



## South-east England Strategic Regional Coastal Monitoring Programme



*Project Partner: Isle of Wight Centre for the Coastal Environment,  
Isle of Wight Council, UK*

### Background

The Southeast Strategic Regional Coastal Monitoring Programme provides a consistent approach to coastal process monitoring. It provides information for development of strategic shoreline management plans, coastal defence strategies and operational management of coastal protection and flood defence. Phase 1 = 2001-2006; Phase 2 2007-2012.

The programme is managed on behalf of the Coastal Groups of the South East of England and is funded by DEFRA, in partnership with local authorities of the southeast of England and the Environment Agency.

### Objectives of the project

The primary aim of the project is to provide a standard, repeatable and cost effective method of monitoring the coastal environment between Portland Bill and the Isle of Grain on the North Kent Coast. Historically, coastal monitoring and data management have been carried out on an adhoc basis throughout the region. This has been both financially inefficient and technically inadequate. The new regional initiative provides a coordinated and consistent region-wide approach to data collection that provides economies of scale, a good technical solution and a sound management framework.

### Programme Content

The programme includes:

- Topographic beach surveys
- Hydrographic nearshore seabed surveys
- Aerial photography
- LiDAR
- Hydrodynamic data (waves and tides)

Topographic surveys are carried out with Real Time Kinematic GPS equipment, giving centimetre accuracy. Surveys incorporate the existing Annual Beach Monitoring Survey, coastal protection surveys and structure inspections.

### Funding

The Regional Strategic Monitoring Programme is funded by Defra.

Total Budget = £8.1 million (phase 1 = 2001-2006)  
IWC Budget = £ 155,000 per annum



Inaccessible coastal areas, including soft cliff and saltmarsh areas are surveyed using LiDAR (Light Detection and Ranging). LiDAR is an airborne remote sensing technique flown usually at an altitude of 1000m. It produces swathes of millions of data points from which detailed digital terrain models can be mapped and analysed.

### Data Management

All data collected by the Regional Monitoring Programme are managed and archived at the **Channel Coastal Observatory**, hosted by New Forest District Council and based at Southampton Oceanography Centre.



### Outcome

The project plan presents a long term vision to provide essential information for improved decision making within shoreline management. Issues such as climate change and provision of coastal defences that are sustainable in the long term, are particularly reliant on good quality data. Long-term data sets (several decades) are needed to deliver these benefits. Nevertheless, there are many short term gains already arising from the programme; these include provision of high quality data for scheme design and efficiency savings arising from collaborative working.

### Supporting the Isle of Wight

The Regional Monitoring Programme plays a significant role in helping to protect the Island's natural environment whilst also providing a data source for the local community as well as for consultants and coastal engineers.

