

# Electromagnetic Wave and Tide Monitoring

## Background

NSW Public Works Manly Hydraulics Laboratory (MHL) has developed and commissioned electromagnetic wave and tide systems (EWS) to collect tide and wave data since the early 1980s. The EWS has been used at over 20 sites along the New South Wales coast for both site-specific and ongoing tide and wave data collection.

## Services Provided

The EWS samples the water surface continuously and telemeters information to a shore station to generate real-time tide and wave data.

Since 1995, several port authorities have engaged NSW Public Works MHL to install EWS systems for use in port management.

### EWS clients include:

- NSW Office of Environment & Heritage
- Fremantle Port Authority
- Port Hedland Port Authority
- Pilbara Iron Pty Ltd

## Benefits

The system provides the port authority with real-time wave and tide conditions, thereby optimising cargo tonnage, keel clearance and navigation throughout the port's waterways.

