



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 24th July 2017

Weather & tide conditions: Conditions were overcast with up to 95% cloud cover and a predominantly westerly breeze of up to 12 knots. The predicted tides at Guildford were 1.19 m (high tide) at 12:14 and 0.65 m (low tide) at 22:39. Perth recorded 45.8 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were operational the week prior to sampling.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was saline throughout with the exception of brackish surface water at HEA and NAR. Water was well oxygenated to oxygenated at all sites. Water temperature ranged from 15.3 to 17.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout with the exception of fresh surface water at RON. Water was well oxygenated throughout NIL, surface water was well oxygenated from STJ to RON while bottom water was hypoxic at STJ and RON and low in oxygen at MAY. Water temperature ranged from 15.3 to 16.6 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was mostly brackish throughout with the exception of fresh surface water from BWR10 to SUC and at WMP. Water was well oxygenated at all sites with the exception low in oxygen bottom water at BWR10 and hypoxic bottom water at KIN. Water temperature ranged from 14.5 to 16.0 °C.

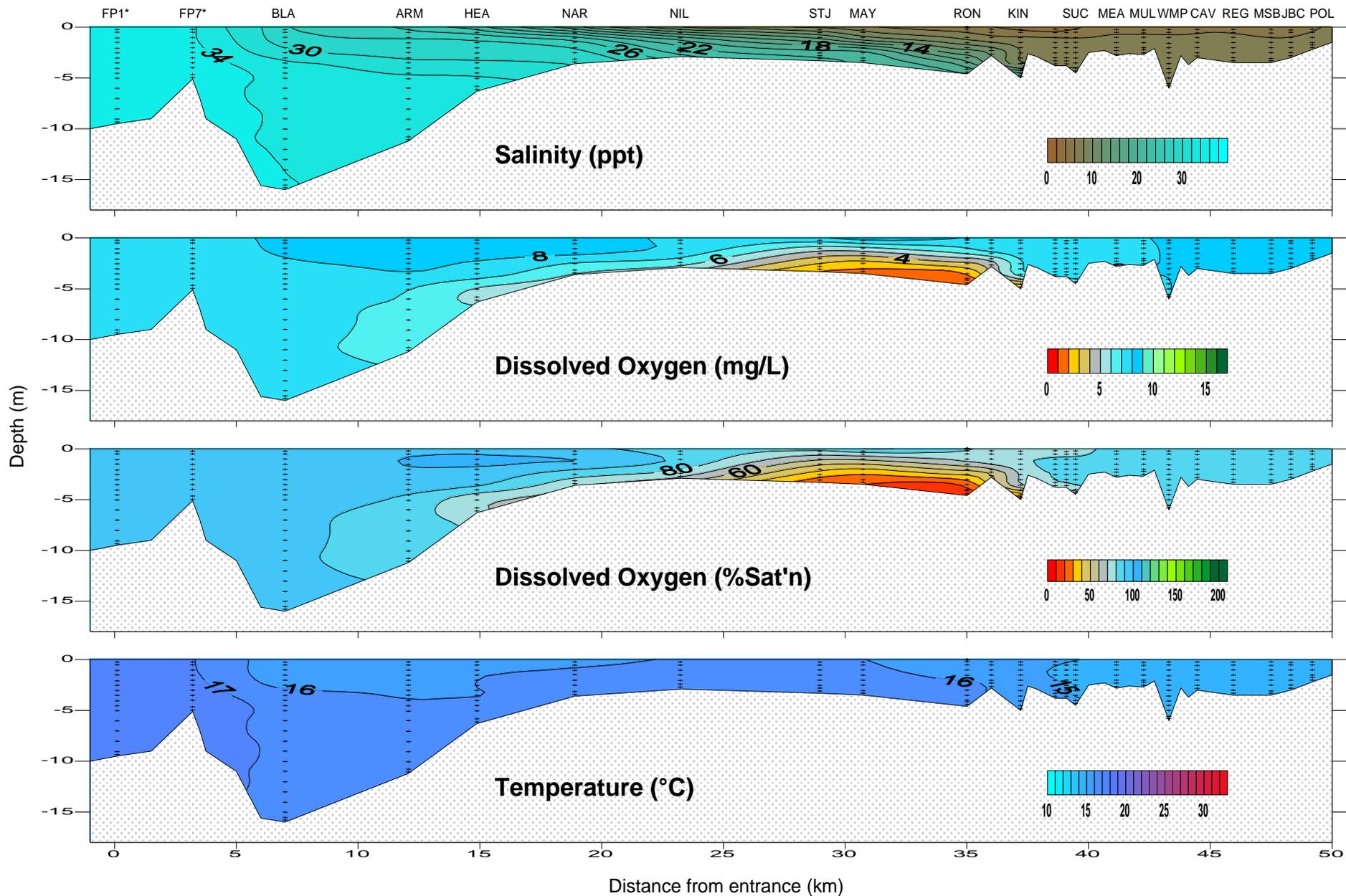
Definitions:

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 - 24th July 2017

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