



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

by
Water Science Branch, Department of Water

Date: Monday 8th February 2016

Weather & tide conditions: Conditions were fine with 0% cloud cover and a predominantly east to north easterly breeze of up to 8.5 knots. The predicted tides at Guildford were 0.53 m (low tide) at 08:58 and 1.06 m (high tide) at 23:49. Perth recorded 0.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: Caversham oxygenation plant operated until 5th February 2016 (Friday) prior to sampling. Guildford oxygenation plant was not operational the week prior to sampling.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was hyper saline throughout. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 23.1 to 26.5 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout with the exception of brackish surface water at MAY and RON. Surface water was well oxygenated over oxygenated bottom water throughout all sites. Water temperature ranged from 27.2 to 28.9 °C.

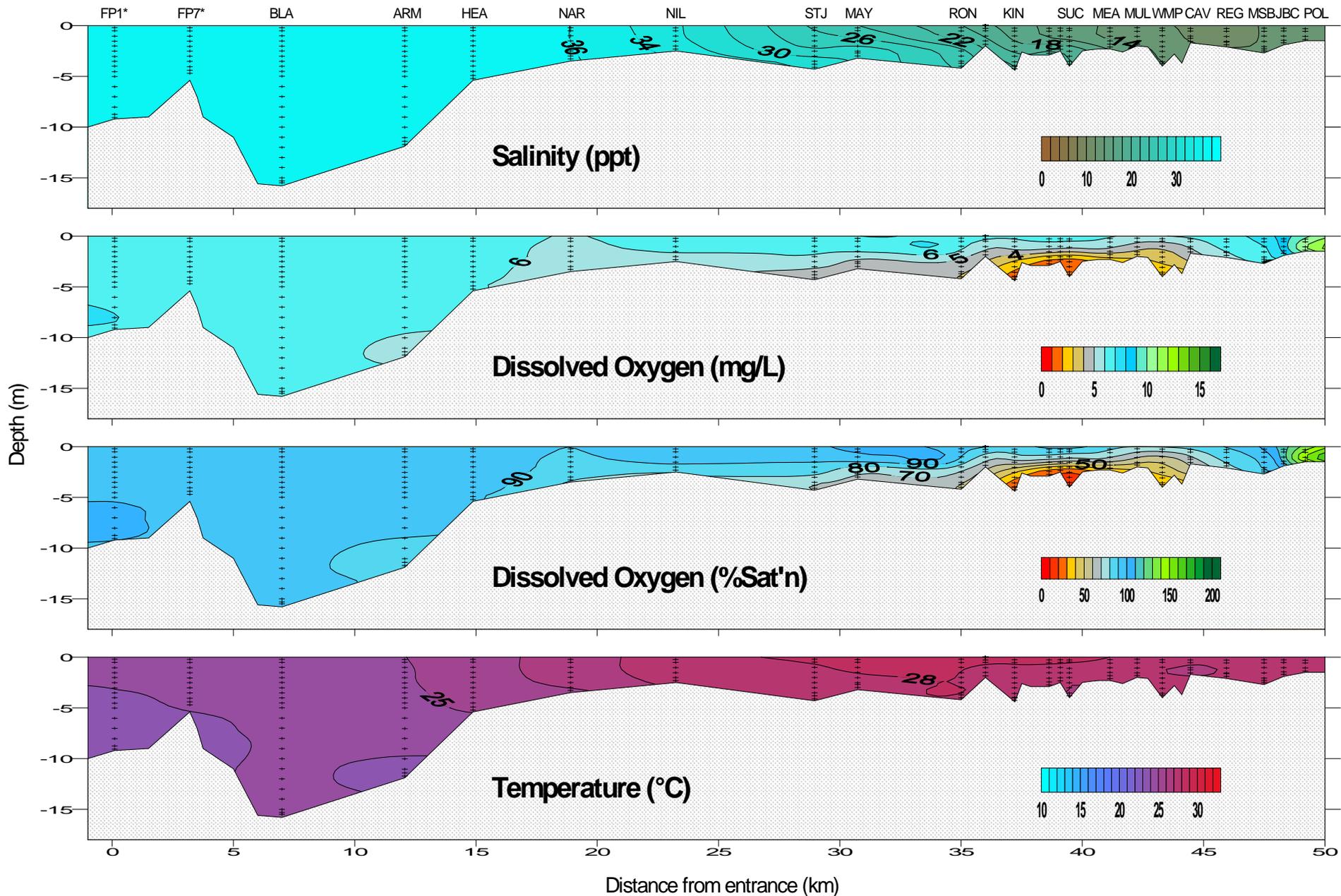
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated to oxygenated throughout all sites in the Upper Swan. Bottom water was well oxygenated to oxygenated at POL to CAV, low oxygen from WMP to MWA and at BWR10 and hypoxic from SUC to KIN. Water temperature ranged from 26.8 to 28.6 °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 - 8th February 2016



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