

Spencer Gulf Metocean Data Collection Studies

There is a proposal to construct a major desalination facility in the upper reaches of Spencer Gulf to provide process water for the proposed Olympic Dam mine upgrade. BMT WBM have been assisting BHP Billiton with marine modelling studies to understand the implications of brine discharges from this potential facility. Additional port facilities may also be located in Spencer Gulf, which have also required background oceanographic investigations.

In parallel with modelling work to understand the implications of brine discharges and the proposed port facilities, BMT WBM data collection specialists have undertaken several campaigns of detailed metocean data collection. These data collection activities have encompassed the following activities:

- deployment of bottom mounted ADCP current meters for two months long periods on two separate occasions;
- deployment of a detailed meteorological station on a jetty located within Spencer Gulf to provide necessary atmospheric data to support interrogation of the ADCP data and subsequent modelling activities;
- deployment of tide gauges and salinity logging equipment at several locations in the region to provide additional oceanographic data to support modelling investigations;
- use of boat mounted ADCP equipment to collect velocity profile transects in several key locations at critical stages of spring and 'dodge' tides in Spencer Gulf.

Client
BHP Billiton

Date
2007-2008

Services & Expertise Provided

Bottom mounted ADCP deployment for 2 separate 2 month periods;

Met station deployment;

Tide water level and salinity measurements; and

Boat mounted ADCP transects.

