

### Anglian Coastal Monitoring Programme Update

January 2018

The Anglian Coastal Monitoring (ACM) project is in Phase IX (2016 – 2021) of operation, boasting over 25 years of continuous coastal monitoring data.

As the ACM Programme bade farewell to its long standing Project Manager Philip Staley last year, the responsibilities of the programme have been shared amongst members of Geomatics: Becky Stanley, Chris Smith and David Welsh working full time for the ACM, technically supported by Philip Muggeridge (Geomatics Technical Specialist) and overseen by Jo Gibson (Geomatics Business Manager) and Alison Matthews (Geomatics Manager).

For general data enquiries, data and analysis requests, please contact us at:

ACM@environment-agency.gov.uk

#### **Monitoring Group**

The Anglian Coastal Monitoring Group are next meeting on the 20<sup>th</sup> February 2018 at the Boston Barrier Community Hub. The minutes from the previous meeting on October 3<sup>rd</sup> 2017 are available from the above ACM email.

#### **Data Access and Management**

All data collected for the ACM is freely available for public download and use. The <a href="CCO">CCO</a> website currently hosts the ACM's archive of aerial photography and LIDAR, and in the near future will host the full archive of topographic data. All ACM data is also available via the <a href="data.gov">data.gov</a> website.

We are moving towards the use of SANDS software to manage our topographic data archive. The ability to distribute the full SANDS database to partners with access to the software and thus undertaken their own basic analysis in the software, will free up more time for the ACM team to undertake more in-depth analyses.

#### **Phase IX Survey Plan**

The survey plan is now available online via this <u>link</u>, or through the <u>CCO</u> website under Anglia and the Survey Schedule drop down, a summary of which is provided in Table 1. The



information symbol on the survey plan provides details of how to interactively view and query the plan for example searching by monitoring type or by year or season.

We are also hoping to incorporate all historical survey extents into the online survey plan in the near future, allowing the easy identification of all previously captured and planned monitoring activities for a particular area.

Table 1: Summary of ACM Phase IX Monitoring

	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Lidar	Baseline	Coastal Sites	Coastal Sites	Coastal Strip including Estuaries & habitats	Coastal Sites
Aerial photography	Baseline	Oblique photography only	Coastal Strip	Coastal Strip	Coastal Strip
Hydrographic surveys		Mablethorpe, Wainfleet Road (Gibraltar Bank) & Sheringham	MBES of various priority 1 sites not previously surveyed. Some SBES surveys.		
Topographic survey	Continuation of current transect & ATV surveys				
Hydrodynamic monitoring	Lowestoft Buoy Deployment	Annual maintena	Annual maintenance of six DWRS and meteorological stations.		
Ecological monitoring		Habitat mapping of dynamic BAP species. Alde/Ore fragmentation mapping			

#### **Engagement**

Becky and Chris are undertaking a series of face-to-face meetings with Local Authority (LA) and EA partners over the coming months to encourage engagement — a point of concern at the October monitoring group meeting. The visits will foster a better understanding of current and future projects in each LA area, helping to inform future monitoring and further tailor our analytical work.



### **Summary of Programme Progress**

Service	Progress	Successes/problems/lessons learnt
Lidar	<ul> <li>Winter 2017/2018 data capture is now complete.</li> <li>Going forward, profiles along each topographic transect at 50m spacing, will automatically be extracted from the lidar.</li> </ul>	
Aerial photography	<ul> <li>Oblique photography for the entire coastline captured in summer 2017.</li> <li>Distributed to LA partners and other interest groups.</li> <li>Soon to be available on CCO data portal.</li> </ul>	• The imagery captured by Geomatics was true oblique photography i.e. at 90 ° to the coastline - this had not been expected by some of the partners. Thorough consultation with examples will be undertaken before any future oblique imagery.
Hydrographics	<ul> <li>Multibeam bathymetry data has been captured at Mablethorpe, Wainfleet Road (Gibraltar point) and Sheringham.</li> <li>Geomatics met with the MCA earlier in the quarter to discuss how our bathy programmes link together and potential for collaboration.</li> </ul>	
Hydrodynamics	<ul> <li>All buoys are fully operational with routine service and maintenance completed as planned.</li> <li>Existing hydrodynamics contract expires on 31<sup>st</sup> March 2018 - we are currently undertaking a procurement exercise to let a new 2 year contract</li> </ul>	<ul> <li>Real-time stream of wave buoy data to the CCO portal is currently intermittent, we are working with our contractors to improve this service.</li> <li>All wave data is still available live from the wave net website <a href="http://wavenet.cefas.co.uk/Map">http://wavenet.cefas.co.uk/Map</a>.</li> </ul>
Topographic	<ul> <li>Winter 2017/2018 capture has started in December.</li> <li>We are working towards making all topographic data available via the CCO website.</li> </ul>	<ul> <li>Data formatting issues are impeding the progress of getting data onto the CCO portal. We are working in collaboration with the CCO to resolve these issues. This links with the topographic data review which</li> </ul>



	<ul> <li>All data is currently available via data.gov.</li> <li>A review of the frequency and density of data collection is currently underway to ensure efficiency, consultation with the LA's to be incorporated as part of the engagement visits. The review will include an updated QC procedure.</li> <li>Repeat laser scan survey of Hunstanton Cliff completed. Al Rumson is undertaking a comparative analysis of this with the 2012 data.</li> </ul>	<ul> <li>is proving a time consuming project but will free up more time in the future.</li> <li>We have successfully started using SANDS software to store our topo data – going forward we hope to use the software to analyse and distribute the data too.</li> </ul>
Habitat mapping	<ul> <li>Baseline photography captured in summer 2016 is currently being used to generate an updated habitat map. Work is progressing well and is scheduled to be completed by March 2018.</li> </ul>	

#### **Additional contact information:**

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