



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

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

Date: Monday 12th January 2015

Weather & tide conditions: Conditions were fine with 0% cloud cover and a north easterly to south easterly breeze of up to 6 knots. The predicted tides at Guildford were 0.60 m (low tide) at 08:52 and 0.86 m (high tide) at 18:45. 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 (BLA to NAR): The Lower Swan Estuary was hypersaline to saline and water was well oxygenated at all sites except for oxygenated bottom water at ARM and NAR. Water temperature ranged from 22.6 to 23.6 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL, brackish over saline at STJ and MAY, then brackish at RON. Water was well oxygenated at the surface and oxygenated on the bottom at all sites. Water temperature ranged from 24.0 to 26.9 °C.

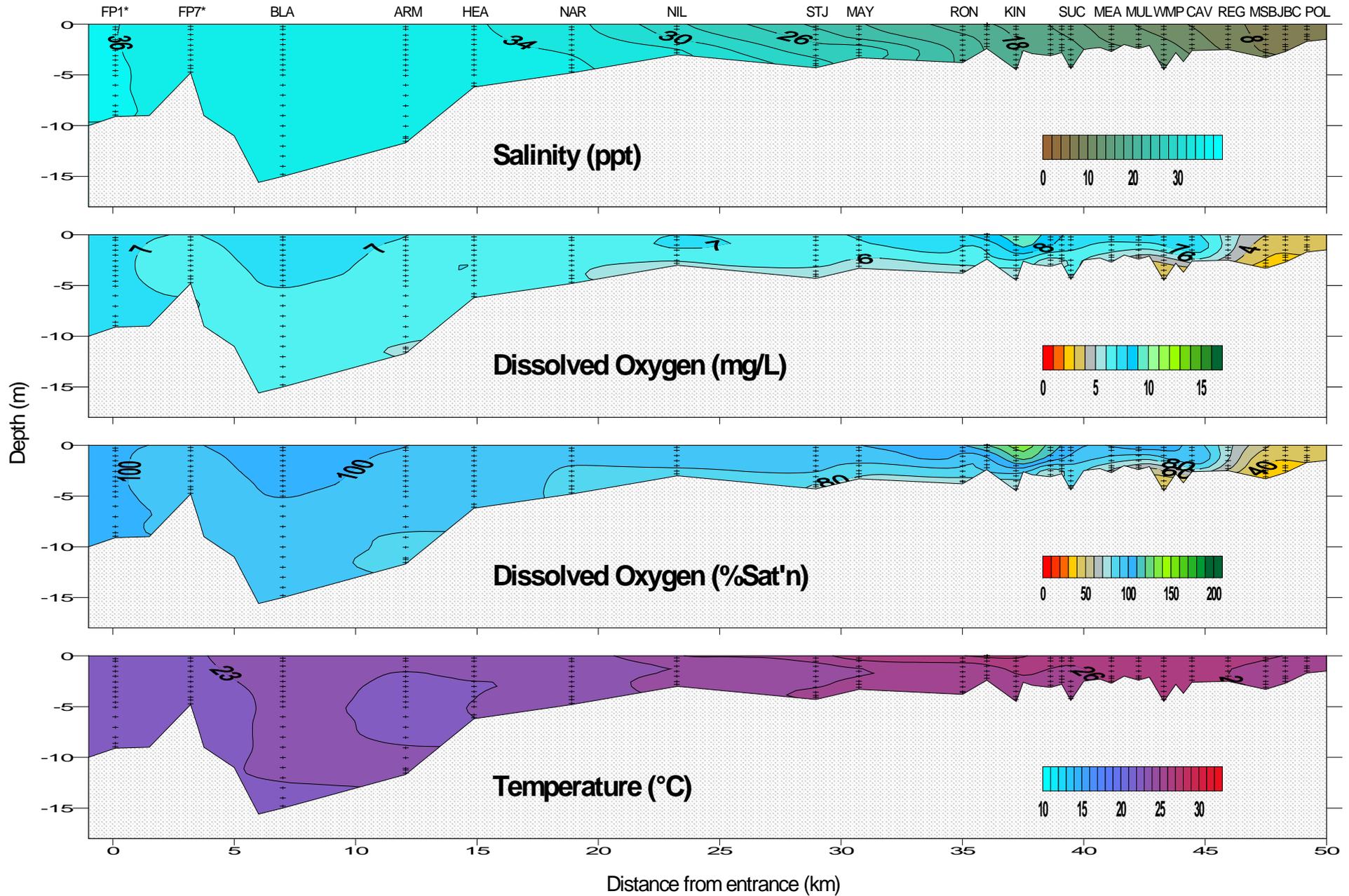
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated at the surface and oxygenated to well oxygenated on the bottom from BWR10 to REG with the exception of bottom water low in oxygen at WMP, then low in oxygen throughout from MSB to POL. Water temperature ranged from 25.1 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 - 12th January 2015



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