



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

by
Water Science Branch, Department of Water

Date: Monday 20th March 2017

Weather & tide conditions: Conditions were fine with up to 2% cloud cover and an east to south easterly breeze of up to 11 knots. The predicted tides at Guildford were 0.64 m (low tide) at 05:32 and 1.01 m (high tide) at 16:18. Perth recorded 5.6 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 (FPI to NAR): The Lower Swan Estuary was saline to hypersaline at all sites, with the exception of brackish surface water at BLA to NAR. Water was well oxygenated to oxygenated, with the exception of low oxygen bottom water at ARM and near anoxic bottom water at HEA and NAR. Water temperature ranged from 20.0 to 23.1 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish throughout all sites. Water was well oxygenated on the surface and bottom water was oxygenated at NIL and low in oxygen at STJ and MAY. Water temperature ranged from 21.1 to 22.0 °C.

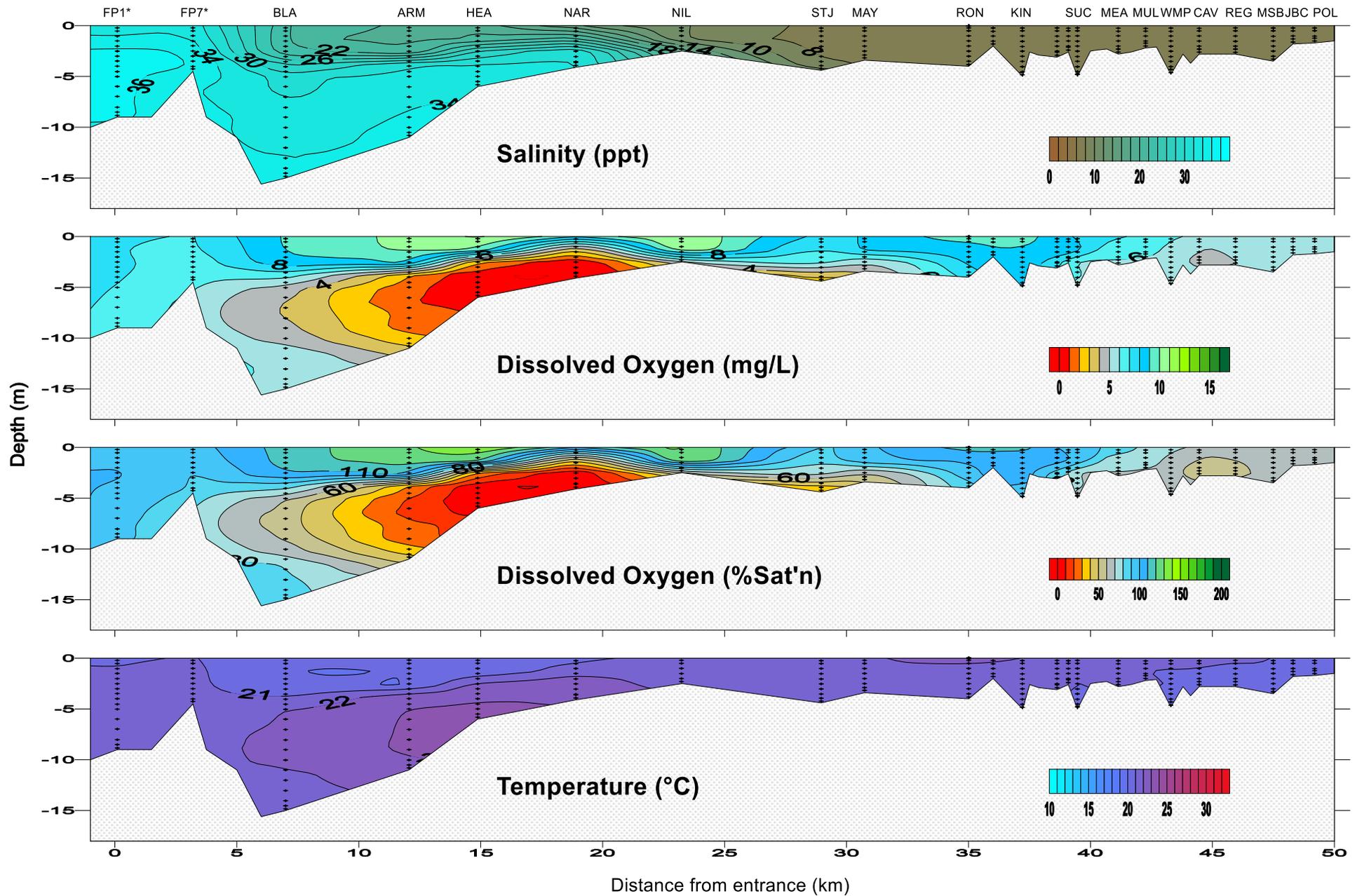
Upper Swan Estuary (RON to POL): The Upper Swan Estuary was brackish and well oxygenated to oxygenated throughout all sites. Water temperature ranged from 20.5 to 22.5 °C.

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 - 20th March 2017



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