

## Eastern Yar Strategy

### Managing Flood and Erosion Risk

#### A strategy for the next 100 years

The Eastern Yar fluvial and coastal strategy is a joint project between the Environment Agency and the Isle of Wight Council. It was started in January 2006, and will identify the best way to manage flood and erosion risk in the Eastern Yar valley over the next 100 years. Flood risk is the chance that an area will be flooded (from rainfall or the sea) and the consequences of this if it happens. Erosion risk applies to higher ground where the sea's tides and waves cause land to wear away.



**Bembridge Sea Wall (Embankment Road), part of the Strategy Area**

#### Strategy Progress

We published an article in the newsletter of the Bembridge and St Helens Harbour Association, *The Sentinel*, in February 2007. We described how we had come up with a long list of options to manage flood and erosion risk in the area from the river and the sea. For example:

- using flood defence structures such as sea walls to reduce the chance that flooding will occur;
- warning people in advance when a flood is going to happen, which can reduce its consequences because people are given a chance to move themselves and their belongings to safety; and
- managing the shape of beaches so they can reduce the impact that large waves would have on the area behind.

We also said we needed to do more technical studies to better understand the river and coastal processes that are happening within the valley and harbour. This is so we can decide which management options will work – or not, as the case may be! For example;

- we have developed a complex computer model of the Eastern Yar valley to show us how the flood waters move through the valley and out into the harbour;
- we are undertaking a study to help us understand how material is being transported along the coastline;
- we have investigated the structure of the Bembridge Sea Wall (Embankment Road) to see how strong it is; and
- we have worked to understand the needs of the wildlife in the area, especially around Brading Marshes.

#### Current work

We are using this research to come up with a short list of realistic options for managing the harbour and valley for the next 100 years. We will compare these options from technical, economic, social and environmental points of view, so we can recommend preferred options.

#### Let us know what you think

We're planning to hold two public exhibitions, in Sandown and in St Helen's, towards the end of this year. These will be held to present our preferred options for you to consider and give us feedback on. We'll be asking you whether we've missed anything in our thinking, and if you have any queries or concerns that we can answer. This opportunity for feedback will be open for 2 months.

Details of these exhibitions will be published in the local press and in a newsletter, nearer the time. We encourage all local people and visitors to take part.

After this consultation, your feedback will be used to make the final decisions on the preferred option, and the strategy will then be submitted for approval by the Environment Agency and Isle of Wight Council.

## Getting to you fast

We're always trying to improve how we update the right people about the right things at the right time. We want to make sure that we're using the right local venues to advertise information and updates on this work. If you have any ideas then please contact us on the details below.

## Further Information

The Environment Agency and the Isle of Wight Council have websites where you can find a range of information relating to the coastal areas.

The Isle of Wight Council's website is updated regularly with news from the project:

[www.coastalwight.gov.uk/easternyarstrategy.htm](http://www.coastalwight.gov.uk/easternyarstrategy.htm)

The Environment Agency's draft Isle of Wight Catchment Flood Management Plan (CFMP) has just been launched for public consultation. This is our high level plan for managing flood risk for the next 100 years throughout the Isle of Wight. The Eastern Yar Strategy sits beneath this. The CFMP consultation closes on 11 July 2008. Further information can be found on the Environment Agency's website:

[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

## Contact us

You can contact us with questions by telephoning 08708 506 506 or via email at:

[enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

### Key facts

- The Lower Eastern Yar valley is a reclaimed estuary which has been heavily engineered in the past and is no longer able to function naturally.
- The lower floodplain (called The Levels and Brading Marshes) is an ancient river valley. This low, flat land extends all the way from the sea wall at Sandown to the sea wall at Bembridge. It is below sea level, so the sea walls at Sandown and Bembridge protect it from tidal inundation.
- If the sea walls fail there is a risk of flooding in the lower floodplain. In any one year there is a 1 in 100 chance that it will flood. With current sea level rise predictions, extreme tidal events could overtop the sea wall in 10 years time.
- We're investigating the extent to which the Duver protects Bembridge Harbour and the Bembridge sea wall from high seas. The seaward face of the Duver is protected from coastal erosion by coast protection works but these are reaching the end of their life. Temporary repairs have been made, but we need to decide what the best thing to do is over the next 100 years. Should the Duver be allowed to erode, it would progressively put residential and commercial buildings on it at risk.
- Nature conservation is of significant importance in the Lower Eastern Yar. There are several sites designated under national, European and International designations for freshwater, brackish and inter-tidal habitats. These include Brading Marshes and lagoons, Alverstone Marshes, St Helen's Duver and the inter-tidal habitats in and around Bembridge Harbour.
- Under nature conservation law, we have to protect the freshwater Brading Marshes at all costs, even if it is not economic to do so. Natural England have reinforced the need for this to continue. We are investigating the Duver to understand the extent to which it helps protect this freshwater marsh.
- Bembridge Harbour is a beautiful place that is enjoyed by thousands of people every year. This coastal management strategy aims to protect people, property and the environment on the Yar. Its findings shouldn't conflict with the needs of the harbour.
- We have undertaken a considerable amount of technical, economic and environmental (including social aspects) appraisal to get this far.
- Continued management of the Sandown sea wall is being considered as part of the Sandown Bay Management Strategy. We are working closely with this strategy, as the Sandown sea wall is a major component in managing flood risk on the Lower Yar.

Whilst we can help to reduce the effects of floods, we can't prevent them from happening altogether. Those living in areas at risk of flooding should take precautions to reduce the impact on their homes.

To find out about the flood warning service and how you can protect yourself and your home call

Floodline on 0845 988 1188 or visit: [www.environment-agency.gov.uk/floodline](http://www.environment-agency.gov.uk/floodline)