1 and FP7, brackish over saline at BLA, ARM and HEA and water was fresh over brackish at NAR. Water was mostly well oxygenated with oxygenated bottom water at ARM, low oxygen bottom water at HEA and hypoxic bottom water at NAR. Water temperature ranged from 14.5 to 16.1 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh and well oxygenated throughout all sites. Water temperature ranged from 13.9 to 15.2 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was fresh and well oxygenated throughout all sites. Water temperature ranged from 13.4 to 14.5 °C.

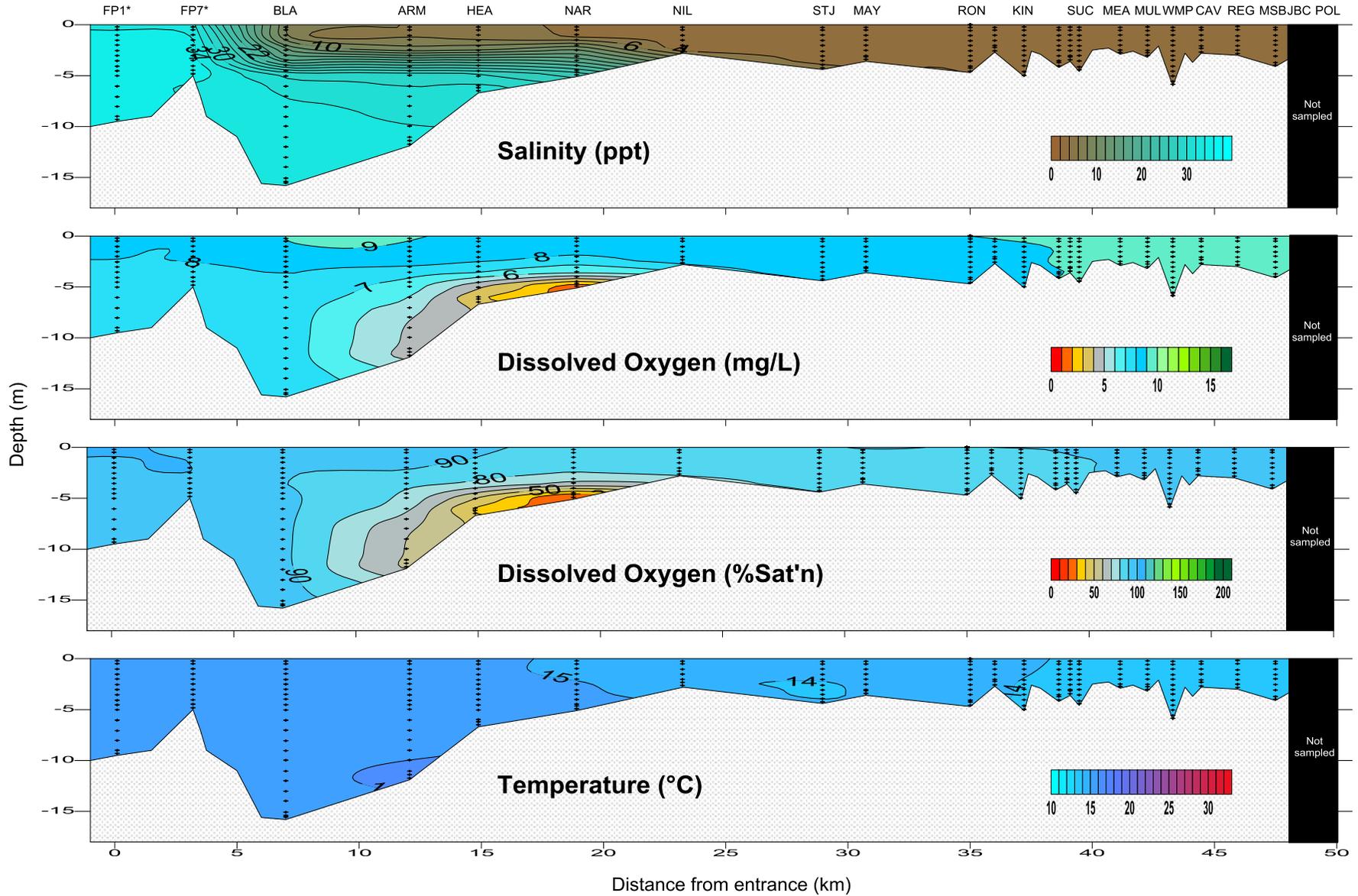
**Definitions:**

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 - 21st August 2017

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