



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

**by
Water Science Branch, Department of Water**

Date: Tuesday 14th February 2017

Canning Estuary run: SCB2 (08:19) upstream to CASMID (09:38) on the Trekker. Crew of Andrew Sayce and Mark Bretnall. The YSI 6600 V2 #3 was used and there were no problems with the equipment.

Lower Canning run: ELL (08:37) downstream to KEN (10:30) on the Kepa. Crew of Rebecca Firth and Rainer Kellen. The YSI 6600 V2 #1 was used and there were no problems with the equipment.

Weather & tide conditions: Conditions were fine with up to 98% cloud cover and a west to south westerly breeze of up to 8 knots. The tide was flowing for the duration of the sampling period. Perth recorded 133 mm of rainfall during the week prior to the morning of sampling (Bureau of Meteorology).

Additional samples: Additional samples and profile readings were taken at the Canning oxygenation sites.

Oxygenation: The Nicholson Road and Bacon Street oxygenation plants were operational the week prior to sampling.

Canning Estuary (downstream of Kent St Weir): The Canning Estuary was brackish over saline at SCB2 and SAL, and fresh over brackish at RIV and CASMID. Water was well oxygenated to oxygenated on the surface over hypoxic bottom water at all sites. Water temperature ranged from 21.9 to 25.2 ° C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh throughout all sites. Water was oxygenated on the surface over low oxygen bottom water at all sites, with the exception of well oxygenated to oxygenated bottom water at BAC and BACD500 to KEN. Water temperature ranged from 22.7 to 25.0 ° 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

Canning River Estuary - Physical-chemical Profile - 14 February 2017

