



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by
Water Science Branch, Department of Water

Date: Monday 22nd August 2016

Weather & tide conditions: Conditions were fine with up to 50% cloud cover and a south to south westerly breeze of up to 11 knots. The predicted tides at Guildford were 0.77m (low tide) at 07:39 and 0.85m (high tide) at 14:17. Perth recorded 34.8 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (FP2.1 to NAR): The Lower Swan Estuary was saline over hypersaline at FP2.1 and brackish over saline from FP7 to NAR. Water was well oxygenated throughout, with the exception of low oxygen bottom water at ARM to NAR. Water temperature ranged from 13.8 to 16.3 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was fresh and well oxygenated throughout all sites. Water temperature ranged from 13.0 to 13.9 °C.

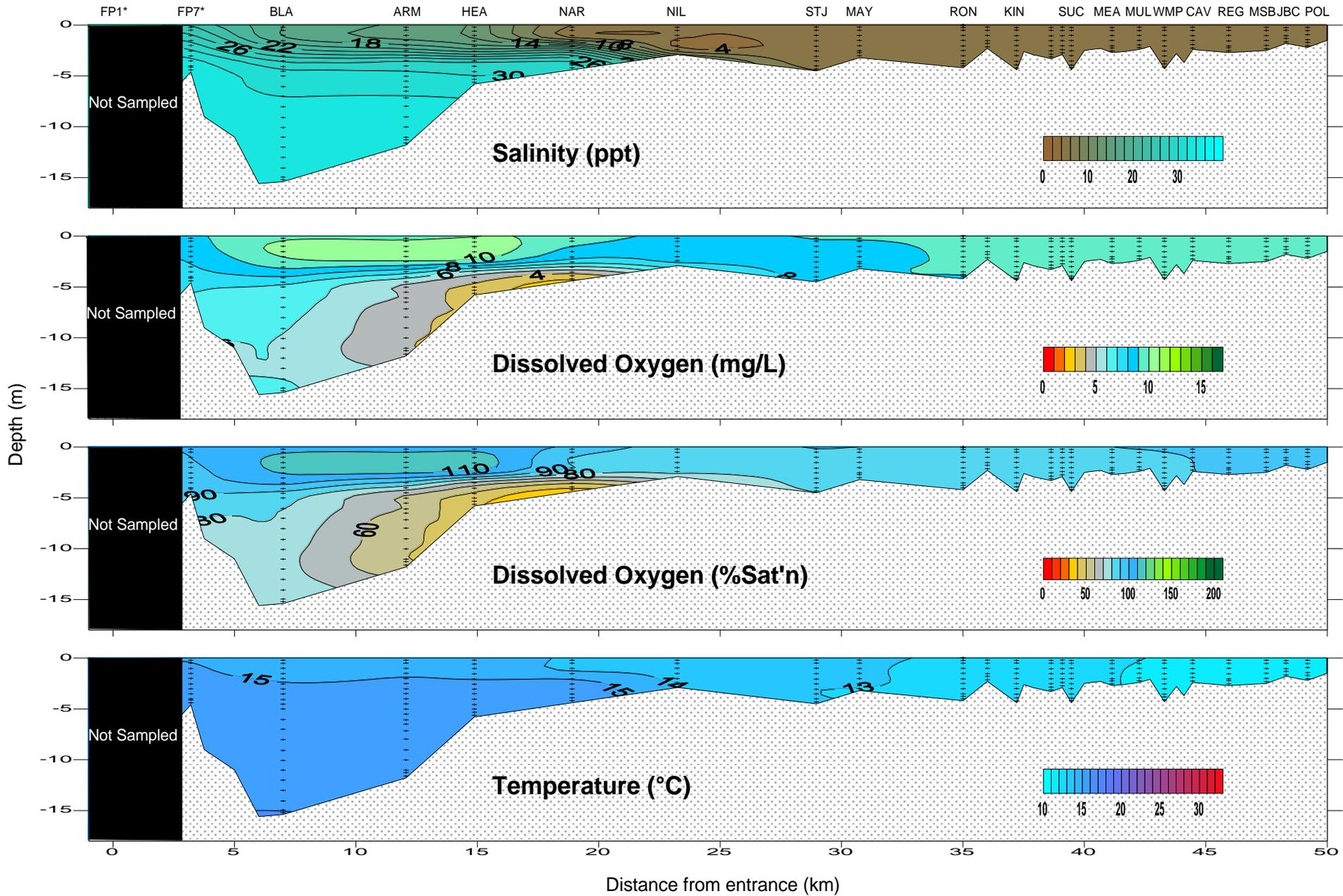
Upper Swan Estuary (RON to POL): The Upper Swan Estuary was fresh throughout RON to SUC and brackish throughout MEA to POL. Water temperature ranged from 11.7 to 12.6 °C.

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 - 22nd August 2016



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