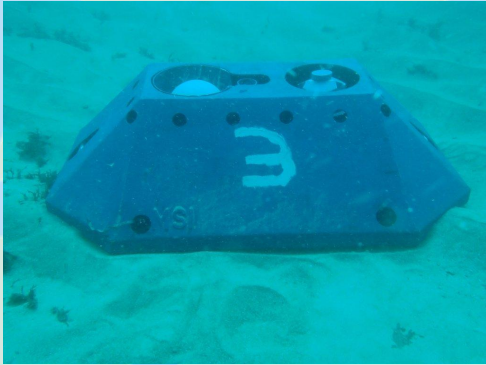


“Where will our knowledge take you?”

## Coastal Dynamics

### Metocean Data Collection



“ **Metocean data collection is a key component of marine and coastal engineering and an essential element in the simulation of marine and coastal behavioural systems.** ”



Accurate project data is imperative for port and harbour developments as well as in environmental assessments, where calibration and validation of numerical hydrodynamic and wave models is critical in providing accurate outcomes. Strategic data collection underpins coastal management decision making, alongside the

monitoring of environmental impacts and shoreline response to development activities. Successful data collection depends heavily on matching appropriate instrumentation with the physical environment and the desired data attributes to be captured.

BMT JFA maintains an experienced in-house modelling and instrument deployment team, this is essential in identifying project specific data requirements relating to numerical model simulations. BMT JFA engineers are experienced in the design and setting up of both oceanographic and coastal data collection campaigns.

Extensive experience in health and safety management for port related diving works enables BMT JFA to comply with all the required HSE regulations where this type of survey work is required. To reduce diving activities for deployments our frames are equipped with acoustic release pop up buoys and acoustic locators.

BMT JFA also works closely with the wider BMT Group and this offers a very broad range of environmental monitoring and

data capture services.

#### Key Capabilities

- Design, implementation and management of metocean data acquisition campaigns
- Analysing data and reporting
- Numerical hydrodynamic and flushing modelling
- Establishment of design conditions based on the measured and historical data
- Provision of wind and wave hindcast services
- Real time data transformation
- Water quality measurement and monitoring

#### Related Projects

- Geraldton Aquaculture
- Sepia Depression Outfall
- James Point Port Development
- Oakajee Port Development
- Albany Port Development

#### Services Offered

- Design, implementation and management of data collection programs
- Provision of health and safety management plan for dive surveys
- Instrument deployment and recovery
- Real time data transmittal via wireless technology
- Post processing of measured data and quality management
- Water quality and coastal processes monitoring
- Temporary and permanent instrument installations for condition monitoring, model calibration and other uses
- Water level monitoring and coastal flood vulnerability mapping