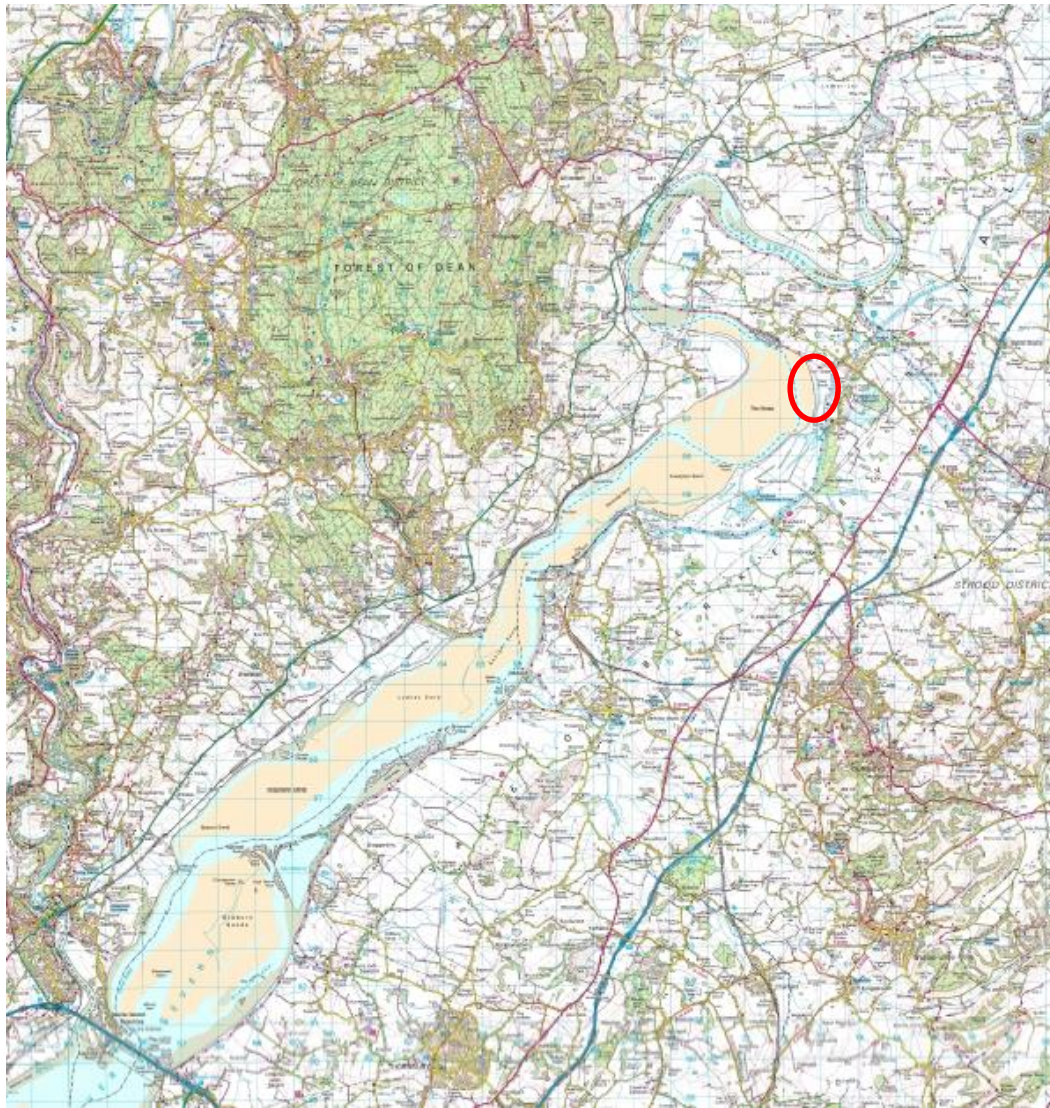


Local monitoring: A valuable yet underused resource



Rose Hewlett
Advance the Line





**The study area forms most of 'SHAR 6', as defined in the
*Severn Estuary Shoreline Management Plan Review.***

The Severn Lands: Designations and Management

- **Ramsar site (wetlands)**
- **Special Protection Area (birds)**
- **Special Area of Conservation (habitats excluding birds)**
- **Site of Special Scientific Interest**

The Severn Lands: Designations and Management

- Ramsar site (wetlands)
- Special Protection Area (birds)
- Special Area of Conservation (habitats excluding birds)
- Site of Special Scientific Interest
- Managed Realignment since 1993
- Countryside Stewardship from 1993
- Arable Reversion from 2003
- Higher Level Stewardship from 2010

Advance the Line

Gauging the tide



A critical review of the current level of methods used to assess and manage flood risk in the Upper Severn Estuary

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13th January 2013

**Our report recommended
*(inter alia):***

- **Inclusion of this area in
the Southwest Strategic
Regional Coastal
Monitoring Programme**

Outcome



The area from Sharpness/Lydney to Maisemore has been included in the Southwest Strategic Regional Coastal Monitoring Programme since 2014 for the aerial components of photography and LiDAR.



Advance the Line

Gauging the tide



A critical review of the current level of methods used to assess and manage flood risk in the Upper Severn Estuary

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13th January 2013

Our report also recommended (*inter alia*):

- **Monitoring of habitat and erosion/accretion by the local community using agreed protocols**

Outcomes



Cochlearia anglica
English Scurvy-grass



Bittern

Formal protocols were agreed in 2014 with the Environment Agency and Natural England. We regularly monitor:

- Erosion/accretion
- Plants
- Birds

and produce Annual Reports.



Bird surveys

October 2014-September 2015

- **107 species (of which only eight species recorded every month)**

- **6,628 birds**

- **Several rarities**

- **Valuable area for wetland birds, but fewer wildfowl than expected – possibly a knock-on effect from the recent enhancement of habitat at Northwick warth**



Dark-bellied Brent Goose

Outcome



The monthly bird surveys identified a need to improve an important reed bed habitat.

Natural England liaised with the landowner and the birders before giving consent for works and revised management conditions.



Botanical surveys

The original outline of objectives and protocols set out to answer three questions:

- Are the species mentioned in the Higher Level Stewardship agreement present in each field?
- What are the changes in the identity of species over time?
- What is the nature and extent of colonisation of the new deposits?



Alopecurus bulbosus
Bulbous Foxtail

Outcomes

Trifolium squamosum
Sea Clover



Rarities recorded in June 2015 include:

- **Sea Clover - on the UK National Scarcity list**
- **Hairy Buttercup - never before recorded**
- **on the east side of the Severn**
- **Corn Parsley - first recording for West Gloucestershire**
- **Distant Sedge - first recording for West Gloucestershire**
- **Bulbous Foxtail - its reaches have become**
- **more extensive on Saul warth**

Results from the botanical surveys are being submitted to the Gloucestershire Centre for Environmental Records.

Natural England have used them to inform a larger survey of the Severn estuary.



Recording erosion and accretion



Note the size of the section of warth just lost

- Regular surveys since 2011
- Formal protocol in place since November 2014
- Quarterly measurements at fixed monitoring points, photographs and field notes
- Measurements are as accurate as possible and indicate trends

Outcomes



28 May 2016



28 August 2016

**At the next monitoring point,
275m to the north,
33m has been lost in four years.**

**Almost 3 hectares along the outer
warth has been lost since 2010.**

**This rapid erosion has yet to be
picked up by Ordnance Survey.**

**This underlines the importance of
being part of the Southwest
Strategic Regional Coastal
Monitoring Programme.**

Outcomes

Advance the Line's monitoring suggests that a key section of the higher outer warth will soon be lost.

The inner warth is 0.75m lower meaning that even the medium tides will regularly reach the canal bank.

Images taken in January and February 2014 on very high spring tides.



The canal bank acts as Frampton's tidal flood defence.

Following Advance the Line's suggestion, the Environment Agency are investigating the ability of the canal bank to withstand regular tidal action.



Good news!

7 February 2013

From Richard Benyon MP

Minister for Natural Environment and Fisheries

Dear Mrs Hewlett

Thank you for your email of 22 January and the copy of your Gauging the Tide report. I understand that the Environment Agency has also received a copy of the report and it will be discussing it with you when it has fully considered its contents.

The Environment Agency has informed me that it is looking at how best to extend monitoring into the upper Estuary. In doing this it welcomes and encourages the involvement of the community in collecting data and is looking at how this can be incorporated into its monitoring regime.

Yours sincerely

Richard Benyon

**The Environment Agency and Natural England now value and use
Advance the Line's data and local knowledge.**



Local monitoring: A valuable yet underused resource

The Severn Lands have been in managed realignment for 23 years and are proof that long-term monitoring is essential to flood risk and habitat management.

At Steart Marshes the newly created managed realignment scheme is being monitored by Bridgwater College.



**Monitoring at
Alvington/Plusterwine:
Who? What? How long for?**

**Can more local monitoring be
undertaken elsewhere?**

