

# Coast and Beach Studies

## Background

NSW Public Works Manly Hydraulics Laboratory (MHL) has extensive experience investigating beach processes and management of the coastal zone. The pressure on the coastal zone from intense competition between alternative uses, increasing population, water pollution, coastal erosion and the destruction of coastal habitats requires an understanding of coastal processes and the application of a broad range of management techniques to solve site-specific issues.

## Services Provided

Investigations are undertaken using physical modelling, numerical modelling, field investigations or often a combination of all three. NSW Public Works MHL has the capabilities to conduct leading edge studies in each of these disciplines, including:

- beach plans of management
- coastal protection works
- stormwater inventories
- environmental planning
- wave setup investigations
- sea level rise
- water quality and pollution
- seawalls and breakwaters
- ocean rock pools
- beach pollution monitoring
- river and lagoon entrance dynamics
- dune stabilisation

## Benefits

These studies address issues including beach fluctuations, shoreline recession, coastal entrance behaviour, sand drift, coastal inundation, ocean overwash, slope instability, stormwater erosion and climate change.

Australia's largest database of wave and tidal data is maintained at the Manly Vale facility. NSW Public Works MHL is capable of installing and maintaining state-of-the-art instrumentation in the coastal zone and offers the full range of remote sensing and diving team operations.

