



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

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

Date: Tuesday 27th January 2015

Weather & tide conditions: Conditions were fine with up to 55% cloud cover and a predominantly easterly wind of up to 14 knots. The predicted tides at Guildford were 0.58 m (low tide) at 07:44 and 0.93 m (high tide) at 18:22. Perth recorded 0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham and Guildford oxygenation plants were operational the week prior to sampling.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was hypersaline throughout from FP1 to HEA, and saline throughout at NAR. Water was well oxygenated throughout from FP1 to BLA, well oxygenated over oxygenated at ARM and HEA, and oxygenated throughout at NAR. Water temperature ranged from 22.9 to 25.4 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout from NIL to MAY, and brackish throughout at RON. Water was well oxygenated at the surface and oxygenated on the bottom at all sites. Water temperature ranged from 25.8 to 27.2 °C.

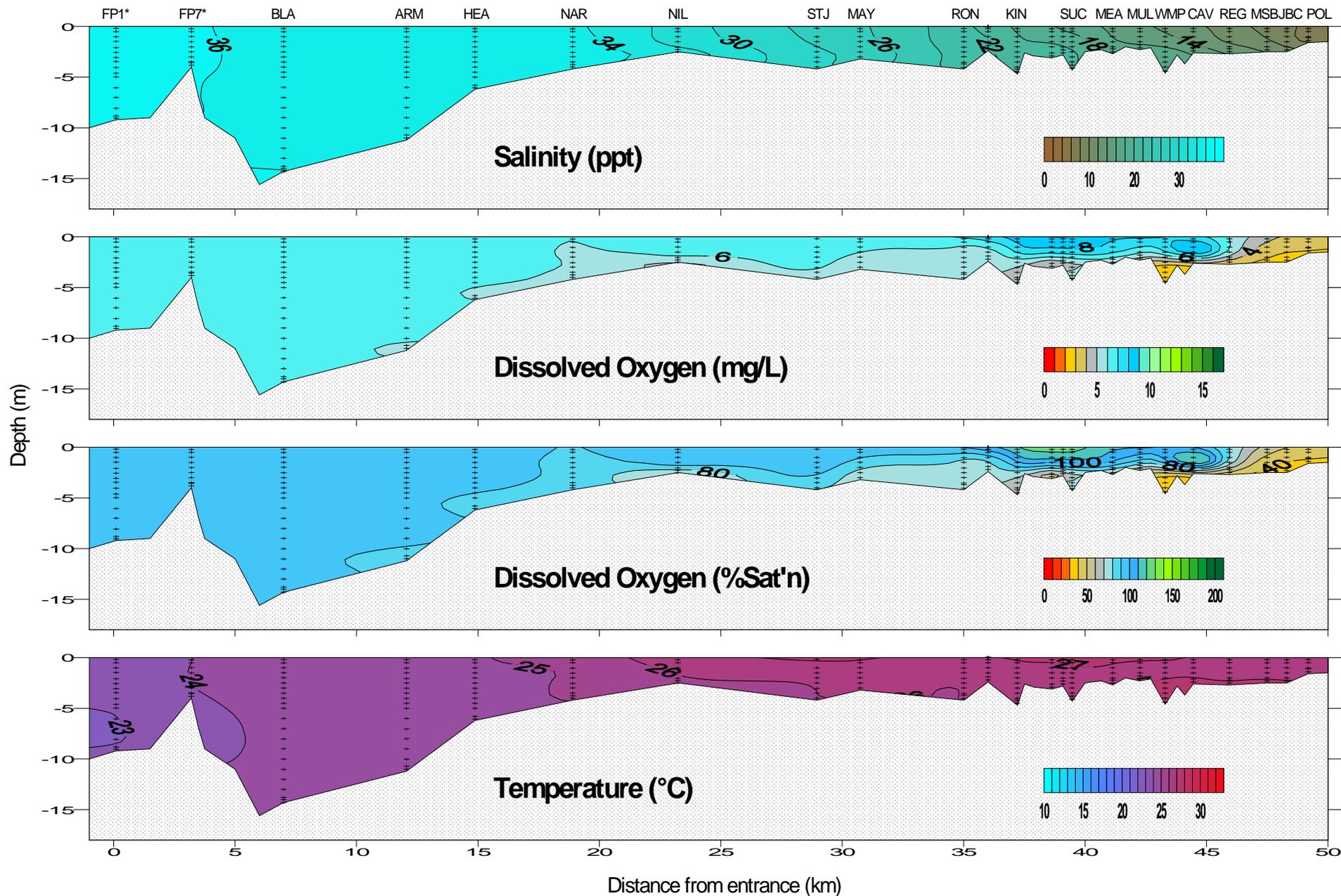
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated from BWR10 to REG, and low in oxygen from MSB to POL. Bottom water was oxygenated at BWR10, KIN, CAV and from VIT to MEA, and low in oxygen at the other sites. Water temperature ranged from 26.0 to 27.5 °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 - 27th January 2015



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