



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

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

Date: Monday 23rd March 2015

Weather & tide conditions: Conditions were fine with no cloud cover and a predominantly south easterly breeze of up to 14 knots. The predicted tides at Guildford were 0.72 m (low tide) at 05:46 and 1.00 m (high tide) at 14:10. Perth recorded 5.4 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 and well oxygenated at all sampled sites. Water temperature ranged from 20.8 to 22.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout. Water was well oxygenated throughout with the exception of oxygenated bottom water at RON. Water temperature ranged from 21.4 to 23.2 °C.

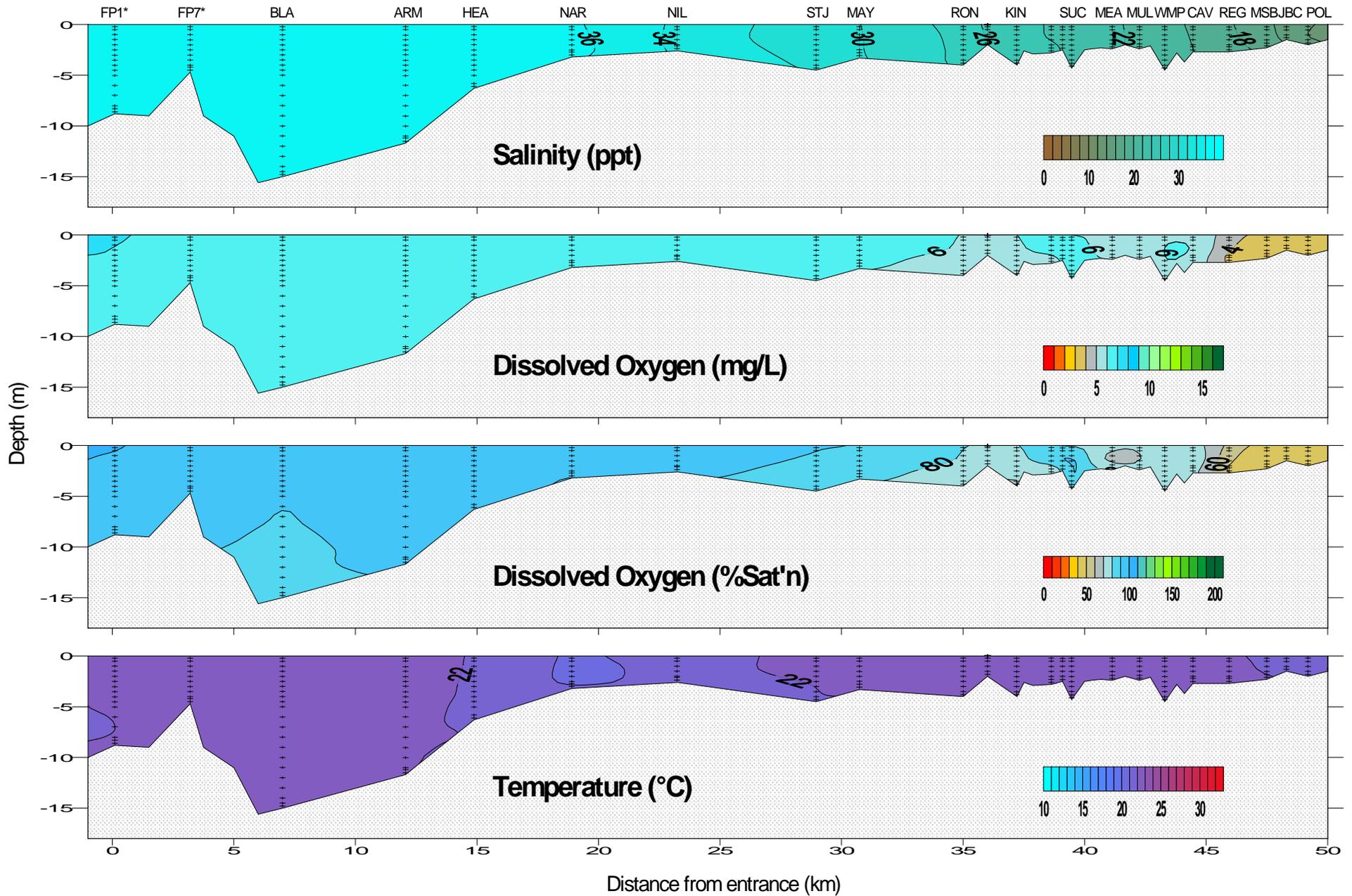
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was saline throughout at BWR10, brackish over saline bottom water at KIN, then brackish throughout at all other sites. Water was well oxygenated to oxygenated at all sites except for REG, which had low oxygen bottom water, and from MSB to POL which had low oxygenated water throughout. Water temperature ranged from 21.1 to 22.7 °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 - 23rd March 2015



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