

# Channel Coast News

Issue 12 - April 2004

The newsletter for the Southeast Strategic Regional Coastal Monitoring Programme [www.channelcoast.org](http://www.channelcoast.org)

## Regional News

### South East Coastal Group

Spring profiles are 80% complete, the remaining surveys, at Eastbourne, Dover and Thanet should be completed within the next couple of weeks.

The onset of finer weather has resulted in the hydrographic surveyors preparing to remobilise on the North Kent coastline. Work is scheduled to commence on all other outstanding baselines in the coming months.

The ABMS coverage has been extended to cover the Swale and Medway Estuaries. Additional ground control has been installed and data will be made available in line with the rest of the programme.

### South Downs Coastal Group

Gardline Environmental are currently processing the bathymetric data for the SDCG frontage, with the entire dataset now expected to be delivered during mid April. Meanwhile, Kampsax are on stand-by awaiting favourable tide and weather conditions in order to complete the 1:3000 aerial survey.



Halcrow completed the Beach Management Plan Survey of the entire MU2 & 2A (Pagham) frontages during one week in

March, using their Land-based Laser scanning system. Processing of this data is ongoing. This system can collect high-resolution point data up to 800m in every direction, to an accuracy of 8mm in each 7 minute, 360 degree scan. Numerous scans can then be tied together and into the E1 and E2 control network, in order to produce an accurate 3D representation of the surrounding landscape.

### SCOPAC

Historical profiles from Weymouth BC are now being translated to their new start positions and will shortly be ready for input into SANDS. The Isle of Wight bathymetric survey continues, with completion of the north and western areas of the island, from Cowes to Ventnor.

### Environment Agency (Southern Region)

The LiDAR tenders have been received and tender evaluation has started. Kampsax are on standby to finish the 2003 aerial photography as soon as possible, before starting the 2004 flights. Unfortunately to date the weather has not been suitable for flying.

### Channel Coastal Observatory

The SANDS training day on 6 May is now fully booked and there is one place remaining on the ArcView course on 4 May. Further training days will be arranged if there is demand for them, at the CCO or elsewhere as required.

The [W@ves21](http://www.waves21.com) software, which processes incoming data from the Datawell Directional WaveRiders, is still giving much cause for concern. RS Aqua (the UK suppliers) have given a target date of late April for new software. In the meantime, at Boscombe, Rustington and Folkestone, real-time values of  $H_s$  and  $T_m$  have been replaced on the web displays by  $H_{1/3}$  and  $T_{1/3}$ , which are broadly equivalent.

## What's New?

The 2004 Annual Partners Meeting will be at 1030 on Thursday 30 September at Worthing Leisure Centre.

Real-time tide data from the UK National Tide Gauges at Weymouth, Bournemouth, Portsmouth, Newhaven, Dover and Sheerness are now available (predicted tides will be added shortly) – follow the link from the Channel Coast website.

## Aerial Photography

Along the South Downs Coastal Group frontage, (Coastal Cell 4d) between Selsey Bill and Beachy Head, aerial surveys are being used as an alternative to traditional 'on the ground' surveying methods.



The Annual Beach Monitoring Survey (ABMS – see *Issue 3*) is undertaken in July or August along the entire regional monitoring programme area, at a scale of 1:5000. In addition to the ABMS flights, the SDCG frontage is flown in March and

October, at a scale of 1:3000.

Some advantages of using aerial methods over traditional on-the-ground methods include:

- the ability to fly the entire region over one low tide, effectively creating a snapshot of the beach condition
- the luxury of being able to see what is actually on the beach
- the ability to revisit historic aerial photography, allowing additional profile information to be extracted should a particular area of beach require further analysis

In order for profiles to be extracted from the resulting photographs, photo control points (or points of known location and height) need to appear in each photograph. The Ground Control Network was established early on in the programme and was featured in the July 2003 edition of the *Channel Coast News*. XYZ co-ordinates of the beach can then be taken at specific intervals along the length of pre-defined profiles at known, repeatable locations.

Alternatively a Digital Terrain Model (DTM) at a grid spacing of 0.5m can be taken across an entire frontage or management unit – an option that maybe utilised for the annual Beach Management Plan surveys in the SDCG region.



*Offshore breakwaters at Elmer, West Sussex*

As of 2004, all aerial surveys along the SDCG frontage will be flown at a scale of 1:3000, in order to obtain improvements in accuracy which will, in turn, provide the SDCG with the option of undertaking Beach Management Plan surveys simultaneously in July/August. It is anticipated that cost savings could be made by operating this way.

Aerial surveys are ideal for the SDCG frontage because it is a relatively linear coastline with few coves or inlets. However, the method is less suited to complex coastlines and, accordingly, other areas are surveyed using traditional land survey methods in preference to low level aerial surveys.

## Contacts

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