

# Channel Coast News

Issue 2 - May 2003

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

## Regional News

### South East Coastal Group

Topographic surveys for the Canterbury and Shepway districts are ongoing. The return date for tenders for remaining topographic surveys is 23 May, with surveys commencing shortly after award of the contract. Tender packages for hydrographic surveys will go out shortly; the process has been delayed as a result of collating all available data and ensuring the specification meets the requirements of other projects, where possible.

Canterbury would like to convey their thanks for historic data provided to the project by local authorities and other partners. The data have been processed and will be available on the project website by the summer. Historic profiles have also been used to populate the SANDS databases.

### South Downs Coastal Group

Low level contact photographs of the SDCG frontage have now been received from the Environment Agency and photogrammetric work to extract the agreed profile levels from the contact photos is underway. Copies of the contact prints for the appropriate administrative frontages are available to each authority upon request (please email your area representative).

The Hydrographic Survey contract for the SDCG frontage between Pagham Harbour and Birling Gap will go out to a select list of 6 tenderers during May, with the intention of surveys starting by late June.

A special meeting has been arranged for 12th May for all SDCG Project Partners to discuss the project and identify individual authorities' reporting and data requirements.

### SCOPAC

Better weather and longer daylight hours have enabled progress to be made on the backlog of baseline surveys, in addition to the start of the

spring profiles; the Bournemouth frontage was completed during Holy Week, although here the fine weather proved a handicap, bringing out the crowds onto the beach.

Survey staff have received training in the use of All Terrain Vehicles, in anticipation of using these vehicles at suitable sites, to speed up surveying. Ryde Sands will be the "test site" for the ATV later this month.

### Environment Agency (Southern Region)

A full set of 2001 digital orthophotos for Kent, Sussex, Hampshire and IOW has been delivered by BKS Surveys Ltd. Orthorectification of existing photography for Dorset is being undertaken by Cartographical Surveys using EA LiDAR data. Once the Dorset orthos are complete, these five sets will provide continuous coverage along the project coastline (see this month's feature article on the production of digital aerial ortho-photography).

E1 and E2 benchmarks and photo-control points have now been established and will be used for the next aerial photography contract. The new Ground Control Network is complete and these points are currently being integrated with the EA's fluvial benchmarks to further improve GPS benchmark coverage across the region. This information is available from the Environment Agency.

A Project Agreement has been circulated for comment and is due to be signed off by all Lead Partners by mid May.

### Channel Coastal Observatory

Near real-time wave data from the WaveRider buoy at Milford-on-Sea are now displayed on the website.

Halcrow's will conduct SANDS training days for SCOPAC and SDCG project partners, to be held at the CCO in June. A training day for SECG will be arranged later.

## Digital aerial orthophoto production

Historically, aerial photographs have been produced for both the EA and Local Authorities across the region. Although the photographs are valuable in their own right, they are difficult to use for measurement or other analytical purposes.

In order to use aerial photographs for most accurate mapping it is necessary to ortho-rectify the image. Ortho-photographs are produced from high-resolution scans of the photography. The ortho-rectification process corrects the scanned image for scale distortions caused by aircraft movement and ground terrain distortion. The image is ortho-rectified using photogrammetric or LIDAR with OS Land-Line data. The resulting image is stored with a coordinate system and can subsequently be combined with other mapping data for analytical and interpretive work.



The final set of images for the stretch from Portland Bill to Lulworth Cove will be completed in May. Orthorectification of images of the harbours is planned for 2003/04. The images are available in tif and ecw format and can be used within any GIS package or CAD systems. Map tiles have been prepared in 500m squares and have a ground resolution of 20 cm. Files



Detail of Sandbanks

are currently available on request by CD, or by FTP link. Please contact your area representative in the first instance. Images should be freely available via the project website by mid-summer. All users of SANDS will be provided with a geo-referenced aerial photo backdrop; these are being prepared at present. If you are expecting SANDS to be supplied through the project, the image layers will be attached on delivery.

At large scales (1:500) the images make ideal backdrops for scheme development or demonstration of problems. Hardcopy images can be produced for project partners on request. The geo-referenced images enable interpretation of beach profile data in context with local geomorphology or coastal structures.

Predictive techniques have recently been developed for assessment of coastal cliff recession; this can assist with benefit cost analysis for scheme development (see also the case studies section of the website).

Please contact the EA representative for further information on contract management, or your area representative for technical advice.

## Contacts

If you have any queries about the Strategic Regional Coastal Monitoring Programme, or would like further information, please contact your area representative:

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