



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 14th May 2018

Weather & tide conditions: Conditions were fine with up to 30% cloud cover and an east to south-easterly breeze of up to 10 knots. The predicted tides at Guildford were 0.86 m (low tide) at 03:52 and 1.14 m (high tide) at 11:18. Perth recorded 0.4 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational the week prior to sampling, while the Caversham oxygenation plant was operational up to 11/05/18.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was hypersaline to saline throughout. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 18.6 to 19.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline from NIL to MAY and brackish over saline at RON. Surface water was well oxygenated at all sites. Bottom water was oxygenated at NIL and low in oxygen from STJ to RON. Water temperature ranged from 18.7 to 19.9 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish over saline from BWR10 to VIT and brackish from SUC to POL. Surface water was well oxygenated at all sites. Bottom water was oxygenated from VIT to MEAD, low in oxygen from BWR10 to KMO and at MULB FARM, WMP, JBC and POL, and low in oxygen from CAV to MSB. Water temperature ranged from 18.6 to 20.0 °C.

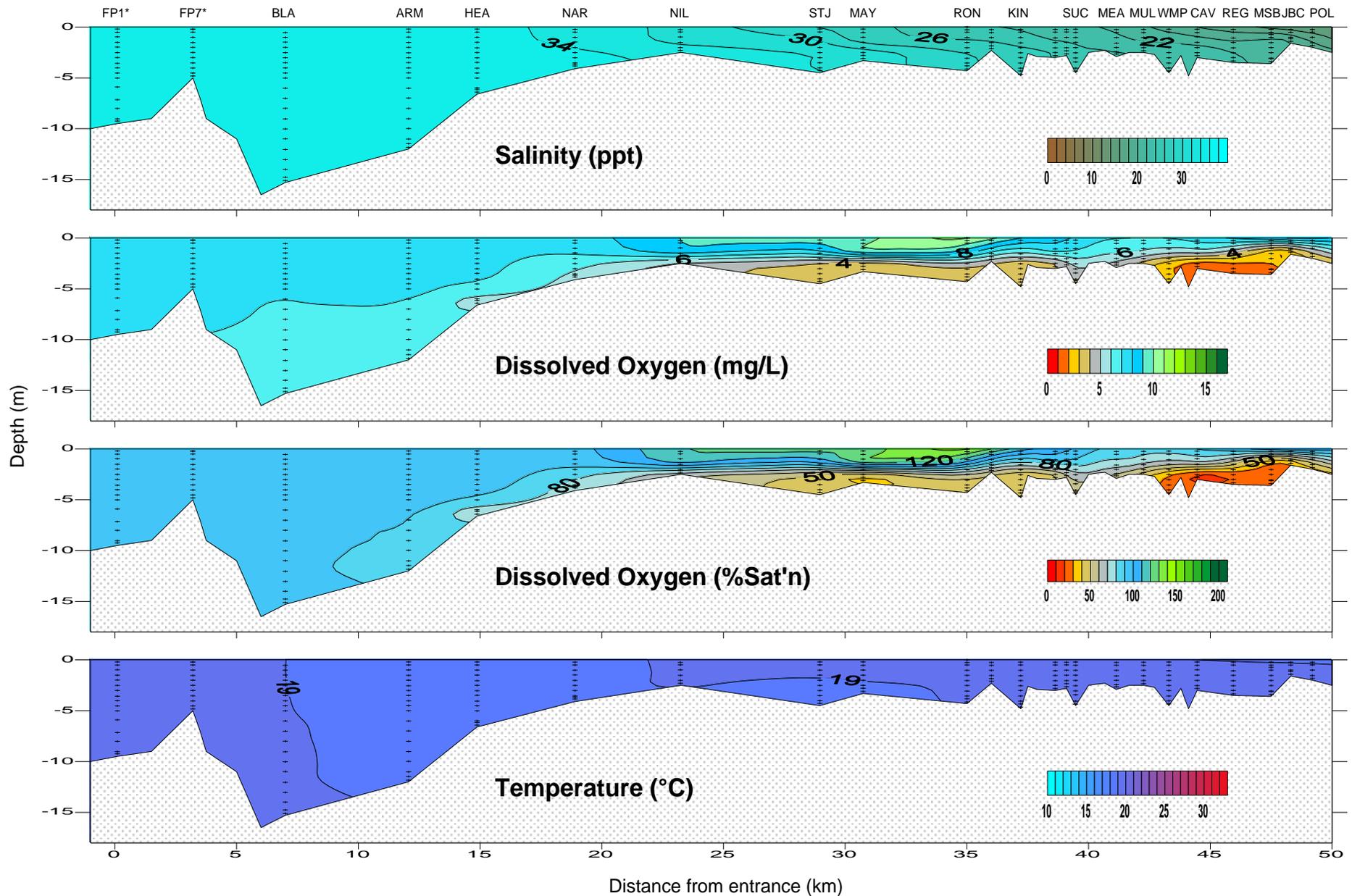
Definitions:

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 - 14th May 2018

Prepared by Water Science Branch, Department of Water and Environmental Regulation



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