



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

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

Date: Monday 9th February 2015

Weather & tide conditions: Conditions were fine with up to 10% cloud cover and a west to south westerly breeze of up to 6 knots. The predicted tides at Guildford were 0.62 m (low tide) at 08:03 and 0.86 m (high tide) at 15:43. Perth recorded 13.4 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, with the exception of saline surface water at NAR. Water was well oxygenated throughout from FP1 to BLA, and well oxygenated over oxygenated bottom water from ARM to NAR. Water temperature ranged from 23.5 to 27.1 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout, with the exception of brackish surface water at RON. Water was well oxygenated at the surface and oxygenated on the bottom at all sites. Water temperature ranged from 24.2 to 29.6 °C.

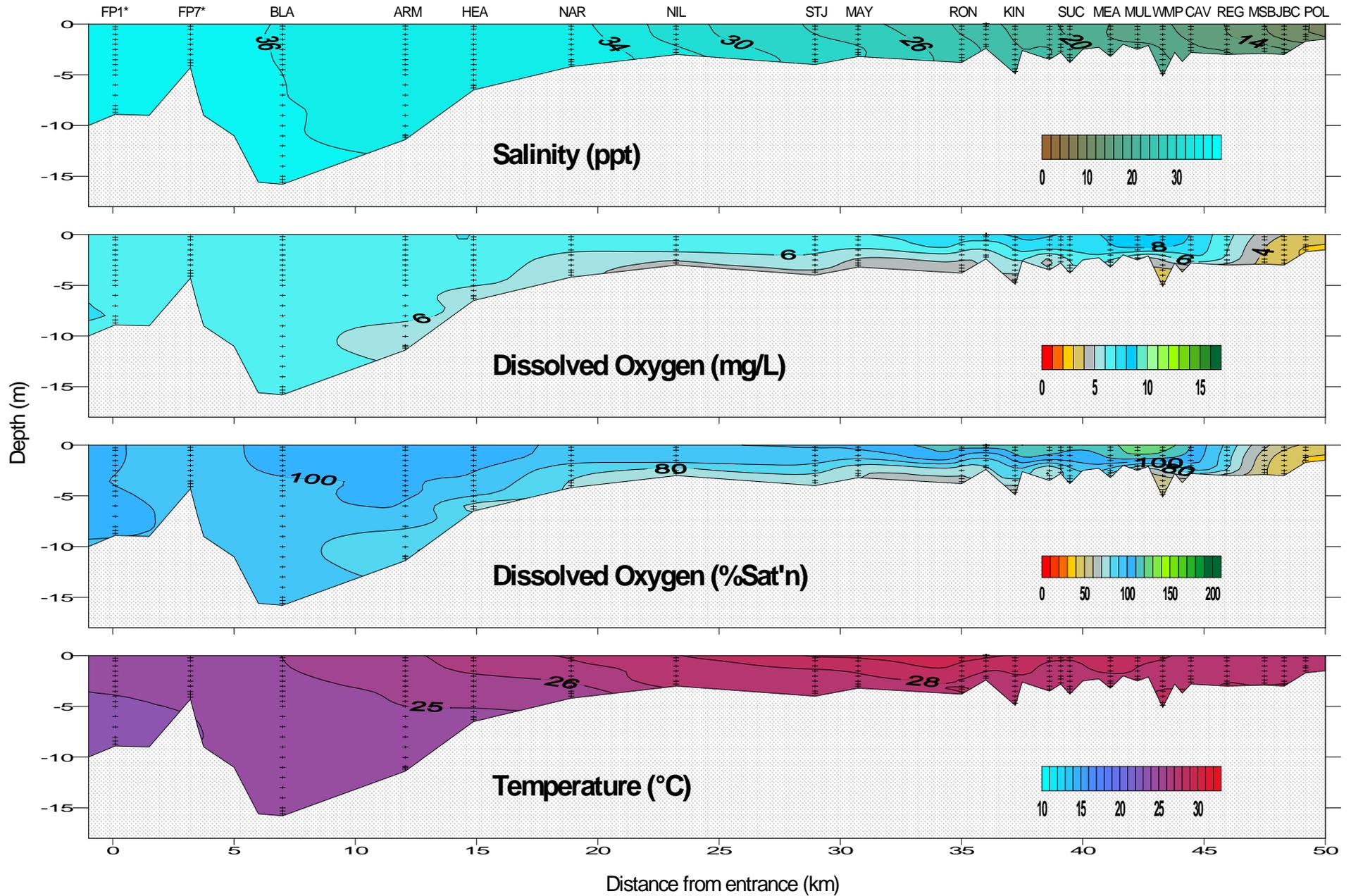
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated from BWR10 to REG, oxygenated at MSB, and low in oxygen at JBC and POL. Bottom water was well oxygenated at CAV, oxygenated at BWR10, REG and from VIT to MULB FARM, and low in oxygen at KIN, KMO, WMP and from MSB to POL. Water temperature ranged from 24.2 to 29.3 °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 - 9th February 2015



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