



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

by  
Water Science Branch, Department of Water

Date: Monday 18<sup>th</sup> April 2016

Weather & tide conditions: Conditions were fine with up to 100% cloud cover and a predominantly south westerly breeze of up to 8 knots. The predicted tides at Guildford were 0.75 m (low tide) at 04:39 and 0.93 m (high tide) at 11:36. Perth recorded 10.2 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 operational from 13/4/16 to 15/4/16 on the week prior to sampling.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was hyper saline throughout, with the exception of saline surface water at NAR. Water was well oxygenated to oxygenated at all sites. Water temperature ranged from 21.3 to 21.7 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary had brackish surface water over saline bottom water at all sites. Surface water was well oxygenated over low oxygen bottom water at NIL and near anoxic bottom water at STJ to RON. Water temperature ranged from 21.7 to 22.4 °C.

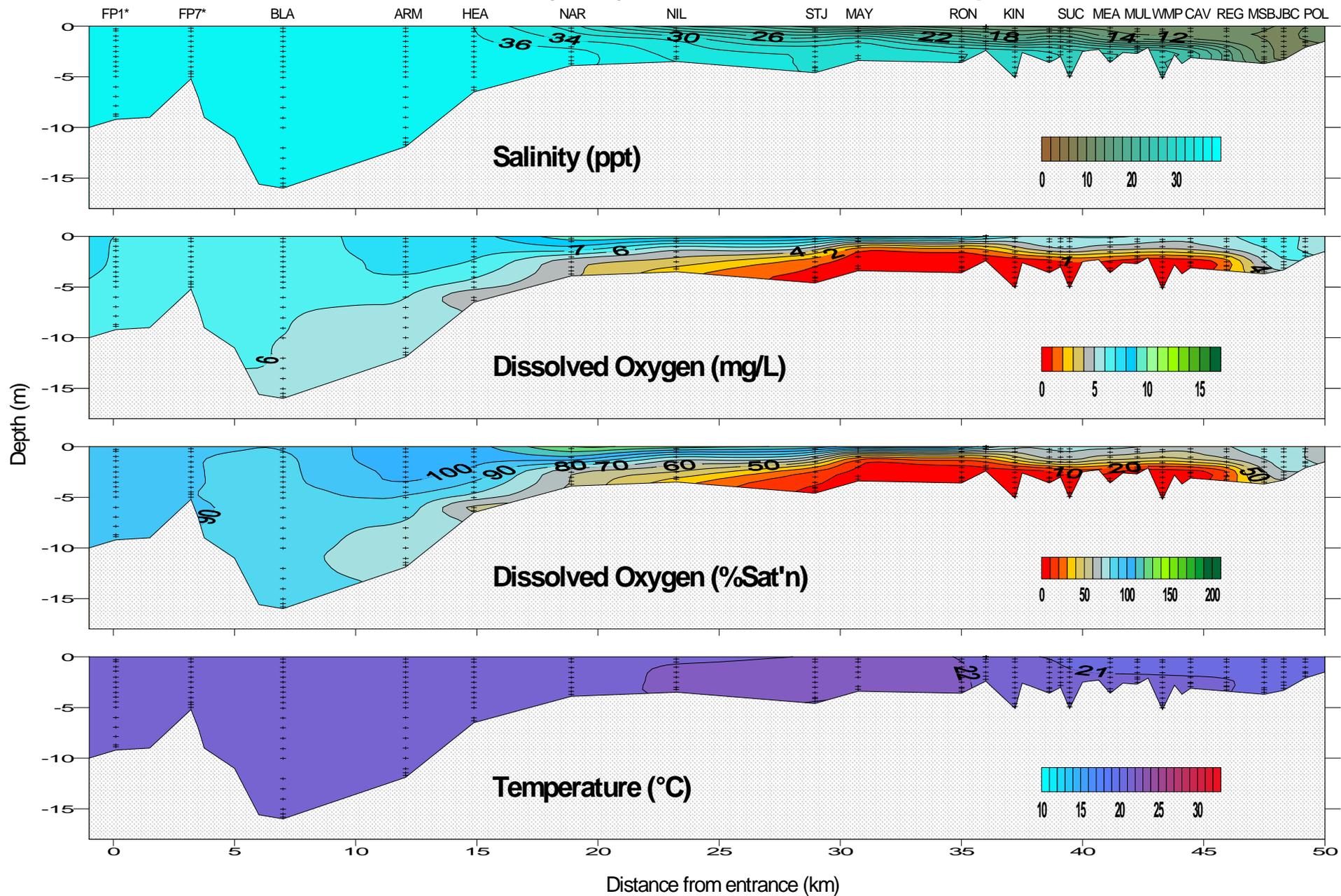
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout with the exception of saline bottom water at BWR10 to SUC. Surface water was well oxygenated to oxygenated over hypoxic bottom water at VIT and near anoxic bottom water at BWR10 to KMO and at SUC to REG. Water was well oxygenated to oxygenated at MSB to POL. Water temperature ranged from 20.4 to 22.4 °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 - 18th April 2016



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