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# **Eastern Yar Flood and Erosion Risk Management Strategy Consultation Summary**

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**Document issue details:**

Written by: PMS

Checked by: JS

Reviewed by: NS

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## Consultation Summary

### 1 INTRODUCTION

#### 1.1 Background

The Environment Agency has worked with the Isle of Wight Council to produce the Eastern Yar Flood and Erosion Management Strategy. This strategy proposes how to manage flooding and erosion along the Eastern Yar River and around Bembridge Harbour so that it can continue to be enjoyed and valued by the thousands that live in, work in, and use it every year.

The draft strategy documents are available on our websites:

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

and

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

#### 1.2 Consultation during Strategy development

The Strategy has been developed over the last five years. During that time we have consulted with all of our key consultees. In particular we spoke to them when we developed our list of options for managing flood and erosion risk, when we produced the Strategic Environmental Assessment, when we needed specific advice on environmental issues and in the selection of the preferred options.

Our key consultees are Natural England, The National Trust, the Royal Society for the Protection of Birds (RSPB) and the St. Helens and Bembridge Coastal and Harbour Working Group. The inputs of these groups have been very important in developing a strategy that reflects the needs of a sensitive natural environment whilst addressing the concerns of local residents.

We have worked with the Isle of Wight Council to allow them time and support to understand their commitments to both the designated environment and their own legal obligations under local agreements.

Over the last 5 years we have published data and reports, informing stakeholders that they were available on the strategy website as soon as they were finalised. This has allowed us to receive feedback on the strategy as we progress and not only during formal consultation periods.

During the latter parts of the strategy development we provided monthly updates to our key stakeholders. This was in response to their feedback that we were not keeping everybody up to date with progress. Monthly communications with these groups enabled us to develop good working relationships. It allowed us to understand their wishes for the communities they represent, to explain complicated subjects such as our obligations under the Habitats Directive and how funding for flood risk management schemes is allocated.

### **1.3 Consultation on the draft Strategy**

A three month formal public consultation took place between 30 November 2009 and 5 March 2010. We produced a draft strategy document entitled "planning for the future". This document presented the short list of options for each of the five frontages and clearly showed which of these options we recommend.

The planning for the future draft strategy document was sent to many of our consultees, made available on the Environment Agency and Isle of Wight Council websites, in our offices and in Bembridge and Sandown public libraries. The draft strategy consultation was promoted in press releases to local print media and interviews were held on local radio stations. All Parish and Town Council Clerks within the catchment were sent a copy of the draft strategy and a poster to advertise the exhibitions.

Public exhibitions were held in Bembridge on 9 December 2009 and on 12 February 2010. Representatives from the Environment Agency, the Isle of Wight Council, Atkins and Natural England were available at these exhibitions to discuss the draft Strategy with consultees.

St Helens and Bembridge Coastal and Harbour Working Group supported us at the exhibitions with stands showing historic photos of Bembridge Harbour.

We considered the location of the exhibitions carefully. The decision to only hold the public exhibitions in Bembridge was not taken lightly. Previous exhibitions held in Sandown have been poorly attended. The nature of the flood risk means that there is greater interest in Bembridge and St Helens. Consideration was also given to the small size of the catchment and the ten minute drive from Sandown to Bembridge. The project team decided to hold the public exhibitions in Bembridge but advertise as widely as possible.

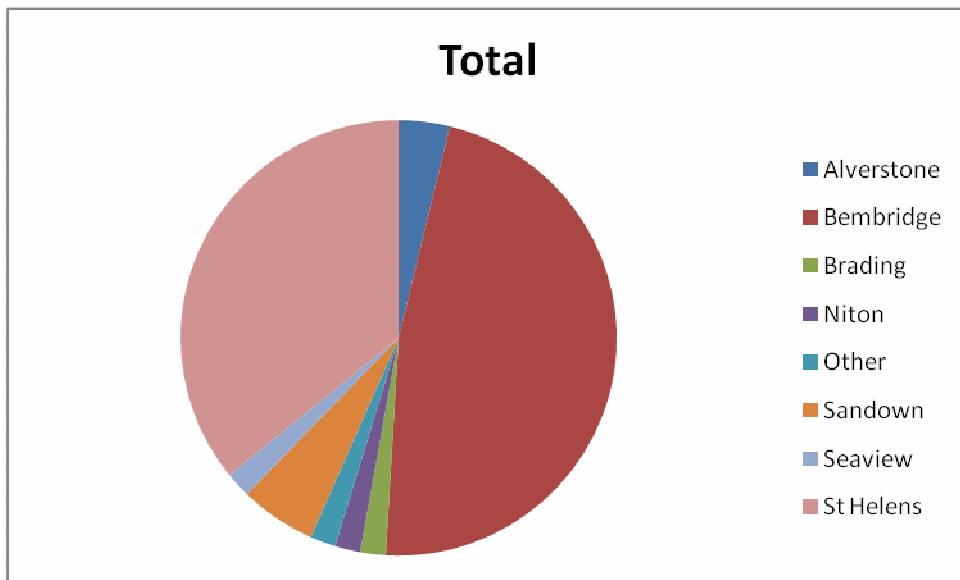
Additional meetings were held with houseboat owners from Bembridge Harbour and the St. Helens and Bembridge Coastal and Harbour Working Group.

Local Councillors asked us to extend the three month public consultation period to compensate for the Christmas holiday. We were happy to extend the planned 12 week public consultation by two weeks.

## **2 RESPONSE TO THE DRAFT STRATEGY**

The two public exhibitions were attended by over 400 people. Responses to the draft Strategy were received on formal feedback forms, in letters and phone calls to the Environment Agency and by emails to a dedicated consultation address ([eyes@environment-agency.gov.uk](mailto:eyes@environment-agency.gov.uk)).

We received 90 formal responses and 56 feedback forms. The people that responded were from all over the catchment but in particular from Bembridge and St Helens (Figure 1). The attendance at public exhibitions reflected a similar distribution of interested parties and local residents.



**Figure 1 Location of consultation respondents**

We asked if our proposed options in the draft Strategy (Table 1) were supported. Most people did support the recommendations and those that did not provided us with comments and questions. We have responded to many of these people directly. In Section 3 we have summarised the main areas of concern and explained the actions that we have taken as a result of that feedback.

**Table 1 Support for the draft Strategy**

<b>Do you support the proposed options?</b>	<b>%</b>
No	27
Yes	55
Yes and No	7
(blank)	11

We asked about the clarity of our documents and information (Table 2). The results show that we have presented the draft strategy clearly and concisely. We received feedback from a range of people commending the project team’s work on the quality of our exhibition and consultation material.

**Table 2 Clarity of our documents**

<b>Is the strategy information clearly presented?</b>	<b>%</b>
No	4
Yes	94
Yes and No	2

The responses from the key stakeholders and statutory consultees required under the SEA Directive (EC Directive 2001/42/EC) support the options put forward.

### **3 CONSULTATION RESPONSES**

A range of responses were received from all consultees to the draft Strategy and these can be broadly divided into five areas; the link between the Duver and Embankment Road, the route of a proposed wall along Embankment Road, protection of property at St Helens, flood risk management at Sandown and other comments.

#### **3.1 Link between the Duver and Embankment Road**

Four responses asked about the link between the Duver and Embankment Road. Some of these comments were about our coastal process studies and others were related to funding the work on the Duver.

The Duver plays a vital role in sheltering the Embankment Road sea defence - particularly from wind generated waves and low frequency swell waves. There is a reduction in wave height as waves pass over the near-shore sandbanks next to the Duver.

Our assessment of coastal erosion on the Duver concluded that without intervention the Duver would not completely disappear over the lifetime of the strategy (100 years). The Duver sand spit will remain in place but will alter in shape.

Coastal processes around Bembridge Harbour are complicated so the project team felt it was important to get our work reviewed by other experts in the field of coastal dynamics. In 2006 we asked the consultants ABPmer to review Atkins' coastal behavioural response work. We also asked Dr Malcolm Bray the coastal geomorphologist from Portsmouth University who verified the conclusions. All of these pieces of information have been brought together and allowed us to recommend draft strategy options. We have confidence in the conclusions provided to us by these experts.

We cannot prevent all flooding or erosion and there is not enough public money to protect every community at risk. We need to work together to find and fund the right long-term solutions for people across the region. We listened to the local community, before going out to consultation, and understood that protecting the Duver was very important to the area.

Economic analysis of works at this frontage has shown a very low benefit to cost ratio, meaning that works here will not qualify for funding from central government. Ahead of public consultation, we worked with the Isle of Wight Council and its cabinet to find a solution that met everybody's needs, without harming the important local habitat. The Council propose to address coastal flooding and erosion on the Duver by maintaining the Duver sea wall for the next 50 years. They have agreed to secure local funding for this work. Without this agreement, we could not have recommended the maintain option for the Duver. We believe this is the most appropriate action to take along this frontage.

### **3.2 Route of the proposed wall along Embankment Road.**

Five people wrote to us about the proposed wall along Embankment Road and more commented about it at the public exhibitions. Our recommended option to sustain the sea defence along Embankment Road will protect 464 properties that are currently at risk from flooding if the road was not there. These properties are spread throughout the catchment, many of them in Sandown and Yaverland. This proposal will also protect Brading Marshes, a wildlife rich open space which the local community value highly. Most people responding to our consultation support this option.

In the draft strategy documents there was a figure showing where the wall may go and how high the wall will need to be. Close scrutiny of the information showed that some homes and businesses could be located on the seaward side of the wall shown in the figure. This has caused much concern and debate.

The exact location of the wall has not yet been decided. At this stage we are simply recommending that we raise and strengthen the sea defence around Embankment Road in line with sea level rise predictions. This includes building a sea wall along the length of Embankment Road, which varies in height from a few centimetres to 1.4 metres in places. We recommend that the sea wall goes on the harbour side of the road so that it protects the road from flooding.

We will change the figure in our final strategy documents to show that the line of the proposed wall is indicative. This will clarify that we have not decided exactly where the wall may be built. We will not be carrying out any additional economic analysis.

When the strategy is approved and the Embankment Road scheme has gained funding, we can begin planning how to implement the sustain option. We will produce a Project Appraisal Report which will look in detail at the costs and benefits and how to protect as many properties as we can economically justify. It will determine what to build the wall from, what it will look like, the exact alignment of the wall and exactly how high it needs to be.

We want communities to help design flood risk management schemes to maximise the local benefits. The Embankment Road scheme will be decided in consultation with all of our stakeholders.

### **3.3 Protection of property at St Helens.**

Eight responses to the consultation commented on the proposals for the frontage at St Helens. In particular people were interested in the possibility of extending the Embankment Road scheme around the St Helens frontage to offer the properties at Latimer Road a greater standard of protection. There was also some concern that we were not recommending any action for the defences protecting St Helens.

There are two points to address here. Firstly, the strategy does consider flood and erosion risk to the properties in St Helens as part of the St Helens frontage rather than the Embankment Road frontage. Our strategy option for the St Helens frontage is to maintain the existing defence. The defences along this frontage are owned and managed by a range of people and riparian owners. The benefit cost of doing the work is 1.72. This is very low and is unlikely to

gain national funding from the normal grant in aid route. For these reasons we are recommending that the riparian owners carry out this work.

Communities, landowners and businesses need to work together to protect themselves from increased flood and coastal risk, including providing and maintaining privately owned flood defences.

The second point is that the consultation has raised an interesting issue about the possibility of extending the proposed Embankment Road sea defence around the front of St Helens. The proposed sea wall would need to tie into an appropriately high ground level to ensure flood waters could not get around the end of the wall. We chose to tie the wall into high land by taking it up Station Road. During consultation the local community has asked us to consider building the sea defence around the front of St Helens and tie into high land on Latimer Road or Mill Road.

We seek to maximise the benefit from any flood and erosion management we undertake. Due to feedback from the local community the exact route of the sea wall will be considered at the next stage of the project (described in section 3.2).

### **3.4 Flood risk management at Sandown**

Some consultees felt that the draft Strategy did not consider flood and erosion risk in Sandown sufficiently, and that the option put forward for the Eastern Yar river frontage was insufficient.

In Sandown there is low flood risk from the Eastern Yar River. Using our flood model, aerial photos and local knowledge, we have identified 11 properties at risk of flooding from the river during a 1% (1 in 100 year) chance flood. Our draft recommendation is to Do Minimum. This means that we are recommending that there will be no capital works carried out on the Eastern Yar River. There will be ongoing maintenance work to the two main structures on the river (the Bembridge Sluice complex and Middle Sluice) and our programme of normal maintenance works on the river will continue. There are not enough benefits in the catchment to justify changing the recommended option to maintain.

Flood risk from the river is not the main risk of flooding for properties in Sandown; flooding from the sea is a much greater risk and this is currently prevented by Embankment Road and Sandown Sea Wall.

We are recommending that we sustain Embankment Road to ensure there is no increase in the likelihood of flooding in Sandown and Yaverland. Without the proposed investment to the Embankment Road sea defence, flood risk would increase significantly in Sandown. Whilst a relatively small investment is required to manage flooding from the river in the Eastern Yar frontage, the significantly larger investment at Embankment Road provides benefit and defence against flooding upstream in Sandown.

The Sandown Sea Wall will be considered in the Sandown Bay Strategy. This strategy is another coastal flood and erosion risk management strategy and will identify the risks from flooding and coastal erosion along the Sandown Bay frontage over 100 years as well as setting out how to manage them.

The Isle of Wight Council is the lead organisation for the Sandown Bay Strategy. The Council will employ an independent consultancy firm to carry out the technical work of the strategy and it is in the programme of work due to begin within the next three years.

### **3.5 Other comments**

Our proposed option to do nothing at Bembridge point, and not to make repairs to Bembridge Point Groyne was accepted by consultees. Our draft Strategy does not recommend any works to the groyne but that does not preclude other parties from carrying out improvements funded and managed by themselves. However, the necessary permissions will still need to be obtained.

At the exhibitions there was some interest in an alternative option to protect the harbour by building a barrage or lock at its mouth. This option had been dismissed during our Phase 1 options screening on the basis of environmental impact and impact on coastal processes in an extremely dynamic area. Rough estimates of cost indicated that it would be at least double the option to build a sea wall (£10 to £50 million to build a barrage vs. £4.5million for the Embankment Road scheme).

Clarification over the timing of the wall option for Embankment Road was also sought in some responses to the consultation. If the strategy is approved, then the benefit cost ratio of the option will qualify Embankment Road for national funding. As such it will be ranked against other nationally submitted proposals for flood and erosion risk management and funding allocated on a priority basis. In the case of Embankment Road there is an additional requirement to ensure that the designated status of Brading Marshes does not change unfavourably. Natural England have clarified that the ideal (and current) Standard of Protection (SoP) for the designated habitat is 1 in 25 (4%) chance of overtopping in any one year. The minimum SoP for the designated habitat is 1 in 10 (10%) chance of overtopping in any one year and 1 in 100 (1%) chance of breach in any one year. Based on current predictions of sea level rise, this means that the sea wall must be constructed by 2030. Our plan is to improve the Embankment Road defences by this date, or before if funding becomes available on the basis of its ranking.

We will mark the key flood risk management structures onto the strategy boundary map in our planning for the future final strategy document. We will also reference Alverstone Meade Local Nature Reserve.

It was noted during consultation that there is an inconsistency in the labelling of the preferred option for the Duver between the planning for the future document and our options appraisal report. The preferred option will be renamed "maintain" in the options appraisal report rather than "minimum maintain".

The Strategic Environmental Assessment reports will be updated in light of these comments and will also include some extra detail on the Water Framework Directive.

We are recommending that people living in properties that are at risk of flooding from the Eastern Yar river take measures to protect their property. Local action can be taken to improve the flood protection and resilience of individual

properties. The Environment Agency can provide advice via Floodline on 0845 988 1188 or by visiting [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk).

The National Flood Forum provides information on resilience on their website [www.floodforum.co.uk](http://www.floodforum.co.uk). They have also produced a directory of flood protection products and services called the Blue Pages. CIRIA, Norwich Union and the Association of British Insurers also have publications on flood resilience.

#### **4 CONCLUSIONS AND NEXT STEPS**

The options presented in the draft Strategy were supported by the majority of consultees. We will not be changing the strategic options recommended in the draft strategy. Those who responded that they did not support the options generally had concerns over the detail of the option rather than the strategic option itself. Our proposals will protect over 500 properties, Embankment Road and Brading Marshes from damaging flooding and erosion for the next 100 years.

We are seeking approval on the final strategy. We have a programme to present our recommended options to the Regional Flood Defence Committee, the Isle of Wight Council's Cabinet and the Environment Agency National Review Group. Our aim is to gain approval on the final Strategy by the end of 2010.

News and updates will continue to be published on our strategy website. If you have any questions or comments on this report, or the strategy, the email address will continue to be available until the strategy is finalised.

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

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