

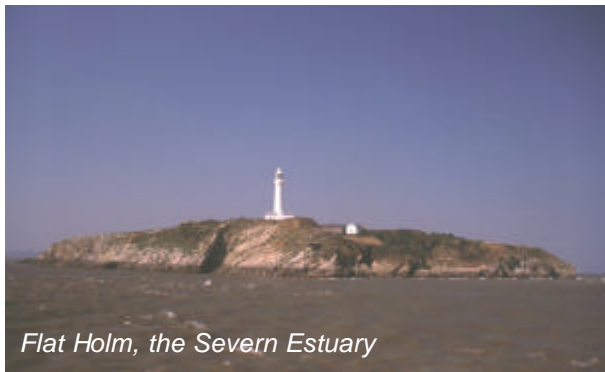


ATKINS

Severn Estuary Shoreline Management Plan Review (SMP2)

The Severn Estuary is a complex and challenging environment to manage; politically, environmentally and socially. The coastline has many uses, including ports, towns and extensive industrial developments alongside important agricultural and conservation areas. Ten local authorities and two national administrations share the shoreline.

The SMP2 will provide a large-scale assessment of the risks associated with coastal processes. This assessment will provide the evidence that helps to inform the development of present and long term frameworks. Outcome policies will be designed to reduce the risks to people, developments and historic and natural environments, in a sustainable manner.



Flat Holm, the Severn Estuary

The first Severn Estuary SMP was completed in 2000. Since its publication, significant progress has been made in understanding and mapping the coastal processes around the 6,000 kilometres of coast in England and Wales. It is now time to update the SMP, to take account of this new information and new guidance, to better manage our coasts.

The first SMP covered a 50 year time period, the SMP2 will consider the management of the coastline over a 100-year timescale. This new approach is necessary to plan for a sustainable long term future for the Severn Estuary.

The SMP2 covers the coastline from Haw Bridge near Gloucester, to Lavernock Point on the Welsh coast, and to Anchor Head, north of Weston Bay, on the English coast (see figure overleaf).

The Coastline

Renowned for having one of the highest tidal ranges in the world, the influence of the sea is dominant in the lower reaches of the Severn Estuary, while the influence of the rivers is greater immediately north of Sharpness.

The effects of the sea and the rivers in the Estuary create flooding and erosion risks that pose hazards to shoreline developments and the environment. New and creative management solutions are needed to manage these hazards especially as climate change will affect flood frequency and severity as well as sea level rise.

Management policies aim to achieve a balance between the desire to protect property and livelihoods, whilst maintaining the shape of the natural coast and the habitats and landscapes.

Severn Estuary Flood Risk Management Strategy (FRMS)

The production of the SMP2 coincides with the creation of a Severn Estuary Flood Risk Management Strategy (FRMS). The Strategy takes a more detailed look at the future management of flood defence structures and how some of the flood risk policies proposed in the SMP will be implemented.

As the SMP2 will guide the scope and direction of the FRM Strategy it is important that these work together.

How can I get involved?

The opinions and views of stakeholders are important in developing an effective SMP. We are keen to hear from interested parties at an early stage.

Things to consider:

- *What coastal features benefit the community, economy or environment?*
- *Do you know of any future potential developments on the coast that would affect decisions on how the coastline is managed?*

If you are interested in getting involved, or for more information please visit:

www.severnestuary.net/secg

When will the plan be completed?

Work started on the Severn Estuary SMP2 Review in October 2008. There will be opportunity to contribute towards the production of the SMP throughout 2009. A three-month public consultation is scheduled for late 2009.

The published document is expected to be available in April 2010.



Newport and the River Usk

The River Usk is bound by extensively developed land and open spaces with flood protection. Much of the city is in a flood risk zone and protected extensively by flood defences.



Chepstow and the River Wye

The River Wye valley is designated as an Area of Outstanding Natural Beauty and includes an array of Sites of Special Scientific Interest.

Gwent Levels

The Gwent Levels is an extensive area of low lying land with nationwide significance for its wildlife and archaeology. There are numerous sites with in the Gwent Levels recognised as Sites of Special Scientific Interest.

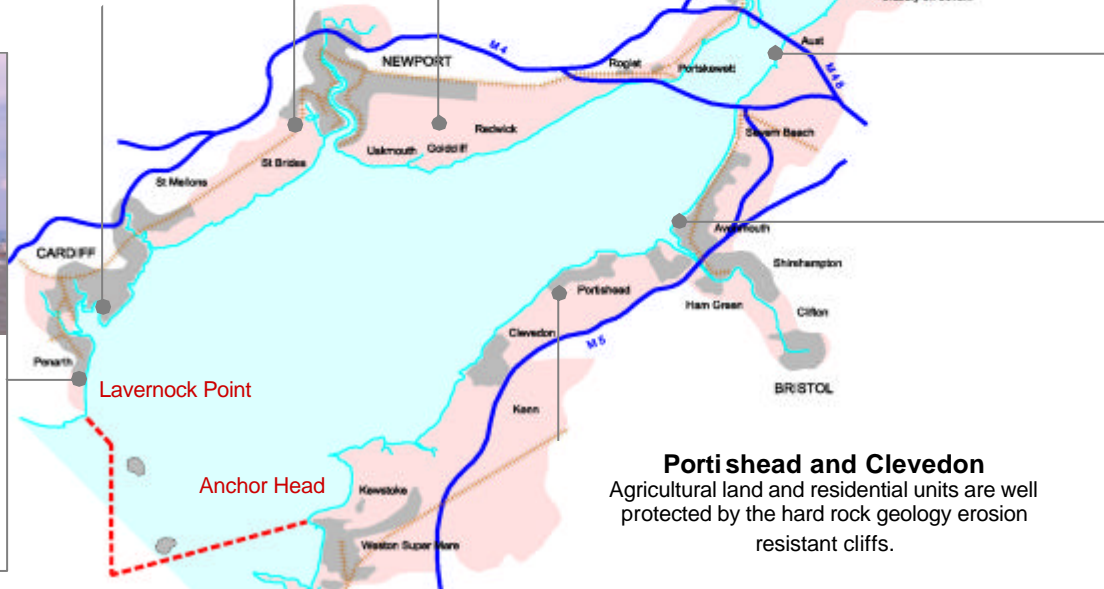
Cardiff

Substantial industrial development and Cardiff Bay Barrage, alongside international and national statutory conservation designations and sites of historic interest creates a complex coastal zone to sustainably manage. Cardiff Flats to the east of the port is undergoing significant rates of erosion.



Penarth

Weathering and erosion of the cliff faces both north and south of Penarth is of concern due to the threat to residential properties. Risk of flooding to commercial properties and infrastructure on Penarth Esplanade is also an issue.



- - - SMP outer coastal boundary
- Principal roads
- Inland extent of SMP: 1 km inland or the extent of low-lying land
- Principal urban areas

Gloucester

Extensive areas of low lying land either side of the Severn Estuary at Gloucester are protected by defences.

Beachley to Sharpness

Agricultural grounds and small settlements are protected by a system of flood embankments.



The Severn Crossings

Here the estuary is constricted between the promontories of Sudbrook and Redwick/ New Passage, and Beachley and Aus. The land on either side of the river is low lying, leading to defence management issues and flood risk.

Bristol and the River Avon

Substantial industrial developments and the port of Bristol are located on the River Avon, a tributary of the Severn Estuary. Additionally, the critical infrastructure and residential developments at Bristol are key features considered by the SMP2.



Portishead and Clevedon

Agricultural land and residential units are well protected by the hard rock geology erosion resistant cliffs.