

Coastal Infrastructure Jurien Bay Boat Harbour

Study and Data Collection 2014 – 2017

A major investigative study and data collection program established a scientific approach to improving management of the harbour environment.

Directional wave buoy

Three acoustic wave and current devices (AWACS)

Current meter

Tide gauge

Anemometer (wind station)

Dissolved oxygen monitor



Directional wave buoy

- Measures hourly offshore wave heights and directions
- Processes both sea and swell waves
- Real-time data uploaded on DoT website for public access

AWAC

- Three Acoustic Wave And Current meters deployed
- Measures hourly nearshore wave heights, current speeds and directions
- Improves understanding of changes to waves from offshore to nearshore



Anemometer

- Provides a high resolution record of wind speed and direction
- Improves understanding of local storm events
- Assists with identifying sand and seagrass wrack movement directions in the bay

Dissolved oxygen monitor

- Measures dissolved oxygen, salinity, temperature and water depth
- Assists with identifying condition of water quality within the harbour
- Improves understanding of water quality response to weather events



Tide gauge

- Provides a high resolution record of water level variation over time
- Improves understanding of weather impacts at the harbour
- Real time data provided on the DoT website as storm surge