



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

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

Date: Monday 3<sup>rd</sup> April 2017

Weather & tide conditions: Conditions were fine with up to 0% cloud cover and a south westerly breeze of up to 5 knots. The predicted tides at Guildford were 0.60 m (low tide) at 03:40 and 1.06 m (high tide) at 16:14. Perth recorded 0 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 saline to hypersaline at all sites. Water was well oxygenated to oxygenated with the exception of low oxygen bottom water at HEA and hypoxic bottom water at NAR. Water temperature ranged from 20.1 to 22.4 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish at all sites with the exception of saline bottom water at NIL. Surface water was well oxygenated to oxygenated throughout and bottom water was low in oxygen at NIL and hypoxic at STJ and MAY. Water temperature ranged from 21.6 to 22.9 °C.

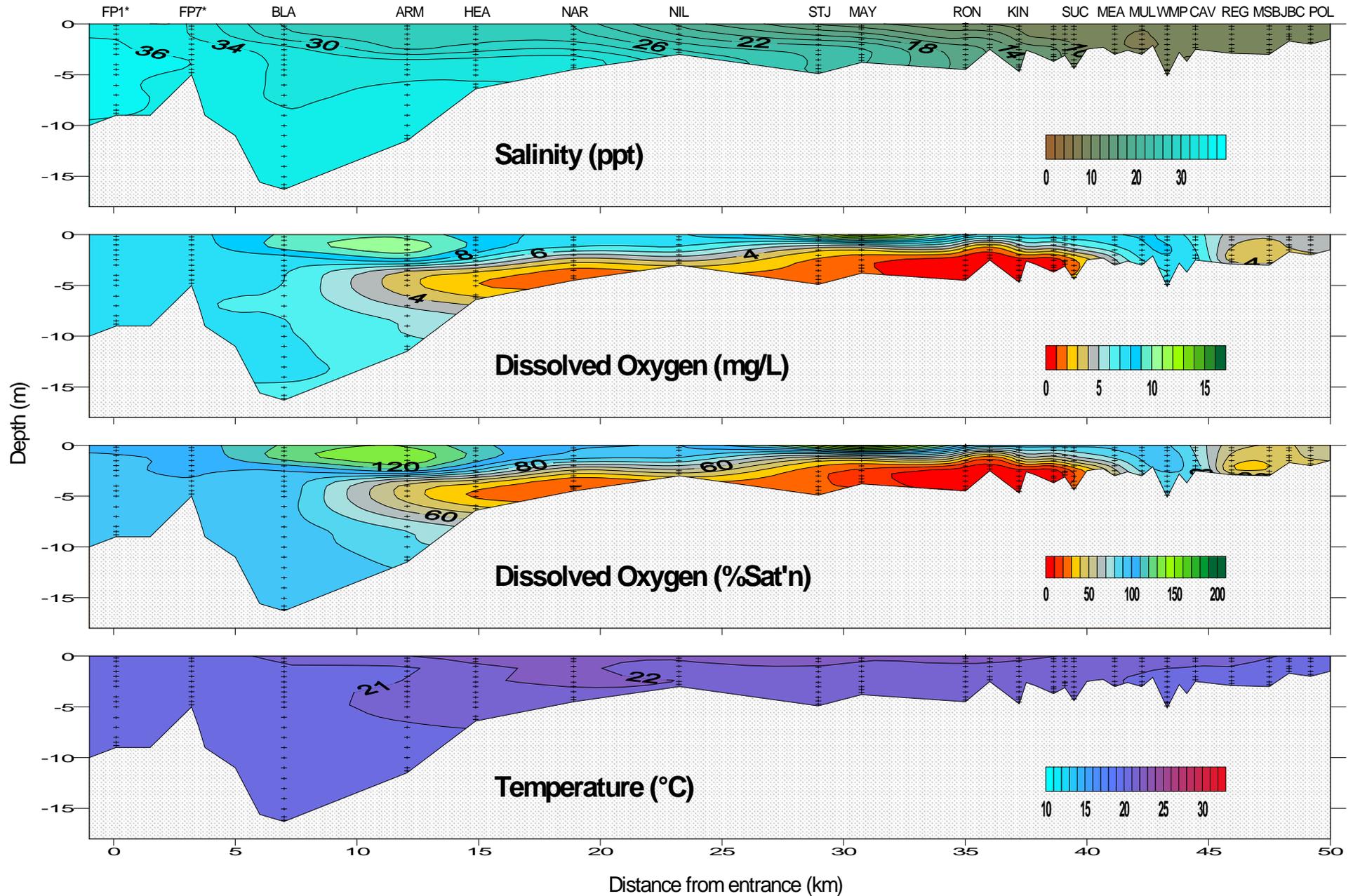
Upper Swan Estuary (RON to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated to oxygenated over hypoxic to near anoxic bottom water from RON to SUC. Water was well oxygenated to oxygenated throughout MEA to CAV and JBC to POL and low in oxygen throughout REG and MSB. Water temperature ranged from 20.1 to 22.9 °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 - 3rd April 2017



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