



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

by  
Water Science Branch, Department of Water

Date: Monday 2<sup>nd</sup> November 2015

Weather & tide conditions: Conditions were fine with up to 70% cloud cover and a predominantly south westerly breeze of up to 10 knots. The predicted tides at Guildford were 0.92 m (high tide) at 01:42 and 0.54 m (low tide) at 14:08. Perth recorded 29.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational and the Caversham oxygenation plant was not operational during the week prior to sampling.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was saline throughout with the exception of hypersaline bottom water at FP1. Surface and bottom water was well oxygenated at all sites, with the exception of oxygenated bottom water at ARM and low oxygen at HEA and NAR. Water temperature ranged from 19.7 to 23.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout with the exception of saline bottom water at NIL and STJ. Surface water was well oxygenated at all sites. Bottom water was oxygenated at NIL, low oxygen at MAY and RON and was near anoxia at STJ. Water temperature ranged from 23.8 to 25.1 °C.

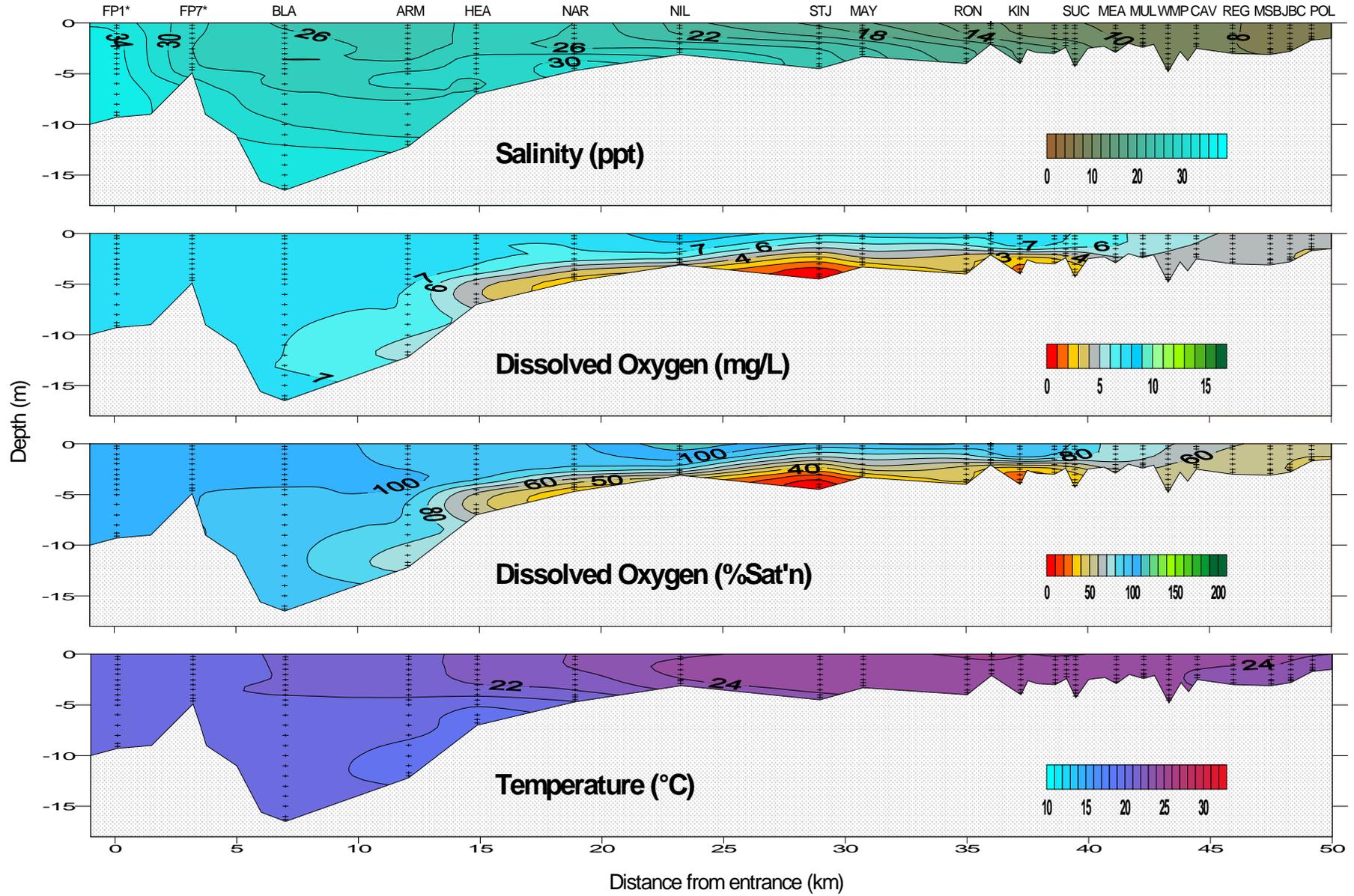
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated at all sites, with the exception of oxygenated at POL, JBC, MSB, CAV and WMP. Bottom water was well oxygenated at REG, oxygenated at all sites except low oxygen from SUC to BWR10 and WMP, with the exception of hypoxic water at KIN. Water temperature ranged from 23.5 to 25.3 °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 - 2nd November 2015



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