



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by
Water Science Branch, Department of Water

Date: Monday 11th July 2016

Weather & tide conditions: Conditions were fine with up to 80% cloud cover and an east to south easterly breeze of up to 6 knots. The predicted tides at Guildford were 0.98 m (high tide) at 12:30 and 0.79 m (low tide) at 21:05. Perth recorded 73.0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational the week prior to sampling. The Caversham oxygenation plant was operational from 5/7/16 on the week prior to sampling.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was saline to hypersaline from FP1 to BLA and brackish over saline from ARM to NAR. Water was well oxygenated to oxygenated at all sites, with the exception of low oxygen bottom water at HEA. Water temperature ranged from 12.6 to 16.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout NIL, fresh over saline at STJ and fresh throughout MAY and RON. Water was well oxygenated with the exception of hypoxic bottom water at NIL and STJ. Water temperature ranged from 12.3 to 15.2 °C.

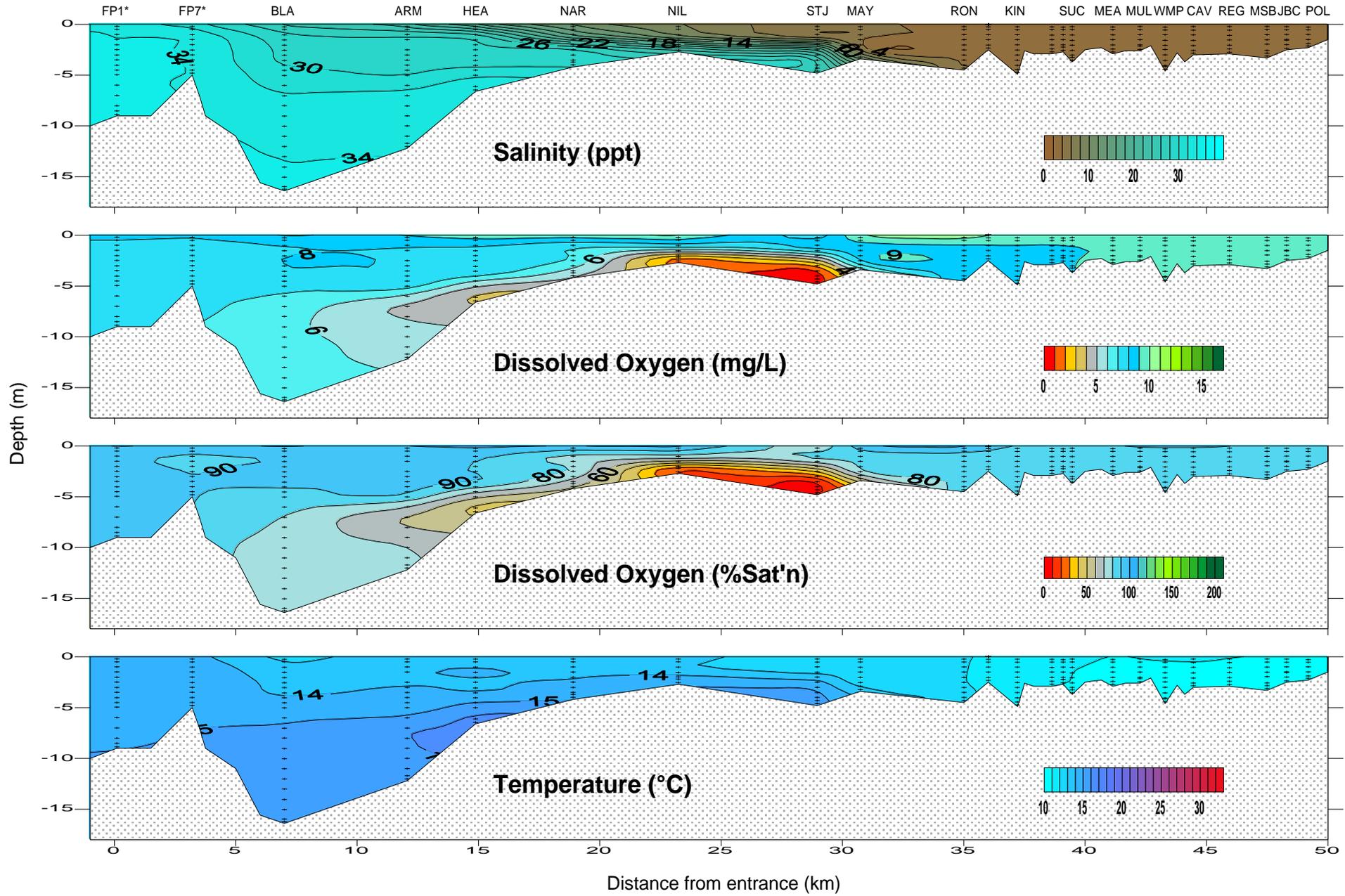
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was fresh and well oxygenated throughout all sites. Water temperature ranged from 10.8 to 11.3 °C.

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 - 11th July 2016



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