



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

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

Date: Wednesday 4th March 2015

Canning Estuary run: SCB2 (07:50) upstream to SAL (08:32) on the Trailcraft. Crew of Ryan Kam, John Snowden and Digby Veling. The YSI 6600 V2 #3 was used and there were no problems with the equipment. RIV (08:01) on the Trekker. Crew of Mark Bretnall and Nathan Phelps. The YSI 6600 V2 #1 was used and there were no problems with the equipment. CASMID was not sampled as the tide was too low to access the site.

Lower Canning run: ELL (09:00) downstream to NIC (09:41) on the Trekker. Crew of Mark Bretnall and Nathan Phelps. The YSI 6600 V2 #1 was used and there were no problems with the equipment. KEN (09:44) upstream to NICD200 (11:11) on the Trailcraft. Crew of Ryan Kam, John Snowden and Digby Veling. The YSI 6600 V2 #3 was used and there were no problems with the equipment.

Weather & tide conditions: Conditions were clear with 0% cloud cover and a predominantly easterly breeze of up to 8 knots. The tide was flooding for the duration of the sampling period. Perth recorded 0 mm of rainfall during the week prior to the morning of sampling (Bureau of Meteorology).

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

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

Canning Estuary (downstream of Kent St Weir): The Canning Estuary was saline throughout at SAL and RIV, and hypersaline throughout at SCB2. Water was oxygenated at all sampled sites. Water temperature ranged from 22.4 to 24.3 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh throughout. Surface water was well oxygenated from KEN to KS9, and oxygenated at PAC and ELL. Bottom water was well oxygenated from BACD500 to KS9, oxygenated at KEN and PAC, low in oxygen at ELL and hypoxic at KENU300. Water temperature ranged from 22.6 to 25.3 °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

Canning River Estuary - Physical-chemical Profile - 4th March 2015

