



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

by  
**Water Science Branch, Department of Water**

Date: Monday 29<sup>th</sup> May 2017

Weather & tide conditions: Conditions were fine with up to 5% cloud cover and a predominantly easterly breeze of up to 5 knots. The predicted tides at Guildford were 0.66 m (low tide) at 00:14 and 1.21 m (high tide) at 13:58. Perth recorded 7.6 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 (FPI to NAR): The Lower Swan Estuary was hypersaline to saline throughout. Water was well oxygenated to oxygenated at all sites. Water temperature ranged from 16.4 to 18.5 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout NIL, brackish over saline from STJ to MAY and brackish throughout RON. Water was well oxygenated throughout NIL, surface water was well oxygenated from STJ to RON and bottom water was low in oxygen at STJ and MAY and hypoxic at RON. Water temperature ranged from 16.6 to 18.4 °C.

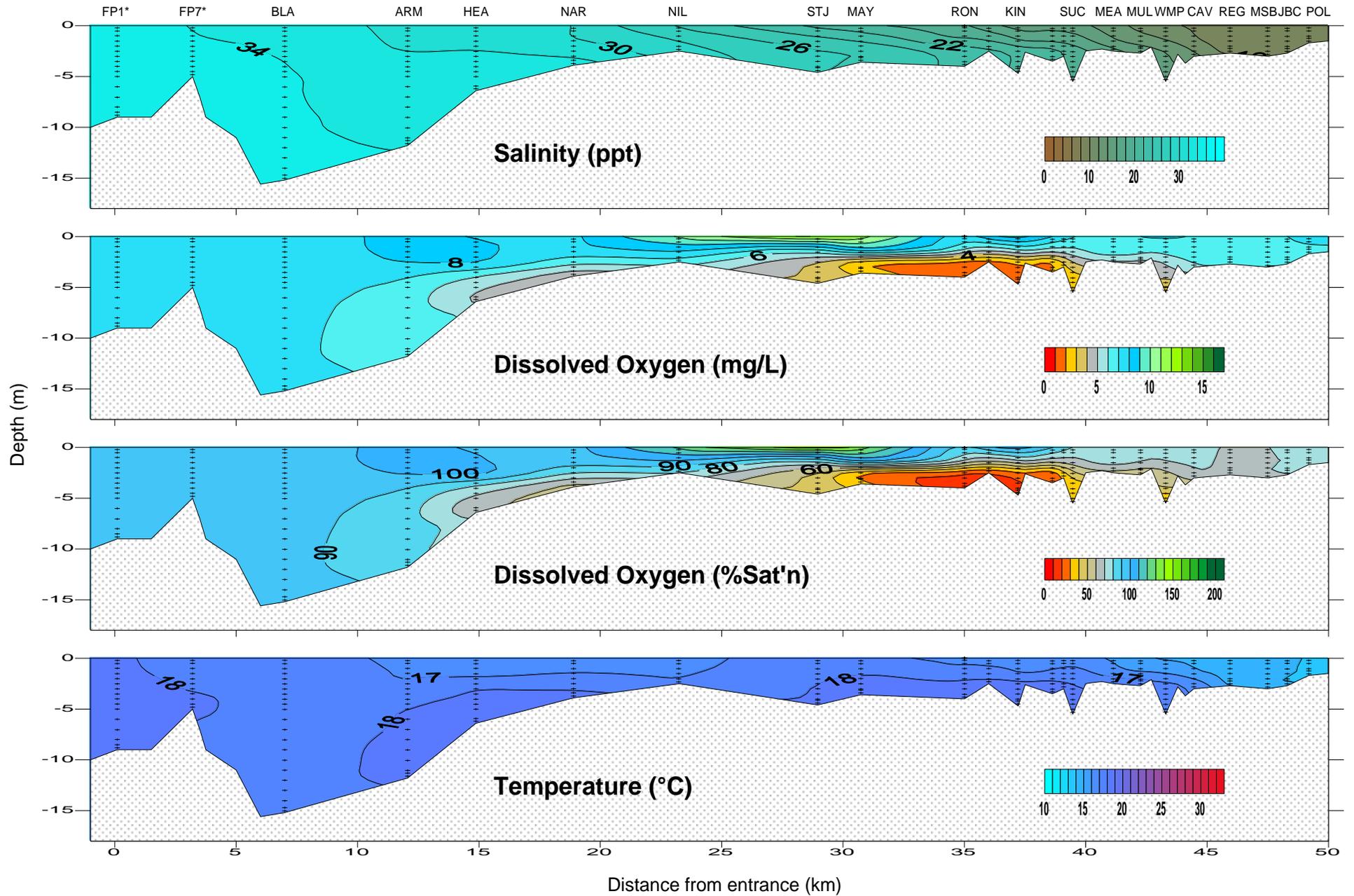
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated from POL to CAV and at MULB FARM and MEA. Surface water was well oxygenated over low oxygen bottom water at WMP, SUC and VIT and surface water was well oxygenated over hypoxic bottom water from KMO to BWR10. Water temperature ranged from 13.9 to 18.5 °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 - 29th May 2017



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