

Web-based Data and Decision Support Tools

Background

NSW Public Works Manly Hydraulics Laboratory (MHL) operates a network of environmental monitoring stations that collect valuable environmental data for NSW. The data network consists of a state-of-the-art telemetry system, and we are able to provide personalised web links for public and private clients to near real time data to assist in decision making.

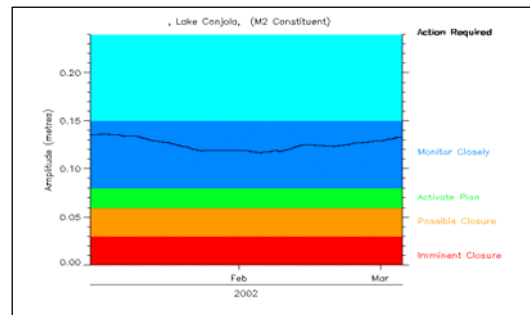
Services Provided

Using the telemetered data NSW Public Works MHL can assist clients by providing decision support tools (DST) based on the following services:

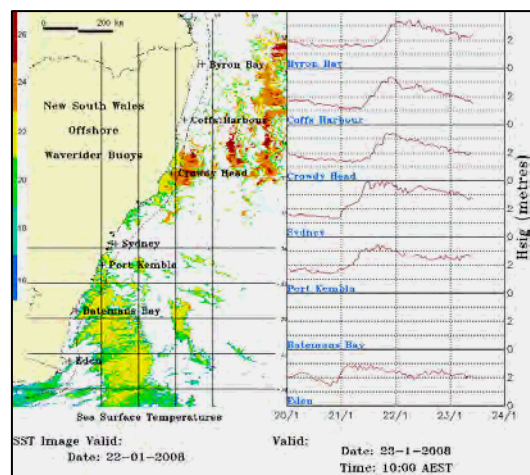
- Web pages displaying current river levels and rainfall can be used to provide flood or flow warning to a wide community
- LagoonWatch – utilises existing environmental conditions in a system, and predicts expected future conditions under a range of conditions
- Entrance Management – provides warning and a staged system for assessing the behaviour of a lake or lagoon entrance, by providing interactive access to the M2 tidal constituent for water levels
- Alarms – SMS or email forwarded to clients warning of extreme water level, rainfall or water quality conditions, commonly used for flood warning or road closures.

Benefits

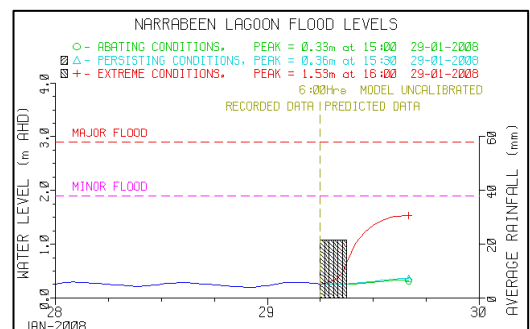
Our public home page provides real-time access to a limited sample of data. On average the data page is accessed over 30,000 times per month and specific data sets are accessed over 8,000 times per month. By adding value to this data we have developed numerous DSTs. Clients include the Office of Environment & Heritage, the State Emergency Service, the Bureau of Meteorology and numerous local councils who depend on the DSTs to help in operational procedures, management decisions, risk assessments, warnings and remedial action which are critical in disaster response situations.



M2 tidal constituent analysis



Wave height and sea surface temperatures



LagoonWatch – predicting conditions for Narrabeen Lagoon