



**Specialists in the implementation of environmental data collection programmes within the coastal zone, estuaries and inland waterways**

*'Monitoring the aquatic environment for a more sustainable world'*

### About us

**Wallingford Environmental Surveys Ltd** came into being as a consequence from the dissolution of the Field Studies Unit of *\*HR Wallingford Ltd* in December 2005. We are based in the UK at Wallingford in Oxfordshire and though completely independent, continue to retain a unique liaison with our former employer. As a consequence we enjoy unrivalled access to many recognised experts in the field of civil engineering hydraulics and resource management relating to the aquatic environment.

We are able to draw upon over 35 years of practical experience operating within the world of coastal hydrography and environment-related aquatic studies with much of our more unique expertise having been acquired while working on pioneering strategic research programmes throughout the UK.

In addition we have gained considerable overseas experience through participation in a wide variety of aid, research and other projects undertaken in remote locations in developing countries.

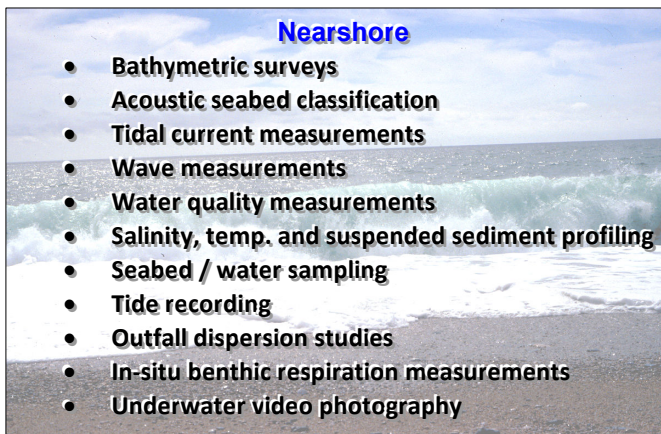
Apart from these attributes we also possess much of the specialised equipment and instrumentation necessary to carry out our work thereby enabling us to offer good value for money to our clients.

*(\*A leading independent company with over 60 years experience in consultancy and research providing advice and support in engineering and environmental hydraulics, and the management of water and the water environment)*

*Our aim is to offer the water industry and related bodies a unique, flexible and competitive environmental data collection service delivered with professionalism and integrity.*

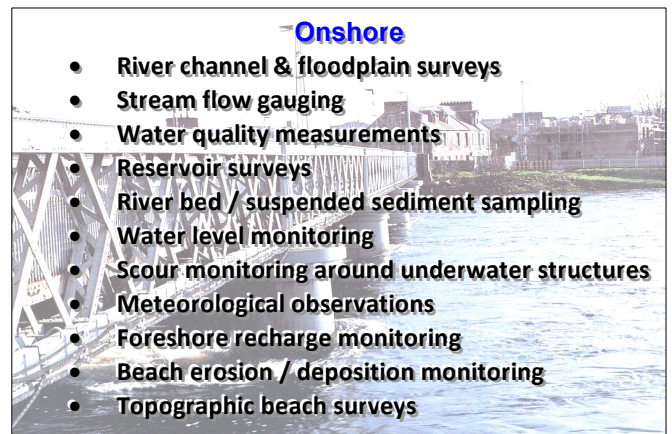
### Core services

**Nearshore**



- Bathymetric surveys
- Acoustic seabed classification
- Tidal current measurements
- Wave measurements
- Water quality measurements
- Salinity, temp. and suspended sediment profiling
- Seabed / water sampling
- Tide recording
- Outfall dispersion studies
- In-situ benthic respiration measurements
- Underwater video photography

**Onshore**



- River channel & floodplain surveys
- Stream flow gauging
- Water quality measurements
- Reservoir surveys
- River bed / suspended sediment sampling
- Water level monitoring
- Scour monitoring around underwater structures
- Meteorological observations
- Foreshore recharge monitoring
- Beach erosion / deposition monitoring
- Topographic beach surveys

### Laboratory analyses

We also have a fully equipped laboratory facility enabling us to carry out certain field instrument calibration procedures. This includes undertaking a range of physical analyses of suspended sediment or sea / river bed material for example for the purposes of establishing the relationship between raw turbidity readings and true suspended sediment concentrations.

Other procedures include: full particle size distribution (PSD) of suspended sediment or sea / river bed material, fall velocity of flocculated sediments, organic carbon determination and bulk density.



## Latest developments

### Client's Representative - East Timor



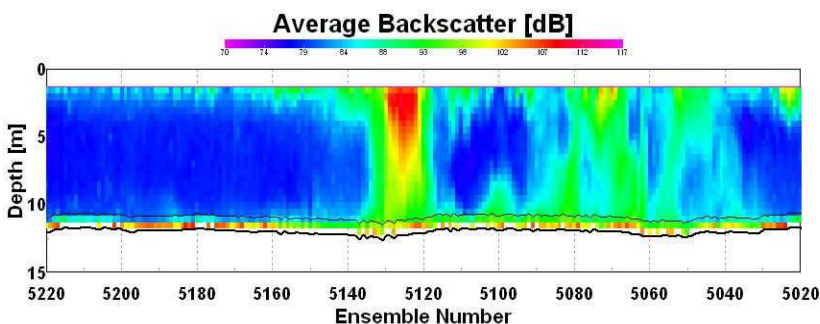
Throughout much of 2011-12 WES acted as Client's Representative on behalf HR Wallingford Ltd in connection with a proposed LNG terminal at Beaco, East Timor (Timor Leste). The role involved overseeing a long-term metocean study at the site which was commissioned to assist with establishing the optimum design criteria for the terminal with regard to prevailing local conditions.

### Radio-controlled moving vessel ADCP measurements



WES has assisted HR Wallingford Ltd in testing a novel use of a system originally developed to measure river flow discharge using an ADCP mounted on a radio-controlled model boat. In this particular application, the latter is commanded via bluetooth communication from an attendant inflatable boat. This enables through-tide transects of current speed and direction profiles to be successfully measured over rapidly drying sand banks for example which would otherwise be extremely difficult if not impossible to achieve.

### 'SediView™' - a software tool under development for measuring suspended sediment concentrations using an ADCP



WES continue to support HR Wallingford Ltd with their ongoing development programme for the 'SediView™' system - a software package that aims to more readily quantify suspended sediment concentrations throughout the water column using the acoustic backscatter of an ADCP. The work involves carrying out CTD & turbidity profiles and water sampling concurrently with the ADCP measurements in order to calibrate the system.

**For further information about any of the services we have to offer, please contact us at:**

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