



North West Regional Monitoring

**JULY 2013
ISSUE 1**



NORTH WEST COAST NEWS

Star of Hope—Ainsdale Beach. Picture Viv Pearson

NORTH WEST REGIONAL MONITORING PROGRAMME NEWSLETTER

Introduction

Welcome to the first twice yearly newsletter for the North West Regional Monitoring Programme.

These newsletters will:

- provide an update on progress of the programme,
- Spotlight specific monitoring and
- provide an outline programme of upcoming monitoring and reporting

What is the North West Regional monitoring programme?

The programme is funded by the Environment Agency to collect and analyse coastal data to inform sustainable coastal defence management. It aims to deliver cost effective and consistent monitoring of coastal processes and shoreline responses. A risk based approach is taken, with emphasis placed on areas at a higher risk of flooding or coastal erosion. The Department of Environment Food and Rural Affairs (DEFRA) Flood and Coastal Erosion Risk Management objectives are also delivered by this programme.

This monitoring ensures that good

quality data is collected and securely stored, captured to national specifications and quality controlled. The programme aspires to make all data collected freely available through an open government licence available online at www.channelcoast.org

Who manages the programme?

The programme is delivered through the North West and North Wales Coastal Group (www.mycoastline.org), with Sefton Council undertaking the coordinating role. A steering group guides the operational activities of the programme. Group members include Local Authorities, the Environment Agency, Universities and Natural England.

The programme maintains strong links with colleagues in North Wales and seeks opportunities to collaborate on projects where possible.

Contacts

- If you would like to know more about the North West Programme please contact: coastaldefence@sefton.gov.uk
- For the data web portal visit: www.channelcoast.org
- North West and North Wales Coastal Group visit: www.mycoastline.org



HIGHLIGHTS IN THIS ISSUE

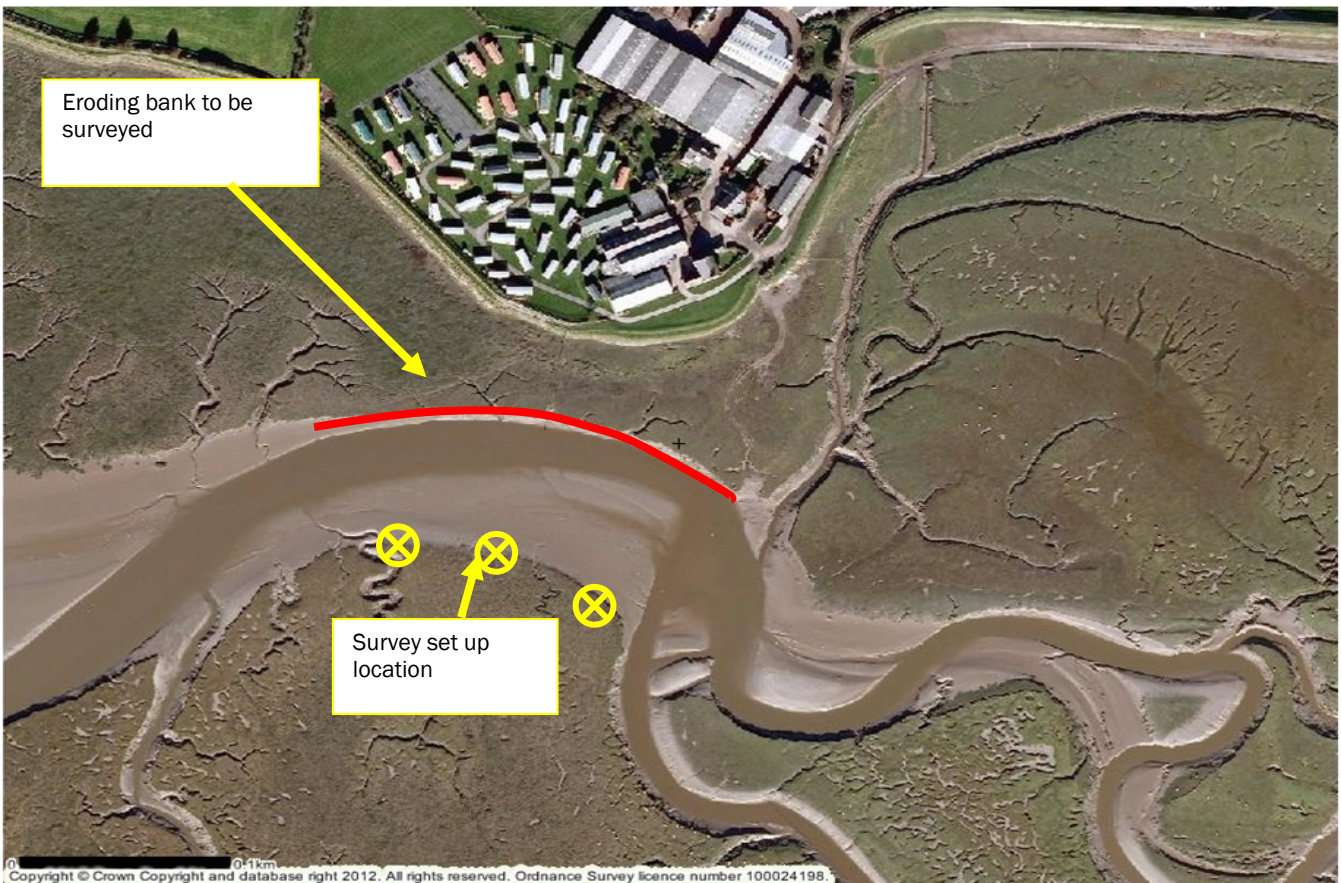
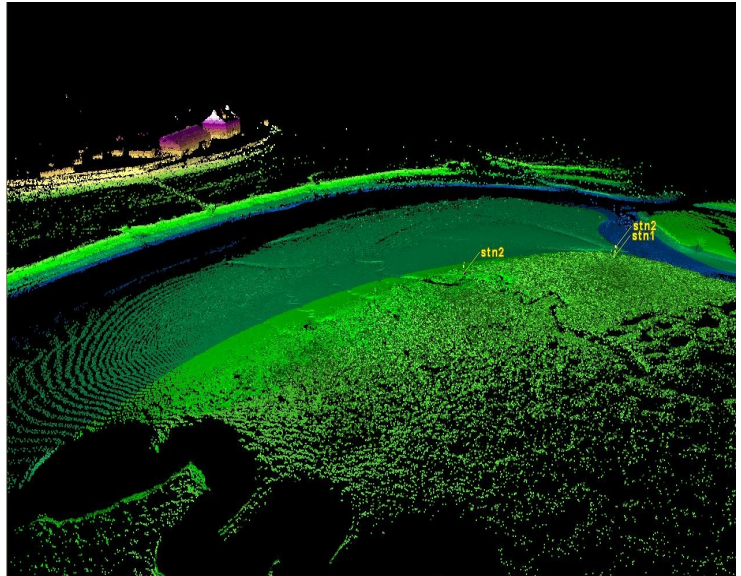
- North West and North Wales Coastal Group Inaugural Annual Conference: 15 & 16th July, see page 4 for more details
- New technologies—Laser scanning, wave monitoring and LIDAR
- Upcoming monitoring, data and reports



In 2012 the programme purchased a Leica C10 laser scanner for use by all the regional partners for high definition surveying (HDS). The C10 is a compact, all in one scan station combining scanner, battery, controller, data storage and video camera. The laser scanner has a range of up to 300m and captures up to 50,000 points a second and can scan 360° full dome scans in high, medium or low resolutions. The laser scanner is held by Sefton Council and can be used by all the partners in the region, authorities wishing to use it can book it out by contacting Sefton Council's FCERM team. Sefton Council can provide practical training in your area and support you with a step by step user guide to enable you to use the scanner and analyse the data for your own projects.

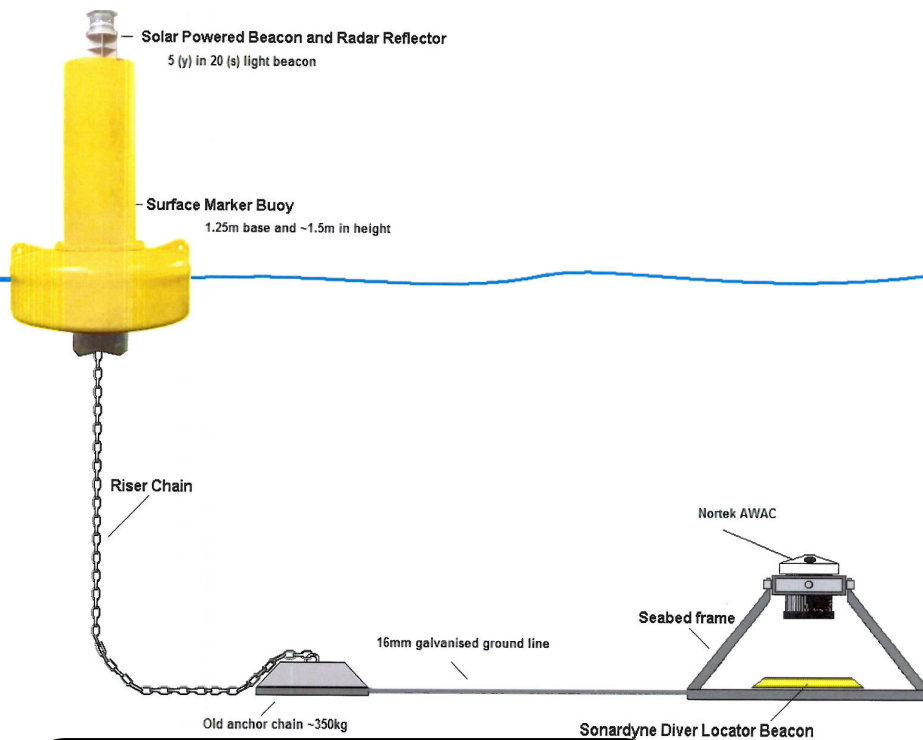
TIDAL COCKER LASER SCAN

On the 5th April 2013, Sefton Council, the Environment Agency and Lancaster City Council staff got together to conduct a laser scan of an eroding outer tidal channel in an area of extensive salt marsh on a bank of the River Cocker. The Results provide accurate baseline information against which future change can be monitored. The survey forms part of a suite of enhanced monitoring at this location to inform analysis of channel movement and future management approaches at this location.



WAVE MONITORING

NEW AWACS FOR THE NORTH WEST COAST



The programme has successfully trialed two Acoustic Wave and Current (AWAC) recorders since 2011, one deployed off Formby Point and one off Blackpool. This equipment records waves, currents, temperature and water pressure throughout the tidal cycle. The data collected can be used in a variety of investigations for example improving scheme design for wave overtopping and to assist in the definition of sediment dynamics.

The AWACS sit in a frame on the seabed and send acoustic beams upwards and record the response as a measurement. A surface marker buoy allows for easy recovery. Following these successful trials an additional three sites will be

established at St Bees Head, Cumbria, by August 2013. They are being deployed to investigate the sediment drift divide that occurs at St Bees and establish a baseline current and wave spectra. The AWACS are serviced every three months to change batteries, remove bio-fouling and download data.

WAVE BUOYS

Two Waverider buoys are deployed in the Morecambe Bay area, one in the mouth of the bay and another further out to sea. These buoys record wave spectra such as height, period and direction. Unlike the AWACS they transmit live data feeds to the national web portal www.channelcoast.org

NEW L2 DEEP WATER RIVER CONTAINER TERMINAL

The new L2 facility will be a 42 acre river terminal which can accommodate vessels that are 4 times bigger than the biggest vessels currently using the Port of Liverpool. The new 854 metre long quay will be able to simultaneously berth two of the world's largest ships, capable of carrying up to 13,500 containers at a time. The only other ports capable of handling the world's biggest ships are all in the south or east of the country. The project will create a new quay wall from the south west corner of the Royal Seaforth Dock and the formation of a berthing pocket on the seaward side of the wall. It is estimated that 1 million m³ of material will be removed from the Mersey by dredging. The new container terminal facility is scheduled to be completed in 2014. A waverider will be installed to collect baseline data and monitor the reflection of waves south of L2's new sea wall, which will be especially important to Wirral coastline.



L2 will be the only one of its kind planned for the NW coast and will be one of the UK's most modern container terminals.

COASTAL CONFERENCE 15TH & 16TH JULY

The North West & North Wales Coastal Group, working with the Northern and Liverpool Bay Coastal Sub-groups and the North West Coastal Forum, is pleased to announce the Coastal Groups' first annual conference.

The event is aimed at Coastal Group members and members of the Regional Flood and Coastal Committee and will explore issues around delivering the Shoreline Management Plan.

The conference will include sessions exploring the regional and national importance of coastal flooding and erosion risk management, understanding coastal risk and schemes being delivered in the North West and North Wales area. There will be a series of short workshops looking at Shoreline Management Plan delivery, information needs and partnerships and funding.

The conference concludes with a series of site visits on the Fylde Peninsula. A conference dinner will be held on the evening of 15th July.

Exhibition space will be available on a first come first served basis. Charges will apply, please contact Caroline Salthouse for further details on:

0151 934 2969 or
caroline.salthouse@sefton.gov.uk

To register your interest in attending please visit the North West Coastal Forum's website www.nwcoastalforum.org.uk

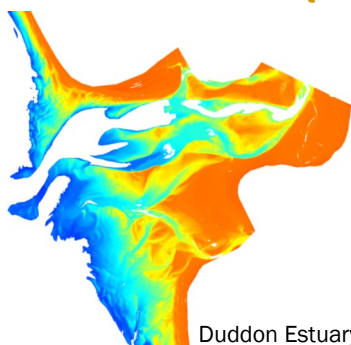
Full conference including site visits and conference dinner on evening of 15th

Free	North West and North Wales, Northern and Liverpool Bay Coastal Group members and Regional Flood and Coastal Committee members
£60	Non-profit Non Governmental Organisations
£90	Public sector
£120	Private sector

There is no reduction available for attendance on one day only. A reduction is available if you do not wish to attend the conference dinner.



RECENT DATA ACQUISITIONS



Duddon Estuary

- **Full colour and false colour infra red vertical aerial photography**—imagery has been captured that covers the coastline above the high water mark at 10cm for the north west coast. 20cm imager for the intertidal has partially been captured
- **Lidar**—The programme was completed in early 2013 with some datasets behind schedule due to adverse weather conditions. 1m data has been collect above the high water mark and 2m data for the intertidal areas.

Where possible data will be made available through www.channelcoast.org

UPCOMING MONITORING AND REPORTING

Over the next few months the programme will be arranging:

- Ecological mapping of the North West using the aerial photography captured in 2012/13 and lidar to map coastal BAP habitat extents.
- LIDAR - The winter flying programme will cover Fylde Peninsular, Sefton and Wirral.
- Bathymetric survey of Ribble, Lune and Solway (2013) and hydrographic extensions across North West (2014)
- Beach topographic surveys across the North West, Autumn 2013.

If you are interested in collaborating on these surveys please contact us

PRODUCED BY SEFTON
COUNCIL ON BEHALF OF NORTH
WEST AND NORTH WALES
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