



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

by  
Aquatic Science Branch, Department of Water and Environmental Regulation

Date: Monday 15<sup>th</sup> October 2018

Weather & tide conditions: Conditions were fine with up to 50% cloud cover and a north-easterly to south-westerly breeze of up to 5 knots. The predicted tides at Guildford were 0.94 m (high tide) at 01:53 and 0.56 m (low tide) at 14:38. Perth recorded 22.0 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 not operational.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was saline over hypersaline at FP1, saline from FP7 to BLA, and brackish over saline from ARM to NAR. Water was well oxygenated to oxygenated throughout, with the exception of low oxygen bottom water at NAR. Water temperature ranged from 17.5 to 20.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish from NIL to STJ and fresh over brackish from MAY to RON. Surface water was well oxygenated throughout while bottom water was near anoxic from STJ to RON. Water temperature ranged from 19.8 to 21.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish at MEAD, MULB FARM and CAV, fresh over brackish from KIN to SUC and at WMP, and fresh from REG to POL and at BWR10. Water was well oxygenated throughout with the exception of near anoxic bottom water at KIN. Water temperature ranged from 18.8 to 22.2 °C.

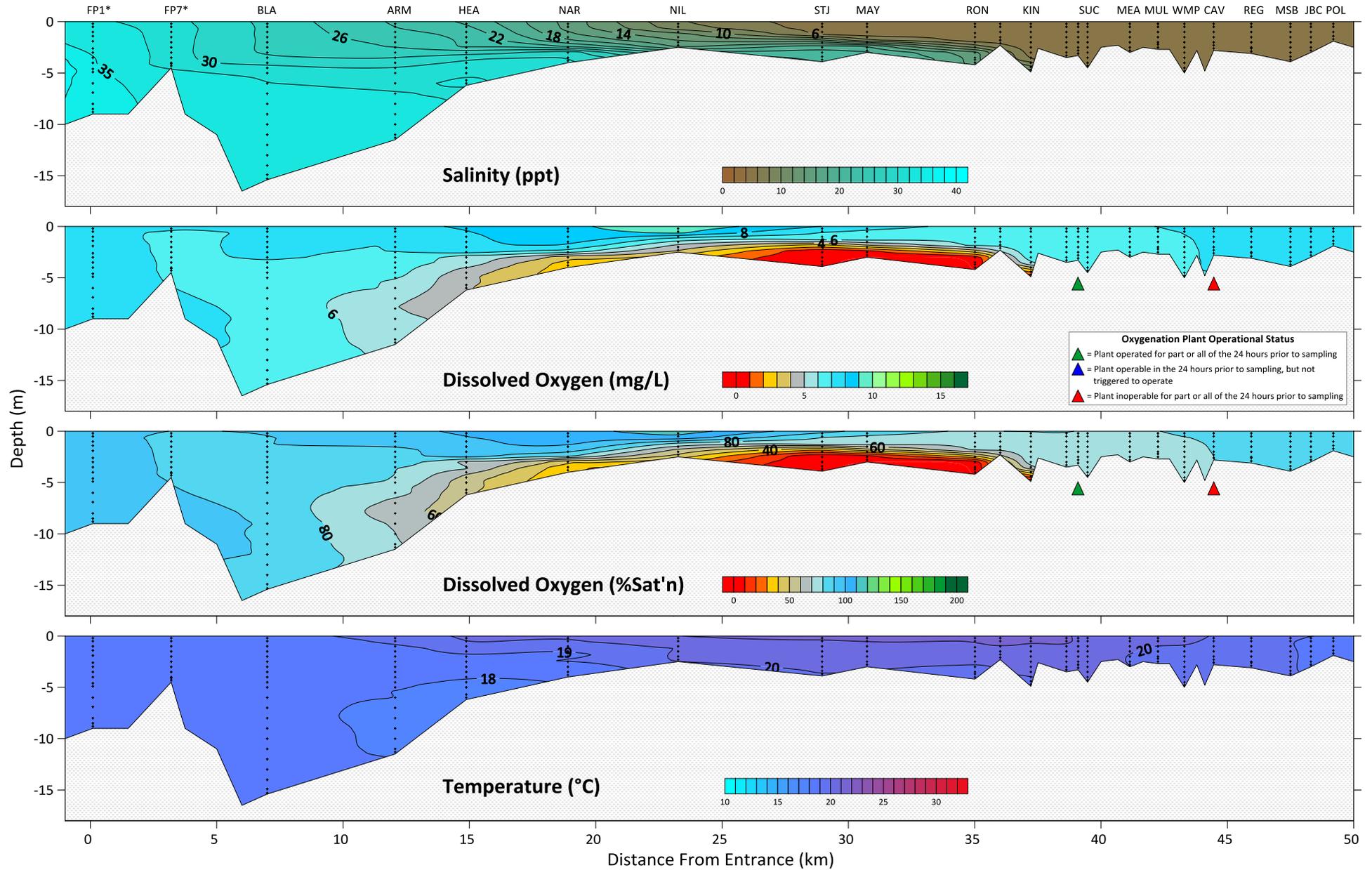
**Definitions:**

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 - 15<sup>th</sup> October 2018

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