



# **Medway Estuary and Swale Coastal Flood and Erosion Risk Strategy**

Technical Appendix L - Stakeholder Report

August 2018

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# Glossary

**AEP: Annual Exceedance Probability.** The probability of a flood event occurring in any year

**CFMP:** Catchment Flood Management Plans. These consider inland flood from sources including: rivers, groundwater, surface water and tidal flooding.

**Coastal squeeze:** The loss of coastal habitats resulting from the effect of being trapped between a fixed land boundary (e.g. seawall) and rising sea levels as a result of climate change. For MEASS the fixed land boundary is the FCRM asset at risk.

**Defra:** Department for Environment, Food and Rural Affairs.

**EA:** Environment Agency.

**FDGiA:** Flood Defence Grant in Aid. Central Government funding scheme for flood and coastal defence projects.

**HRA:** Habitats Regulation Assessment. A European Directive to ensure protection of Natura 2000 sites, translated into British law through the Conservation (Natural Habitats, &c.) Regulations, 1994.

**LPRG:** Large Project Review Group. EA body for the approval of large flood and coastal defence schemes.

**MMO:** Marine Management Organisation.

**SAC:** Special Area of Conservation. Sites designated under the European Union's Habitats Directive (92/43/EEC).

**SEA:** Strategic Environmental Assessment. Systematic decision support process to ensure environmental and other sustainable aspects are accounted for in a Strategy.

**SMP2:** Essex and South Suffolk Shoreline Management Plan (2010)

**SPA:** Special Protection Area. A site designated under the EC Birds Directive (1979).

**TE2100:** Thames Estuary 2100 project.

**Ramsar:** Wetland sites of international importance.

**Natura 2000:** Network of key resting and breeding sites for protected species. Made up of SACs and SPAs.

**WFD:** Water Framework Directive. EU Directive (2000/60/EC) which commits EU member states to achieve good status of water bodies, including marine waters.

# 1 Introduction

The aim of MEASS is to assess how to best manage the coastline to protect people, properties, designated habitats, and agricultural land from coastal flood and erosion risk. As with all flood and coastal risk management work, the wider impacts must be considered. This means that the best technical solutions for defences need to be found, while also considering the impacts and benefits for local communities, the environment, and the cost to the tax payer.

## 1.1 Why the Strategy is being developed

There are currently coastal flooding and erosion risks to the communities and landowners around the Medway Estuary and Swale. Aging flood defences, rising sea levels and climate change mean that coastal flood and erosion risk to people, properties, habitats, and agricultural land will significantly increase in the coming years. Over the next 100 years it is predicted that 17,226 properties will be at an increased risk of tidal flooding (up to a 0.1%AEP event) within the MEASS area.

Currently most of the Strategy frontage is defended, especially around the Isle of Sheppey to protect the important port at Sheerness, and along the tidal River Medway to protect the Medway Towns. A significant proportion of the defences in the area are nearing the end of the design lives and the risk of failure during a storm event is high. However, it is not sustainable in the long term to continue to maintain all of the defences in their current position. Therefore, MEASS will assess how this risk can be best managed, in line with government guidance, to deliver the most sustainable FCRM management approach.

The strategy area has large extents of both intertidal and freshwater habitats which are both nationally and internationally designated. Intertidal habitat is at risk as sea levels rise, 'squeezing' it against the existing defences. Freshwater habitat is at risk from the failure of the defences, resulting in the inundation of saltwater, as well as the increased overtopping which could be associated from sea level rise. Therefore, MEASS is also legally obliged to assess how the adverse impacts to these designated habitats can be mitigated by realigning defences or creating compensatory areas in other locations.

## 1.2 Strategy Area

The Strategy area includes the Isle of Sheppey, the tidal extents of the Medway Estuary and the Swale estuary. The boundaries of the strategy area are:

- Allington Sluice as the upstream tidal limit of the Medway;
- the village of Stoke on the Hoo Peninsula; and
- the Sportsman Public House on Cleve Marshes near Faversham.

MEASS encompasses the large urban areas of the Medway Towns including Rochester, Strood, Chatham and Gillingham; major industrial and commercial areas along the estuaries; and large swathes of rural farmland and extensive salt marsh and mudflats. Many of the rural areas are highly designated and protected for their heritage, landscape and environmental value.

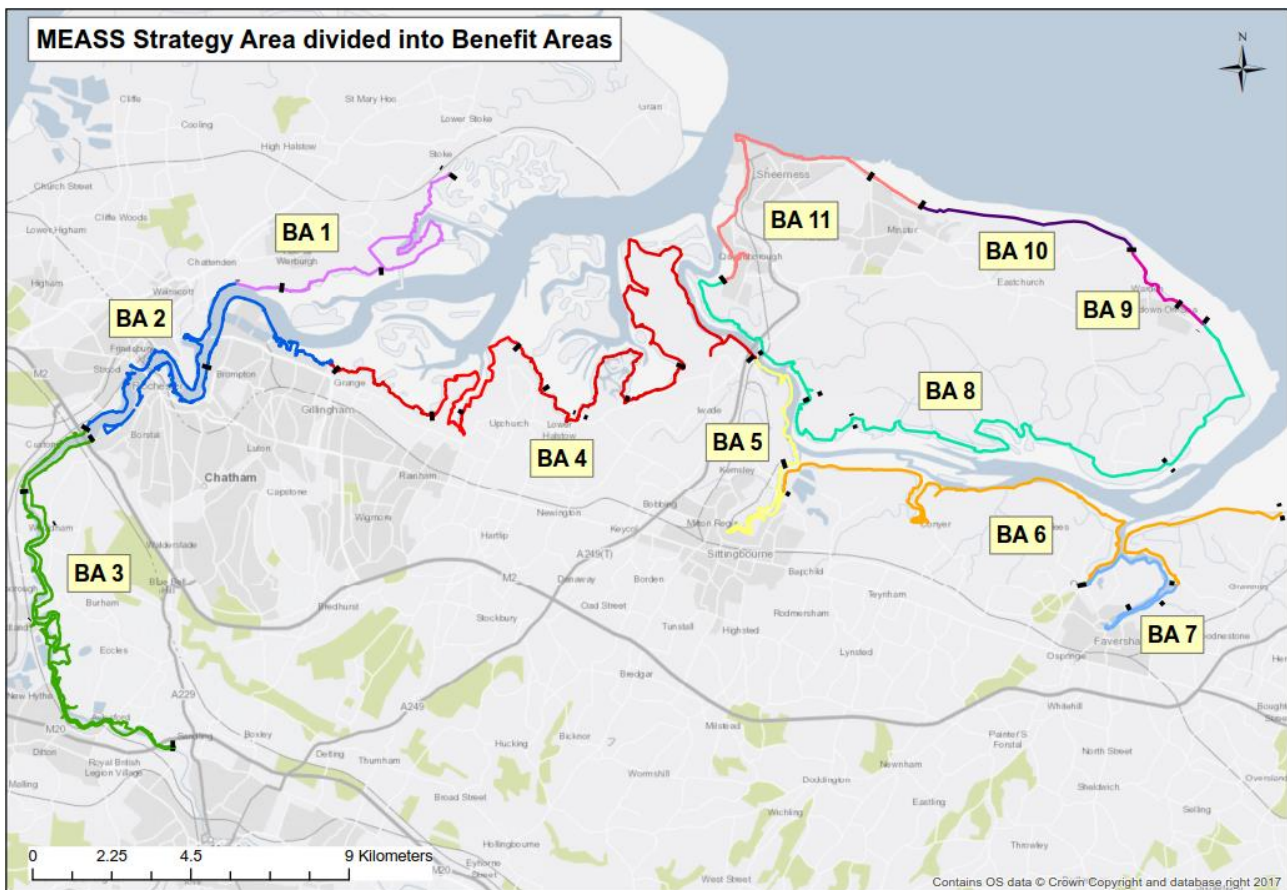
### 1.2.1 Benefit Areas

As the Strategy frontage is approximately 120km in length, and there are complex interactions between the different land uses, the MEASS area has been broken down into a series of Benefit



Areas (BAs) based on the extent of discrete flood cells. These BAs have been broken down further into 35 sub-Benefit Areas based on the SMP Policy Units (Figure 1). Further detailed mapping of the BAs can be found in Appendix F.

**Figure 1: The division of the frontage into 11 BAs and 35 sub-BAs based on discrete flood cells (determined from modelling) and land use. Please note that BA1.1 (Stoke) is now included in the Thames Estuary 2100 Strategy. BA8.1 and 8.2 (South Sheppey) were merged to form BA8.2 to reflect the interconnectivity between these areas. For further breakdown of BAs, please see Appendix F.**



Source: Mott MacDonald, 2017. Contains Ordnance Survey Data © Crown copyright and database right 2015

### 1.3 Aims of the strategy

MEASS will assess and consider a variety of economic, environmental, and technical approaches to manage the coastal flood and erosion risk, in order to balance the wide range of features and interests within the area.

The vision statement of MEASS is to “*work with the community to plan how we will sustainably reduce flood risk to 17,226 homes in the Medway Estuary, Swale and Sheppey over the next 100 years (under a 0.1%AEP event), whilst also protecting and enhancing the local environment.*”

Building on from this vision statement a series of primary and secondary objectives for MEASS have been developed (Table 1) to drive the delivery of an effective FCRM strategy which supports as many local plans and aspirations as possible.

**Table 1: MEASS Primary and Secondary Objectives**

Primary Objectives	Secondary Objectives
1) Reduce flood and erosion risk to properties and infrastructure at significant or very significant risk in light of coastal change over the next 100 years.	3) Favour options that reduce the whole life costs of current defences.
2) Maintain the integrity of Natura 2000 sites (protected under the Habitats and Birds Directives) assuming the loss due to coastal squeeze of 113ha of saltmarsh habitat between years 0-20 and a further 140ha of saltmarsh habitat between years 20-50.	4) Favour options that support delivery of the Thames River Basin Management Plan.
	5) Help enable local plan objectives to be realised where possible.

## 1.4 Aims of this Report

This Report forms an appendix to MEASS. The aim of this Report is to summarise the activities undertaken as part of the stakeholder consultation and outline how this has influenced the development of the Strategy.

- **Section 2: Aims and objectives of the consultation** – this Section provides an overview of the initial aims and objectives set by the Project Team for the Strategy consultation.
- **Section 3: Stakeholder groups** – provides information regarding the categorisation and organisation of stakeholders under the Strategy.
- **Section 4: Strategy consultation activities** – this Section outlines the different activities that have been undertaken with each of the different stakeholder groups during the development of the Strategy.
- **Section 5: Summary of consultation responses** – this Section provides an overview of the comments received from each of the key stakeholder groups.
- **Section 6: Responses from online consultation and public consultation** – presents the results from the three months online public consultation, the drop in event and the response from the MEASS project team on the different themed topics that arose through the consultation.
- **Section 7: Letters of Support**
- **Appendices** – contain the detailed questionnaires, presentations, letters etc that were part of the consultation process.

## 2 Aims and Objectives of the Consultation

The general aim for MEASS consultation was to: “work with the community to plan how we will sustainably reduce flood risk to 17,226 homes in the Medway Estuary, Swale and Sheppey over the next 100 years (under a 0.1%AEP event), whilst also protecting and enhancing the local environment.”

To help deliver this aim the project team developed a series of objectives (Table 2).

**Table 2: Objectives for MEASS stakeholder consultation**

Objective	Details	Measurable	Programme
Increased awareness of flood and erosion risk by residents and landowners	Residents and landowners are aware of the specific risks from coastal flooding and erosion in their area, and the wider strategy area.	Responses from the feedback forms from the public e-consultation, public roadshows and landowner meetings- aim for 80% of community having a good or very good awareness of the risks	By the end of the public consultation phase (February 2018)
Provide awareness of how options have been identified	All stakeholders understand how the options and Strategy has been developed, based on the FCERM-AG and the residual risks (financial and technical) of the schemes.	<p>The aim is to engage and provide information to:</p> <ul style="list-style-type: none"> <li>• 100% of local authorities</li> <li>• 100% of SEG</li> <li>• 100% of landowners in MR sites</li> <li>• 80% of landowners in NAI sites</li> <li>• 60% of general landowners</li> </ul> <p>Can gauge responses through the feedback forms received from landowner consultation, e-consultation and public roadshows, in addition to minutes from meetings with LA and SEG.</p>	By the end of the public consultation phase (February 2018)
Awareness of the Partnership funding approach	All stakeholders are aware of the Partnership Funding approach and outline discussions are had with key potential contributors e.g. Southern Water and the LA's to discuss the potential for partnership working. Furthermore, the residual risk to the asset owners if funding is not achieved is discussed so they understand any residual risks.	Record of meetings with the key contributors/ landowners where partnership funding was discussed. Within the implementation plan the Project Team is able to identify the likely sources for partnership funding.	By the end of the public consultation phase (February 2018)
Make sure that any stakeholder feels they can get their views heard and receives responses on concerns	Provide mechanisms for all stakeholders to provide feedback and ask questions and make sure all comments are responded to.	<p>All comments recorded on the feedback forms during the e-consultation, landowner meetings and public roadshows/ in meeting minutes.</p> <p>Produce a Stakeholder Report summarising the comments and outline how these have been addressed in the Strategy.</p> <p>Not every single comment can be responded to individually, but the themes of comments will be addressed. The Strategy will then be a public document.</p>	Recorded in the Stakeholder report that will be developed by February 2018.
Gain formal approval for the Strategy from statutory stakeholders e.g. Natural England and Historic England	To undertake consultation with statutory stakeholders, and gain formal approval of the Strategy prior to submission to LPRG.	The SEA and HRA will be provided for consultation. Comments received will be formally recorded and addressed where appropriate. Minutes of the meetings with the stakeholders will also be recorded. Approval of SEA and HRA is provided by statutory consultees.	By the end of the public consultation phase (February 2018)
Gain support in principle for the Strategy from landowners and operators	Landowners and operators provide support in principle for the options outlined in the strategy.	In the Objective 2 it was aimed that 100% of landowners in MR sites and 80% of landowners in NAI sites would be contacted. It is therefore hoped that discussions will be had with 40% of them, and we will be able to get agreement from 20% of the landowners who discussions are had with. A specific focus will be put on the landowners and operators at risk in the first epoch.	By the end of the public consultation phase (February 2018)
Make sure that all stakeholders feel that an open and transparent approach to stakeholder engagement is undertaken	The Strategy will aim to make sure that all stakeholders feel that an open and transparent approach to the engagement has been undertaken to make sure that there is buy-in and agreement on the Strategy prior to submission to LPRG.	<p>Inclusion of comments and records of meetings in Stakeholder Report which will be submitted to Project Board for approval in February 2018 and will supplement the Strategy as an appendix.</p> <p>The key messages have been shared with the whole of the project team to make sure that a clear and concise method is delivered to all stakeholders.</p>	Throughout the Strategy.

### 3 Stakeholder Groups

Due to the extensive area MEASS covers, there was a significant number of stakeholders the project team needed to consult with. All stakeholders were divided into tiers, based on the impact the Strategy would have upon them and their possible level of influence (see Figure 2). Appendix A shows a list of stakeholders that were engaged for MEASS.

**Figure 2: Matrix of impact and influence used to classify the stakeholders into tiers**

		Level of Impact			
		Minimal	Minor	Moderate	Significant
Level of Influence	High	Tier 2		Tier 1	
	Moderate	Tier 2		Tier 1	
	Low	Tier 3		Tier 2	
	Very Low	Tier 3		Tier 2	

#### 3.1 Stakeholder groups

The stakeholders were divided into 4 key engagement groups. This division was based upon the project objectives and the type of engagement the project team undertook. The type of engagement has been spilt into:

- Provide – the project team provides information for their understanding of the scheme, increased awareness and understanding of risks.
- Receive – the stakeholder group informs project team of requirements, risks and concerns.
- Collaborate – detailed discussions with stakeholder group to agree best management options for MEASS.

**Table 3: Objectives for each stakeholder group**

Group	Tier and Who	Type of engagement	Key aims/objectives
<b>Statutory</b>	<b>Tier 1:</b> Environment Agency, Natural England, English Heritage, MMO etc.	Provide Receive	Statutory consultees make sure that legal obligations of the Strategy and any future implementation plans are met. We engaged with them throughout MEASS and obtained particular feedback on SEA scoping and final SEA statement, WFD and HRA.
<b>Stakeholder Engagement Group (SEG)</b>	<b>Tier 1 &amp; 2:</b> Included representatives from local councils, statutory consultees, recreation and environment groups, and infrastructure owners.	Provide Receive Collaborate	This group provided early strategic feedback throughout the development of the strategy and helped us make sure that the decision-making process was appropriate, transparent and understood in the wider community, prior to wider consultation. This identified any significant concerns or opportunities early on and throughout the process and helped us test and develop the options before wider public consultation.  We facilitated a workshop to enable the SEG to define their role, leadership and focus. The SEG produced and signed up to a Charter for the group to agree how often they meet etc.
<b>Landowners/ Asset Owners</b>	<b>Tier 1,2 &amp; 3:</b> Landowners e.g. Southern Water, Network Rail	Provide Receive Collaborate	We engaged this group throughout MEASS. Particular engagement with affected land/asset owners was held when the short-listed options were developed to enable discussions over the potential impacts to their land/ assets. Also helped identify key contributors. Due to the number of land and asset owners within the strategy area,

Group	Tier and Who	Type of engagement	Key aims/objectives
<b>Public</b>	<b>Tier 3:</b> Anyone with an interest in the strategy, who are not already included in the above groups.	Provide Receive	<p>using the matrix in Figure 3.1, the land/ asset owners were divided into the 3 different tiers and differing levels of consultation being undertaken with the different tiers.</p> <p>It was important to make sure that knowledge of the strategy was disseminated and freely available to all those who have an interest and allow them to actively contribute to the development of the preferred options for their areas.</p>

## 4 Strategy Consultation Activities

Throughout the development of the Strategy a significant amount of consultation activities have been undertaken. The sections below summarise the key consultation activities held with each of these groups.

### 4.1 Statutory (Including Local Authorities)

#### Launch Event – July 2015

On 22<sup>nd</sup> July 2015 the first Launch Event for the Medway Estuary and Swale Strategy was held at the Brook Theatre in Chatham, from 1pm to 7pm. The event was advertised by letter and issued in July 2015. The event was a drop-in session with posters on display and staff on hand to answer questions. A short presentation on the Strategy was held at 1pm, 4pm and 6pm during the event. The presentation outlined the aims of the Strategy, how the Strategy would be developed and invited Stakeholders to attend the Stakeholder Engagement Groups (SEG).

In total 44 attended the event including, but not limited to:

- 8 landowners;
- 6 parish council members from Teynham, Minster-on-Sea and Stoke;
- 12 council members from Swale Borough Council, Medway Council, Tonbridge and Malling Council, Maidstone Council and Kent County Council;
- Representatives from Peel Ports, Scottish Power, National Grid and, Isle of Grain Power Station (owned by National Grid); and
- Natural England, Elmley Nature Reserve, Kent and Essex IFCA, Kent Wildlife Trust, and Kent Wildfowling and Conservation Association.

During the event names of those who attended were collected, along with contact e-mails and details on the organisations they were representing. Attendees were also provided feedback forms to complete. The aim of the form was to understand the aspects of the Strategy the individual or organisation were most interested in, who would be interested in joining the Stakeholder Engagement Group (SEG) and to collate any further information useful to the development of the Strategy.

#### 4.1.1 Swale Borough Council

An information pack was issued to Swale Borough Council in July 2017. The information pack provided information on the draft options that had been selected for the frontages within the Strategy Area. The Councils opinion on the draft options was requested at the time the email was issued on 10/07/2017. Feedback was received on 21/07/17. A meeting with the Swale Borough Council officers and the project team was also undertaken to discuss the project in more detail and sign off the Draft Leading Options before they were taken forward to the main consultation phase.

A presentation was given to Swale Borough Council Members on 18<sup>th</sup> September 2017 in Sittingbourne, Kent. This presentation focused on the following aims:

- To provide an understanding of the Medway Estuary and Swale Strategy;
- Explain progress of the Strategy and the next steps;
- Present the draft leading options for the frontages within Swale Borough Council's area; and

- Answer any questions about the strategy and draft leading options they might have.

#### 4.1.2 Medway Council

An information pack was issued to Medway Council in July 2017. The information pack provided information on the draft options that had been selected for the frontages within the Strategy Area. The Council's opinion on the draft options was requested at the time the email was issued on 10/07/2017.

A meeting with the Medway Council coastal manager and the project team was also undertaken during July 2017 to discuss the project in more detail and sign off the Draft Leading Options before they were taken forward to the main consultation phase.

#### 4.1.3 Tonbridge and Malling Council

An information pack was issued to Tonbridge and Malling Council in July 2017. The information pack provided information on the draft options that had been selected for the frontages within the Strategy Area. The Council's opinion on the draft options was requested at the time the email was issued on 10/07/2017.

A meeting with the Council and a member of the project team was undertaken during July 2017 to discuss the project in more detail and sign off the Draft Leading Options before they were taken forward to the main consultation phase.

#### 4.1.4 Natural England

Throughout MEASS Natural England have been a key consultee and are a member of the Project Team and Project Board. The following activities have been undertaken with them:

- Presentation on the Strategy and the different benefit areas proposed in December 2015.
- Discussion around a technical note on coastal squeeze, to agree coastal squeeze requirements between December 2016 and July 2017.
- Attendance at monthly progress meetings with ongoing discussions on key decisions around methodologies for the Strategy to apply.
- Attendance at Project Board from December 2016 to the end of the Strategy development.
- Attendance at workshops on the Strategy.
- Attendance at a workshop in August 2017 on draft leading options.
- MEASS review presentation in January 2018.
  - This meeting reviewed the key outstanding concerns on the SEA, HRA and Implementation Plan, reviewed possible alternatives, and aimed to reach an agreement on the best way forward, the next steps and programme.

Review of HRA/SEA

#### 4.1.5 Historic England

Historic England attended a workshop in January 2018 to discuss MEASS. The meeting focused on the methods that had been used to determine the baseline for heritage assessment and the heritage assets affected.

#### **4.1.6 Marine Management Organisation (MMO)**

The MMO attended the first SEG meeting in September 2015. However, at this meeting it was considered the Strategy was too high a level for them to be involved further at this stage. Invitations to the ongoing SEG meetings and the minutes were issued to keep the MMO informed.

The MMO were updated on the Strategy during the online consultation period in November 2017 and provided feedback.

### **4.2 Stakeholder Engagement Group (SEG)**

The SEG was a group of selected stakeholders who would act as the link between the Project Team (led by the Environment Agency) and the wider community. The members of the SEG included Local Councils, Parish Councils, Environmental Groups and key businesses/infrastructure organisations who would represent the opinions of and transfer information back to the wider community. The SEG was not a decision-making forum. Instead its discussion provided information and views which informed the Project Team's thinking, as the Strategy developed.

#### **4.2.1 First SEG Meeting – Long list assessment**

On 30<sup>th</sup> September 2015 the first SEG meeting for the Medway Estuary and Swale Strategy was held at Sun Pier House, Chatham from 10am – 4pm. The overall purpose of the meeting was to form the SEG, introduce the members to the Strategy, and gain the SEG members thoughts on the long list of options for the Strategy. The long list of the options presents a list of all viable options for the frontages.

To enable the Project Team to work effectively with the SEG and vice versa, a Charter was developed, that outlined the roles and responsibilities of the Project Team and the SEG members. The Charter and the membership of the SEG were discussed at the meeting. Attendees agreed to accept the roles and responsibilities outlined in the Charter, and that these become the terms of reference for the SEG, a copy of which is presented in Appendix C.1. A copy of the Charter is presented in Appendix C.2

Following the agreement of the SEG, the Project Team went on to outline why the Strategy was being developed, how the Strategy fitted into the overall process and timescales for coastal management in the UK, how the Strategy was progressed and the progress to date.

Then the long list of options was presented to the SEG. Sessions were held by the Project Team that described each of the Benefit Areas, the key points to note in the area and the long list of options for each Benefit Area. Discussion workshops were undertaken to discuss key questions and thoughts on the long list of options in small groups.

A summary of the comments and responses from this meeting can be found in 5.2.1.



**Figure 3: First SEG Meeting**



#### 4.2.2 Second SEG Meeting – short list assessment

On 7<sup>th</sup> July 2016 the second SEG meeting for MEASS was held at Newington Village Hall, Sittingbourne from 10am – 4:30pm. The overall purpose of the meeting was to update SEG members of the progress since the last meeting, provide information on the short-listed options, seek feedback from the SEG members on how the short-listed options address the objectives of the Strategy, outline the next steps of the Strategy and update the SEG on plans for public consultation. The short listed options are a refined list options from the previous long list that have been assessed against the environmental, economics, and technical objectives of the scheme. This process of review is known as optioneering.

**Figure 4: Discussions with SEG members about how well the shortlist meets the Strategy Objectives**



The Project Team explained the difference phases in the development of the Strategy and the progress made since the first SEG meeting. The Project Team highlight that Phase 2 – long list to short list of options had been completed.

The second session of the meeting involved a presentation and discussion around the two main types of Options in the Strategy: Managed Realignment and Hold the Line. The difference between the Maintain, Sustain and Upgrade options was also outlined within this session. See 5.2.2 for SEG comments on the Strategy progress.

In addition, the Strategy Team informed the group of the importance of Partnership Funding. An important part of the session was to highlight that Partnership Funding offers communities the opportunity to invest in, and benefit from local flood and erosion risk measures that would otherwise not have attracted central government funding.

The next session discussed the strengths and weaknesses of the shortlisted options with the SEG members, focusing on the areas they were most interested in.

#### **4.2.3 Third SEG Meeting – Draft Leading Options**

On 12<sup>th</sup> September 2017 the third SEG meeting for the Medway Estuary and Swale Strategy was held at Newington Village Hall, Sittingbourne from 10am – 3:30pm. The overall purpose of the meeting was to update SEG members of the progress since the last meeting, present the proposed draft leading options and reasons for recommending these, seeking feedback from the SEG members on the Draft Leading Options, to establish any information missing in the assessment of the draft leading options, inform SEG of future consultation, establish volunteers willing to provide feedback on the public consultation material prior to consultation and outline the next steps of the Strategy.

An overview of the processes followed to develop the preferred option in line with the Government's guidance was presented to the SEG members. The project team presented a flow chart of the processes followed to determine the preferred options.

An overview of the Strategy area with the leading options for each of the epochs outlined. It was explained that there were some areas where the options change between epochs as it may be economically viable to maintain the defences for the first epoch; or it may be more cost-effective to maintain the defences for the first epoch as they currently have a good residual like and then undertake works to improve the defences in the second epoch.

Within the meeting there was a discussion on the methods of communication of the Strategy to the public and also agreement on the documents that were to be issued. This allowed the Project Team to understand the key messages that SEG considered should be passed onto the public.

The meeting concluded with the Project Team providing an overview of the next steps for the strategy, and explained that this would be the final SEG meeting. The Project Team issued out evaluation forms on the workshop and received sixteen completed forms from the 18 attendees. Results from the evaluation forms can be found in 5.2.3.

**Figure 5: Discussions with SEG members to present the leading options and obtain feedback.**



### 4.3 Non- Statutory Consultees

#### 4.3.1 Internal Drainage Board

The Internal Drainage Board (IDB) has been involved in the SEG meetings during the development of the options. The Environment Agency have also offered to attend an IDB board meeting which will be undertaken later in the programme as included in the implementation plan.

#### 4.3.2 Southern Water

An initial meeting has been held between the KSL Area Team and Southern Water to discuss the location of key Southern Water assets and the need to collaborate going forward on management decisions and maintenance of defences. This in particular focussed on their assets in Benefit Area 4.2a – Motney Hill which is currently proposed for a No Active Intervention policy. This would mean risk to the access to the Southern Water assets.

#### 4.3.3 RSPB

RSPB have attended the first and second SEG meetings on 30<sup>th</sup> September 2015 and 19<sup>th</sup> August 2016.

In January 2016 a meeting was held with RSPB, Natural England (NE), Kent Wildlife Trust (KWT), and the project team. The meeting was to provide the group with a more detailed discussion on the habitat and wildlife considerations for MEASS, listen to the views of the different groups and better understand the key issues.

The Environment Agency Environmental Lead has had ongoing communication with RSPB to make sure that they are aware of the latest development in MEASS.

In August 2017 RSPB attended a workshop on the draft leading options for MEASS prior to the options going forward for consultation and during the final reporting stages for the Strategic Environmental Assessment and Habitats Regulation Assessment.

#### 4.3.4 Kent Wildlife Trust (KWT)

In January 2016 a meeting was held with RSPB, NE, KWT, and the project team. The meeting was to provide the group with a more detailed discussion on the habitat and wildlife considerations for MEASS, listen to the views of the different groups and better understand the key issues.

The Environment Agency Environmental Lead has had ongoing communication with KWT to keep them up to date and aware of the latest development in MEASS.

In August 2017 KWT attended a workshop on the draft leading options for MEASS prior to the options going forward for consultation and during the final reporting stages for the Strategic Environmental Assessment and Habitats Regulation Assessment.

#### 4.3.5 MPs

MPs were identified in the Stakeholder Engagement Plan as Tier 1 stakeholders. The liaison with MPs was led through the Senior User and Area Team for the strategy. The MPs were invited to the project launch event and the briefing note sent to all MPs who would potentially be interested in the Strategy.

Throughout the Strategy there were regular updates provided to the MPs through the KSL Area Manager correspondence.

Furthermore, a briefing note providing an update on MEASS was sent to the MPS at the start of the public consultation phase.

#### 4.3.6 Other organisations

Other organisations who have an interest in the Strategy area were targeted through the public consultation, and provided some detailed feedback. Follow up on this feedback is outlined in Section 5.3 and provided specific targeted responses.

### 4.4 Landowners

Landowners within the Medway Estuary and Swale Strategy area were ranked as high, medium and low, depending on the level of impact or influence they would potentially have on the Strategy development. These ranks were given a tier, High was Tier 1, Medium Tier 2 and Low Tier 3.

**Tier 1 Landowners** were identified as being directly affected by the proposals and included key landowners such as the Ministry of Defence (MoD) and RSPB. These landowners were engaged through the Strategy by direct emails and briefings, one-to-one meetings, workshops, public drop-in sessions and were represented on the SEG via the NFU or through members of the organisation. Further information is presented below on the events undertaken.

**Tier 2** consisted of smaller landowners (or their agents) who were directly affected by the proposals. For this group a series of smaller meetings in specific areas (e.g. with Isle of Sheppey landowners) were held. These small group meetings of less than 10 people were informal to get to know the landowner and their concerns. A special focus was put on landowners in this tier if they were potentially affected in epochs 0-20 years and 20-50 years. This group were engaged by direct emails, written correspondence, specific workshops, public drop-in and represented on the SEGs. Further information is presented below on the events undertaken.

**Tier 3** landowners consisted of those with land close in proximity to potential managed realignment sites. These landowners were engaged through e-consultation, public drop-in sessions, press and social media, MEASS website and local publications. Further information is presented below on the events undertaken.

#### 4.4.1 NFU Meeting – February 2016

On the 4<sup>th</sup> February 2016 a meeting for NFU members was held at Sittingbourne. The overall purpose of the meeting was to inform the NFU members of MEASS and explain why the Strategy is being undertaken.

The aim of the Strategy was presented to the NFU members, as to sustainably reduce flood and erosion risk to over 18,000 homes in the Strategy area, over the next 50-100 years. The roles which the Environment Agency and Mott MacDonald play within the Strategy development was defined and the SEG was introduced, along with their role within the Strategy.

The key policies of the Strategy, Hold the Line, Managed Realignment, and No Active Intervention were presented. The Benefit Areas of the Strategy were defined and the government guidance that had been followed was highlighted, to explain the current policies allocated to each Benefit Area. The progress of the Strategy was discussed, informing the NFU the Project Team were currently reviewing the long-list of options for the Strategy.

The presentation concluded with the Project Team asking for feedback from the NFU members on what the team needs to know about the Strategy area, what their future plans and aspiration are for the area, and any local knowledge they believe would be useful to the Strategy development.

#### 4.4.2 NFU Briefing Note – June 2016

In June 2016 an update in the form of a briefing note was issued to the NFU. The note provided information on what works (environmental surveys, modelling, SEA scoping and coastal processes studies) had been undertaken since they had last been updated. It also provided key dates of upcoming events and next steps.

#### 4.4.3 Landowner Letters

The following letters have been issued to landowners over the development of the Strategy:

- An information letter was issued in July 2015 to invite landowners to the SEG launch event.
- A letter was issued in September 2015 to provide the landowners with an update of MEASS and a link for any correspondence.
- A letter in October 2015 provided information on the invertebrate sampling that was required to be undertaken in watercourses on their land.
- In November 2016 a letter was issued to the landowners. This letter was issued to the various tiers of landowners dependant on the impact of MEASS.
  - The Tier 1 and 2 landowners were invited to a consultation event to allow further discussions about the impacts of their land and the Strategy.
  - The Tier 3 landowners were updated on MEASS with a briefing note as their land was not considered at this stage to be affected.
- A letter was issued to Tier 1 and 2 landowners in September 2017 to invite them to a workshop to discuss the Strategy.

#### 4.4.4 Landowner Consultation Event – December 2016

The first landowner consultation events were held on:

- Thursday 8<sup>th</sup> December 2016 from 2pm at Cuxton Social Club, Cuxton, Rochester
- Monday 12<sup>th</sup> December 2016 from 2pm – Carmel Hall, Sittingbourne

The events presented the Strategy and the guidance the Strategy uses. The landowners were then asked to provide comments on the short listed options presented and gather information on how viable Managed Realignment is on their land in the next 50 years.

#### 4.4.5 Landowner Consultation Event – October 2017

The second landowner consultation event was held at Riverside Country Park on 12<sup>th</sup> and 18<sup>th</sup> October 2017 from 3 – 7pm. The exhibition presented several posters which provided details on the key guidance used for MEASS, information on the economic assessment and what is included, a description of partnership funding and information on the preferred options.

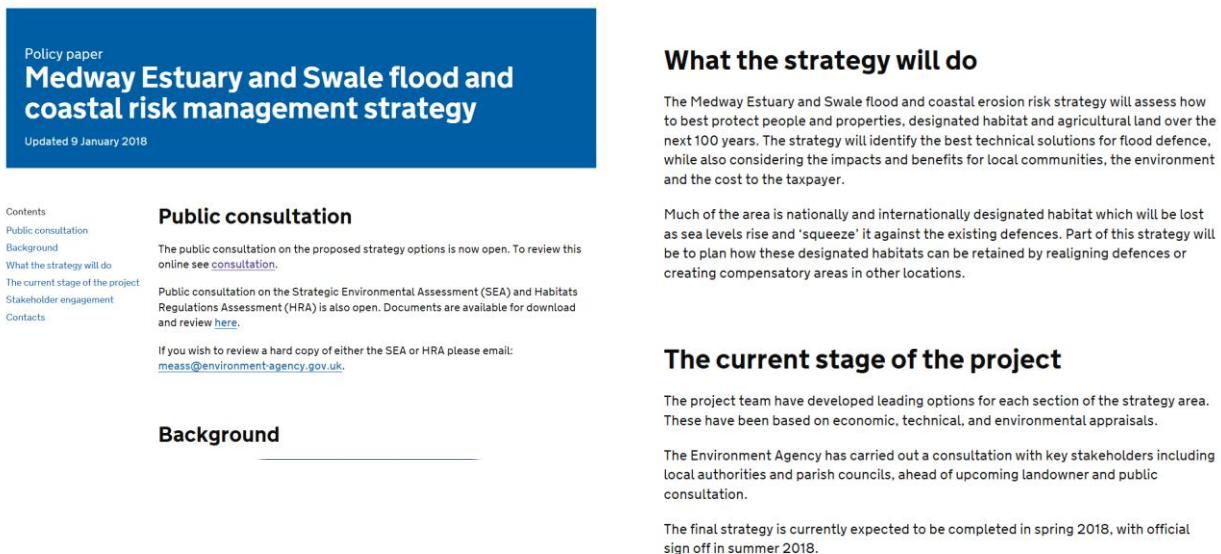
### 4.5 Public

The public have been updated on the progress of MEASS throughout the life of the project via the website and public exhibitions.

#### 4.5.1 Website

The Environment Agency have developed a webpage for MEASS. The website contains information on the development of MEASS, a link to the public consultation site, a link to the HRA and SEA and contact details for the project. A press release was issued when the consultation went live and prior to the close of the consultation period, as well as emails sent to the SEG group. A screen shot of the webpage is presented in Figure 6.

Figure 6: Screen shot of parts of the MEASS webpage.



Source: <https://www.gov.uk/government/publications/medway-estuary-and-swale-flood-and-coastal-risk-management-strategy/>

#### 4.5.2 Public Exhibitions

The period for public consultation ran from November 2017 to February 2018. During this period three drop-in sessions were held in November to December 2017, to allow the public to ask the Project Team directly about the Draft Leading Options of MEASS.

The exhibitions were advertised using the following media:

- Article in Inside Swale magazine. Local Authority publication delivered to all residents within the borough.
- Press release issued by EA press office at beginning of public consultation phase.
- Radio interview with Radio Kent.
- Briefing note and consultation website / details sent to all affected MPs.
- Tweets: 1 at consultation launch, 1 prior to each public drop in event, 1 during January to remind about public consultation, all including direct link to consultation website.
- Poster sent to all SEG members and Parish Councils. Confirmation received that poster displayed at: Sheerness leisure centre, Burham PC, Teynham PC, Halling PC, Eastchurch PC, Sheppey Gateway (Sheerness), St Mary's Island resident's association (SMIRA) website.
- Poster forwarded on to wider distribution groups by Medway and Swale Estuary Partnership (MSEP), and Medway Council.

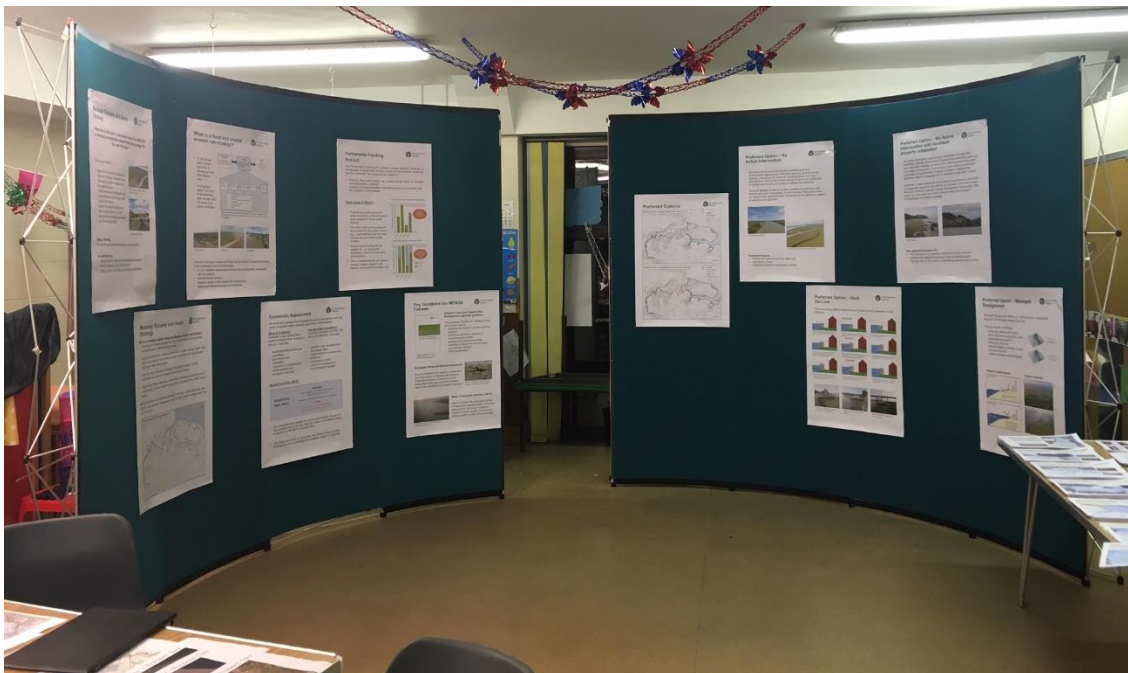
The locations for the exhibitions were:

- Eastchurch Village Hall, Isle of Sheppey – 30<sup>th</sup> November 2017 (2 – 7pm)
- Riverside Country Park, Gillingham – 6<sup>th</sup> December 2017 (2 – 7pm)
- Halling Community Centre – 12<sup>th</sup> December 2017 (2.30 – 7.30pm)

The project team was available throughout the exhibitions to answer any questions and concerns that people may have had on the Strategy. The exhibition presented posters on the development of the Strategy and the Draft Leading Options. In addition, handouts of the public consultation document were available, split into each Benefit Area so the public could take the Benefit Area they were most interested in. Feedback forms and FAQs were also available.

The information was also presented on the online project website for people to view and comment on.

**Figure 7: Image of the set up at Halling Community Hall**



**Figure 8: Attendees at Halling Community Hall**

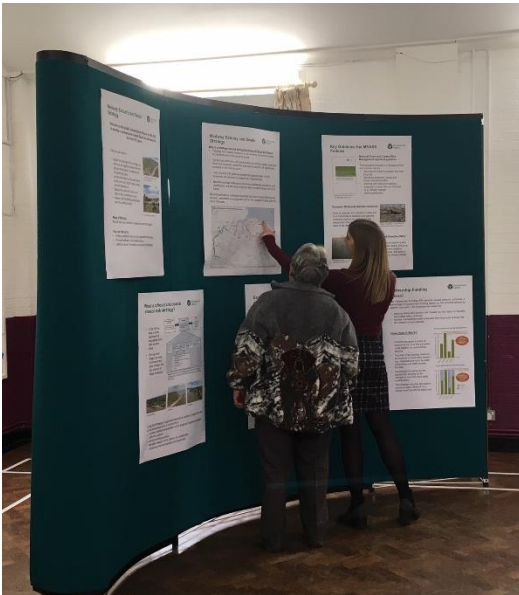


**Figure 9: Attendees at Riverside Country Park**





**Figure 10: Attendees at East Church**



**Figure 11: Attendees at East Church**



During the exhibitions A0 posters were displayed containing the following information:

- Poster 1: Welcome poster and the aims of the exhibition.
- Poster 2: Information on why a Strategy is needed along the Medway Estuary and Swale.
- Poster 3: Information on what is a flood and erosion risk strategy.
- Poster 4: A description of the key guidance documents the project team follows for MEASS.
- Poster 5: Information on what is included in an economics assessment.
- Poster 6: A description of partnership funding.
- Poster 7: An explanation of the Preferred Option – Hold the Line.
- Poster 8: An explanation of the Preferred Option – Managed Realignment.
- Poster 9: An explanation of the Preferred Option – No Active Intervention.
- Poster 10: An explanation of the Preferred Option – No Active Intervention – Property Adaptation.
- Poster 11: Provided a map showing the Preferred Options for MEASS.

The posters and questionnaire are presented in Appendix E.1.

#### **4.5.3 Online consultation**

The period for online consultation ran from November 2017 to February 2018. A specific portal was developed for the consultation which allowed the project team to provide all the documents required. The documents included the Non Technical Summary, the questionnaire (presented in Appendix E.1) and the information on the Benefit Areas.

The participants were asked to complete the form for the area they were interested in. The outputs for the consultation are included in Section 6.

## 5 Summary of Consultation Responses

The sections below present the responses received from the different organisations and different stages of consultation. At the end of each section is a description and overview of the impacts the consultation had on the development of the Strategy and the response the MEASS project team provided to the consultation queries and comments.

### 5.1 Statutory

#### 5.1.1 MEASS Stakeholder Launch Event

The launch event was undertaken with SEG members, landowners and Statutory stakeholders. The aims of the event were:

- introduce the Strategy to Stakeholders;
- present the areas that were covered by the Strategy;
- explain that the Strategy aimed to continue and develop upon the work of the previous SMPs;
- invite Stakeholders to join our future Stakeholder Engagement groups to help shape the outcomes of the Strategy; and
- capture any important local information that we do not have currently.

The results from the feedback forms established that the majority of the Stakeholders understood the challenges of managing flood and coastal erosion risk in the area. 89% felt they understood the challenges and 90% felt they understood how the MEASS team were developing the Strategy and the proposed timescales.

The Stakeholders were asked about on what aspects of the Strategy they were most interested in. The feedback forms highlighted what each group considered to be the highest importance to them. The results indicated the following:

- Council members were generally interested in all aspects of the Strategy.
- The prime focus for Environmental Groups was on the opportunities for habitat and wildlife.
- For the Industry Groups the works to manage flood risk was a high priority for them.
- Landowners were most interested in the potential flood risk to their land, and how the Strategy may affect their future plans.
- Parish Councils were most interested in the funding towards future works, and the opportunities for habitat and wildlife.

#### 5.1.2 Swale Borough Council

The meeting in September 2017 provided the Council with an update on the draft leading options. The meeting allowed Swale BC to provide information on their planned development and how this could impact options. The outcome of the meeting was that at this stage in the project the SBC officers were supportive of the draft leading options and the changes to local policies. It was identified that the MEASS proposed No Active Intervention (NAI) policy in BA10 (Minster Cliffs) aligns with the Council's coastal management strategy.

### 5.1.3 Medway Council

The meeting provided the Council with an update on the draft leading options. The meeting allowed Medway Council to provide information on their planned development and how this could impact options. The Council identified a number of potential future sites they would wish to use for various activities. However it was also identified that these changes would not have a major change on the preferred options and they were supportive of the proposed draft leading options.

### 5.1.4 Tonbridge and Malling Council

Tonbridge and Malling Council only cover a small part of the Strategy. The meetings and communications have presented the Council with an update on the key Strategy decisions. A review of key potential development sites was undertaken and revealed that the majority were not within flood zones relating to the Strategy areas and therefore these are unlikely to be sources of funding. Tonbridge and Malling Council were supportive of the proposed draft leading options.

### 5.1.5 Natural England

Natural England have been a key member of the project team and project board. Throughout the progress meetings and project workshops they have been key in the development of the Strategy. Any recommendations during MEASS, that Natural England has provided, has been dealt with in the project or through technical notes to provide further information. A letter of support from Natural England is included in Appendix B.1.

Some of the key inputs from Natural England into the development of the Strategy have included:

- Agreeing methodologies for assessing risk to the environment, particularly to designated habitats and species.
- Reviewing draft documents and options development.
- Providing advice and input into the development of the Managed Realignment site list – particularly due to the limited survey information on some of these sites. Natural England's knowledge of the sites and of the connectivity between different areas helped with understanding of where compensatory habitat could be best delivered.
- Review of the HRA and SEA at the early stages followed by a detailed review during the statutory consultation phase. Input to the technical discussions at the Progress Meetings.

### 5.1.6 Historic England

Historic England were contacted throughout the Strategy to keep them updated.

Following a heritage workshop in January 2018, feedback from Historic England highlighted the importance of the Strategy in assessing the wider historic landscapes that cross different Benefit Area Sections.

Furthermore, there was an interest from Historic England to find out more about the process for the Strategy implementation and highlight where it will be beneficial for Historic England to get involved early on in scheme development.

### 5.1.7 MMO

The MMO attended the first SEG meeting in September 2015. Following the issue of SEG meeting minutes no comments were received from the MMO.

Following the online consultation in November 2017 the MMO was updated on the Strategy and provided a response on the consultation. The MMO highlighted that they were to be referenced as the authority of enforcement decisions within the marine/coastal area and [MEASS] must be in accordance with the marine plans (or Marine Policy Statement in its absence) unless relevant considerations indicate otherwise.

### 5.1.8 Summary of MEASS response to consultation - Statutory

The overall outcome of the Stakeholder launch event was that a significant number of the attendees were interested in joining the SEG. The opportunity for ongoing communication with Stakeholders was very well received and it was an important part of the overall consultation process for getting initial engagement with key interested parties.

The statutory consultation has predominantly fed into MEASS throughout the project, rather than at specific stages. Early engagement with Statutory consultees, both through the SEG and through individual meetings, allowed early discussions of key risks and issues. The development of the Strategy Habitats Regulation Assessment and Strategic Environmental Assessment was in line with guidance such as the Healthy Estuaries Guidance (Natural England, 2017) and this has helped develop a Strategy which meets its statutory and legislative requirements.

The scoping for the Strategy Habitats Regulation Assessment and Strategic Environmental Assessment provided a large number of responses and helped focus the rest of the required assessments. These responses can be found in MEASS Technical Appendix J and K.

The biggest change in the Strategy as a result of Statutory consultation was a change in managed realignment sites. Following Natural England's initial review of the Habitats Regulation Assessment the potential sites for providing compensatory habitat to meet legal requirements were amended. These changes are summarised below in Table 4.

**Table 4: Changes made to options following statutory stakeholder review**

Benefit Area	Old Option	New Option	Impacts	Reason for Change
1.3 Abbots Court	Maintain to year 25 then No Active Intervention.	Managed Realignment site to the west of the site in Year 5. The rest of the site stays as maintain until year 25 then No Active Intervention.	<ul style="list-style-type: none"> <li>Land behind the Managed Realignment site will have a minor improvement in flood protection.</li> <li>Managed Realignment site provides required compensatory habitat required for the Strategy.</li> <li>Wider habitat biodiversity outcomes.</li> <li>Freshwater compensation is required in year 5 rather than year 25.</li> </ul>	The Strategy will contribute to a process called coastal squeeze in the Medway Estuary. This means that under sea level rise scenarios, the saltmarsh in the estuary will be at risk of habitat loss. Under international law, there is a requirement to provide compensatory habitat. Although alternatives to this site were investigated, they cannot provide the required amount of habitat compensation, and therefore this was required as an additional site.
3.5 Wouldham Marshes	Managed Realignment site from Year 5.	No Active Intervention.	<ul style="list-style-type: none"> <li>The defences are at risk from failure from year 5.</li> <li>As this is not a formalised Managed Realignment site, the landowner is able to opt to maintain defences themselves through private funding.</li> <li>Risk of flooding under extreme events to Ringshill Farm Cottages and Starkey Castle Lodge. Property level protection may be required here.</li> <li>Impacts to priority habitat.</li> </ul>	<p>The Managed Realignment site was proposed to provide compensation for SPA and RAMSAR internationally designated habitat. However, following further discussions with different experts and reviewing additional bird data, it has been determined that the site will not be suitable for Managed Realignment.</p> <p>The alternative potential here is No Active Intervention. This means that there is no central government funding but the defences could be privately maintained.</p>

Benefit Area	Old Option	New Option	Impacts	Reason for Change
4.7 Chetney	Maintain to year 15 then Habitat Adaptation	MR site at Tailness Marsh in year 5 and Maintain to year 15 then Habitat Adaptation	<ul style="list-style-type: none"> <li>The majority of the site will stay as previously proposed.</li> <li>The north east corner of the frontage at Tailness Marshes will, if modelling results are positive, become a Managed Realignment in the shorter term by year 5.</li> <li>Compensation for this site will therefore be discussed earlier than the rest of the site.</li> </ul>	The Strategy will contribute to a process called coastal squeeze in the Medway Estuary. This means that under sea level rise scenarios, the saltmarsh in the estuary will be at risk of habitat loss. Under international law, there is a requirement to provide compensatory habitat and there are requirements to provide more compensation in the shorter term (first 5 years) of the Strategy.
8.3 South Sheppey	Maintain and raise in line with sea level rise.	Maintain and raise in line with sea level rise with Managed Realignment at Spitend Marshes in year 5.	<ul style="list-style-type: none"> <li>The majority of the site will stay as previously proposed.</li> <li>The area by Spitend marshes (see map below) will become a Managed Realignment by year 5.</li> <li>Compensation for this site will therefore be discussed during development of designs for the site.</li> <li>Great Bells Farm will provide compensatory freshwater habitat.</li> </ul>	The Strategy will contribute to a process called coastal squeeze in the Medway Estuary. This means that under sea level rise scenarios, the saltmarsh in the estuary will be at risk of habitat loss. Under international law, there is a requirement to provide compensatory habitat and there are requirements to provide more compensation for the Strategy.

## 5.2 SEG

A summary of the comments from the three SEG members meeting can be found below. Further details in comments and then MEASS team responses are provided in Appendix C3.

### 5.2.1 First SEG Meeting – long list optioneering

Following the first SEG meeting a report was produced and shared with the SEG members for comment. The main points raised during the discussion are outlined below:

- Managed Realignment needs to take account of the current freshwater designated sites and confirm that areas of high quality freshwater are not lost (or are compensated for if impacts will occur);
- As well as the national statutory environmentally designated sites the local non-statutory designations should also be taken into account;
- Questions were raised over the economic viability of options where the defences would be improved over the first 20 years, and then after Year 20 they will be removed to allow for Managed Realignment;
- Not all Benefit Areas where Managed Realignment is suggested are suitable - The Project Team recognises that although a whole area may be highlighted as considering Managed Realignment this is likely to happen in pockets along the frontage, rather than across the whole of the Benefit Area;
- Some further information was given on the current condition and Standard of Protection of current defences;
- Further information was provided on the key areas of interest and areas that may need to continue to be protected e.g. Sewage Works and Railways;
- Further details were provided on the potential options for Hold the Line that the Project Team can discuss e.g. improvements to the groynes, construction of a revetment or beach nourishment to increase the beach volumes; and

- The potential location of Managed Realignment sites were discussed with some members especially in BA01 (North Medway), BA04 (Medway Marshes), BA06 (Swale Mainland) and BA08 (South Sheppey).

Evaluation forms were provided at the SEG meeting and out of the 24 members who attended 17 completed the evaluation forms. The questions and responses from the evaluation form are available in Appendix C3.

### 5.2.2 Second SEG Meeting – short list optioneering

Comments were received for all of the Benefit Areas through workshop discussions. A summary of the key findings is outlined below:

- SEG members would like to know more about where Managed Realignment options are proposed and the extent of the Managed Realignment. Additionally, landowners would like to understand what funding they will be eligible for if areas of land are lost.
- Stakeholders would like the Project Team to look at the mapping ecological units within the Strategy area to ensure that habitat loss areas are linked to compensatory delivery – need an inter-connected ecological network approach.
- Hold the Line options in urban areas are considered by stakeholders to be a good idea e.g. BA02 (Medway Towns), BA05 (Milton Creek and Sittingbourne) and BA7.2a (Faversham).
- Stakeholders would like Managed Realignment sites to take account of the freshwater areas that will be lost and the resultant impact on designated habitats, or areas where freshwater/brackish habitat has been created.
- Questions were raised by Stakeholders over the suitability of sector gates? The team explained that tidal barrages and sector gates were included in the long list, but due to the significant costs of these options they were not deemed suitable.
- Stakeholders think it will be important to have discussions with local developers as they could be potential contributors to schemes.
- Stakeholders suggest that the team look at the possibility of developing partnerships with local landowners/ construction groups to undertake the works may help reduce the options costs and make them more viable.
- Generally, around the north coast of Sheppey, options that improve amenity value and potential for tourism are preferred by stakeholders.

Following the discussion of the options the Project Team presented how the short list will be developed further, and group discussions were undertaken to focus on different areas meeting the objectives. The key messages from each group are summarised below:

- Swale area
  - Objective 1 – It is important to discuss with developers in the areas how they can contribute to the Strategy.
  - Objective 2 – Priority is needed for the Managed Realignment areas. This needs to happen in Phase 4 of the Strategy and then there is a need for the public to see the options, in addition to understanding when the schemes could be implemented.
  - Objective 5 – Food security is a national issue and the Strategy must properly take that into consideration. It can sometimes feel like farmers are treated less favourably than urban residents and businesses.
- Sheppey area

- FCERM is a key priority.
- Sudden emergencies happen fast. Therefore, resilience and awareness are key.
- People's expectations need to be managed, especially around the level of protection available for reducing the risks from cliff erosion.

➤ Whole Strategy area

- It is too early to provide comment on the how well the shortlist meets the objectives as there has been limited information on the options to date and the short list is still very long, but in theory they look like they will do currently.
- It is important that connectivity is maintained between the habitats.

### 5.2.3 Third SEG Meeting – Draft Leading Options

The draft leading options for each of the epochs within the Strategy were presented to the SEG members during the third SEG meeting. In small groups the SEG members discussed the draft leading options. Key points from these discussions are outlined below:

- If businesses need to be relocated there will need to be planning considerations for new developments, if required.
- Further consultation with the Hoo Communities is required.
- Generally, there was a good to strong agreement with the leading options proposed in Benefit Areas 1-3 (North Medway, Medway Towns and Upper Medway).
- There was disagreement from some SEG members around the leading options proposed for Benefit Areas 4.1 and 4.2 (Riverside Country Park and Motney Hill), but generally there was agreement around the majority of the options.
- There were suggestions from the group that private landowners need more support in obtaining permissions to maintain sea defences themselves. The project team needs to help landowners with this process - the Project team aims to feed this back to National Policy Teams and will try to provide better guidance and support.
- Landowners require an understanding of the timelines for the options to assist with setting out the business case for the investment in their own sea wall in NAI scenarios.
- It would be necessary to provide a clear definition of what rights and responsibilities landowners have under a NAI option; and there will need to be a clear commitment from EA that they will enable local management of the defences in NAI frontages.
- Within BA7.1 (Ham Marshes) there are concerns around potential development sites in the areas. There is a need to talk to landowner and tenants.
- There were a number of discussions around BAs 08 – 11 (Isle of Sheppey) around the possibility of using excavated materials from development sites to construct defences.
- More clarification of the extents of the NAI and HTL section in BA8.5 (Rushenden Marshes) is needed.
- There is a need for the EA to be aware of other flood management projects and schemes within the local area.
- Generally, there was support for the leading options proposed for developed areas e.g. BA02 (Medway Towns), BA05 (Milton Creek and Sittingbourne), BA07 (Faversham Creek) and BA11 (Sheerness).
- It was commented that the team need to make sure MPs and councillors get all the information. When things are announced to the press, request that these should go to MPs under embargo and formal briefing to MPs at same point.
- It was suggested the team need to contact tenants and not just absentee landlords.

- The Internal Drainage Board (IDB) highlighted the potential the impact on the IDB of the extent of MR sites of potential decrease in rates and income. The local EA team will be presented to the IDB board.

The project team provided an overview of the next steps for the Strategy and handed out evaluation forms to the SEG members. Of the 18 who attended the Project Team received 16 completed forms. A summary of the SEG response is outlined below:

- Most of the responses agreed that the session helped them to understand how the draft leading options had been developed.
- All responders said that they had the opportunity to express all of their opinions on the draft leading options.
- 14 responders were happy for the project team to contact them for help advertising the public consultation.
- A number of SEG members offered to provide feedback on the layout of the consultation documents.
- All responders rated the meeting a 4 or 5 out of 5 for effectiveness.

#### **5.2.4 Summary of MEASS response to consultation -SEG meetings**

The SEG group were engaged throughout the development of MEASS including three key meetings and helped the Project Team to refine and focus optioneering and risk assessments. Part of the engagement was to provide key information to SEG members to help different organisations understand the focus and activities under the Strategy. This was aimed at bringing the stakeholders on board with the key decisions early on in the process. Appendix C3 presents the key questions and responses from the MEASS Project Team.

Following each SEG meeting, the comments received from the stakeholders that were present, were fed back to the broader project team through the progress meetings and helped define decisions and processes over the next stages of the Strategy.

### **5.3 Non Statutory Consultees**

#### **5.3.1 Southern Water**

It was agreed with Southern Water that for Benefit Area 4.2a – Motney Hill in particular, a coordinated approach to implementation of the Strategy needs to be undertaken. This has been included as a key milestone within the Implementation Plan. There are also other areas where Southern Water may be a key stakeholder, and coordination of programmes and their funding cycles will be assessed by the KSL Area Team for Partnership Funding discussions.

#### **5.3.2 RSPB**

Throughout MEASS RSPB have been involved in various meetings. The following comments have been made and incorporated into the Strategy.

- Sites have been considered by the RSPB team at strategic level – they mainly focused on Natura 2000 sites. But if proposed MR sites are next to current RSPB reserves then there could be opportunities to extend boundaries to support enhancement of wider area.
- MEASS should be careful to not undermine any existing RSPB activities on freshwater sites. Freshwater grazing marsh is priority habitat for RSPB. To note that there is a track record with Medmerry and Wallasea.



- There are variable quality SPA sites across the Strategy. RSPB recommends that the project team assumes all habitats are currently of good quality and where they are not, the RSPB recommends options to enhance habitats.
- RSPB consider that the last option assessed should be to lose freshwater habitat to allow intertidal habitat. RSPB would like to make sure that they agree with the data used to inform the process of deciding preferred options.
- RSPB highlighted the need to look at alternatives – if there are reasonable alternatives then need to go with those first.

The below table identifies the specific concerns the RSPB has for each BA:

**Table 5: Specific concerns the RSPB has for each BA**

Benefit Area	Comment from RSPB
<b>BA6.2 Cleve Hill</b>	<ul style="list-style-type: none"> <li>• RSPB are keen for Manged Realignment on this site as not high nature value land compared with area to east (Seasalter reserve). Potential for grazing marsh in realignment area as well as coastal habitats. Likely to benefit wintering birds and waders by providing shelter.</li> <li>• It was highlighted that the estuary will be confirmed as MCZ at end of month and should also be considered.</li> <li>• All parties would like to see this site progressed.</li> <li>• It was identified that strategically need to look forward to 30-50 years. If have transitional habitats (brackish) then need to agree areas so can use for compensation/mitigation against targets.</li> </ul>
<b>4.1 Riverside Park</b>	<ul style="list-style-type: none"> <li>• This location has a concreted road and is a large visitor site, therefore there are minimal environmental concerns.</li> </ul>
<b>4.2 Horsham marsh</b>	<ul style="list-style-type: none"> <li>• It was highlighted that realignment is possible but would not be a first choice.</li> </ul>
<b>4.5 Barksore marshes</b>	<ul style="list-style-type: none"> <li>• This land has a high conservation value and therefore a manged realignment option is not recommended.</li> </ul>
<b>4.7 Chetney marsh</b>	<ul style="list-style-type: none"> <li>• This land has a high conservation value with some arable land on Chetney which is not designated but still a functional habitat.</li> <li>• This has the potential for freshwater habitat developments.</li> </ul>
<b>6.1 Murston Pits to Faversham</b>	<ul style="list-style-type: none"> <li>• This BA includes Oare Marshes which is key site for RSPB.</li> <li>• It was highlighted there is a potential for tidal exchange at this site.</li> </ul>
<b>7.1 Ham marshes</b>	<ul style="list-style-type: none"> <li>• This BA has ongoing water vole work by RSPB in partnership with KWT. The site is not favourable but would be considered by RSPB for further developments.</li> </ul>
<b>8.2 Shellness</b>	<ul style="list-style-type: none"> <li>• RSPB agree that the Strategy should protect some of this area.</li> </ul>
<b>11.2 Minister marshes</b>	<ul style="list-style-type: none"> <li>• Area is a freshwater grazing marsh.</li> </ul>

During the online consultation period in November 2017 RSPB responded saying they generally support the draft Strategy that is being consulted upon. RSPB had a number of concerns regarding BA4 (Medway Marshes), BA6 (Swale Mainland) and BA8 (South Sheppey) owing to the preferred options proposed. Response to these concerns back to the RSPB and update of the Strategy has been outlined in Section 5.3.9.

### 5.3.3 Kent Wildlife Trust

During the early phases of MEASS Kent Wildlife Trust (KWT) provided the following comments:

- Habitat connectivity
  - Where LAs have adopted biodiversity areas can opportunities for wider landscape issues be maximised as part of the Strategy?

- Impacts on connectivity/network of species in wider system need to be considered in the HRA and SEA.
- Particular impacts on metasppecies will need to be considered further at scheme stage.
- Post-realignment management of sites
  - Post realignment management may vary depending on sites.

Following the meeting in August 2018, KWT confirmed that they understood the general process followed to assess options and impacts on habitat. They were particularly supportive of the option for BA6.2 (Cleve Hill). They agreed with Natural England in expressing concerns about the functionality of Managed Realignment sites in BA3 (Upper Medway) upstream of the Medway.

#### 5.3.4 National Grid

During the online consultation in November 2017 National Grid provided a response to the project team. It was identified that National Grid welcomes the Hold the Line approach at BA5.1 (Milton Creek), BA6.1 (Swale Mainland), BA1.2 (Kingsnorth) and BA1.3 (Hoo) as retrospectively protects their Kemsley substation, tower routes, and the Kingsnorth and Damhead Creek sites. However, they seek clarification on the long-term embellishment of the freshwater habitat at Hoo to ensure maintained access to their tower routes.

In areas where Managed Realignment was proposed National Grid have raised a number of concerns. Response to these concerns back to National Grid and update of the Strategy has been outlined in Section 5.3.10.

National Grid are concerned about the proposed MR sites at Chetney Marshes (BA 4.7) as they perceive this option as causing an increased flood risk to their Chetney Marsh tunnel head, which would put at risk the cables in the tunnel. A further concern for this area is that the MR would cut off Chetney Marsh site and tower making maintenance and repair difficult, and tidal action on the piles and pile caps causing them to become exposed affecting stability is also a concern.

At BA 6.2 Cleve Hill National Grid is concerned that the tower routes are not considered within the MR proposal and felt if the area is allowed to develop as a Managed Realignment site, access would be very difficult and significantly increase the threat to the structural integrity of the electrical assets. Furthermore, concerns were raised over the setback embankments suggesting that these do not include the area around Cleve Hill substation. The site would be next to the new estuary bank and would, in the opinion of National Grid, be subject to increased weathering, affecting stability of the site.

#### 5.3.5 Cleve Hill Solar Park LTD.

Cleve Hill Solar Park Ltd. (CHSP) provided a response to the online consultation in February 2018. They raised concerns regarding the implementation of MEASS. Response to these concerns back to CHSP and update of the Strategy has been outlined in Section 5.3.10.

CHSP states that the MEASS's current proposal for BA 6.2 does not meet its objectives and those of national policy. CHSP highlighted that they wished to understand consideration of the existing energy infrastructure in more detail. They are concerned around how the site is to be acquired and/or funded. They wished to understand the timeframe in more detail.

In conclusion, CHSP feel that if the Strategy were to be adopted in its current format it would be unrealistic and would require to be revised to take account of the existing and proposed energy generation and transmission infrastructure there, as well as the designated freshwater habitats behind the sea wall and ensure these assets are protected from future coastal flooding events.

It should be noted that the Strategy went to public consultation just before CHSP made their solar farm plans public, and the Managed Realignment site option conflicts with the solar farm plans. The MEASS project team responses in Section 5.3.10 outlines how the project team have worked these risks into the Strategy.

### **5.3.6 Blue Transmission London Array Limited**

Blue Transmission provided a response in February 2018 to the online consultation. Their concerns related to the Managed Realignment of the sites and the works to protect any assets they have there. In particular, in BA6.2 (Cleve Hill), they wanted to know what the risk to the current infrastructure is, how this has been considered in costs and proposals, and whether the Managed Realignment site could allow flood waters to encroach around the substation, which could delay urgent repairs and maintenance creating a risk to electricity supply. The MEASS project team responses in Section 5.3.10 outlines how the project team have worked these risks into the Strategy.

Blue Transmission requested a meeting with the Project Team with representatives from BTLA, NGET and CHSPL to discuss the MEASS further. They are also willing to supply the Engineering Technical Report (ETR) 138 which outlines how The Energy Network Association mitigates flood risk to their sub-stations. The KSL Area team have offered to set up a meeting to discuss these further.

### **5.3.7 Kent County Council**

Councillor Whiting from Kent County Council objected to the NAI approach within Benefit Area 4 at BA4.4 (Lower Halstow), BA4.5 (Barksore Marshes) and BA4.6 (Raspberry Hill). The Council acknowledges that the approach at BA4.4 (Lower Halstow) offers some protection to Lower Halstow village, but are under the impression it does not protect the village fully. The Council considered that this would create an unacceptable risk of flooding at the Brickfield site, Twinnly Wharf and at Raspberry Hill Lane. The MEASS project team responses in Section 5.3.10 outlines how the project team have worked these risks into the Strategy.

### **5.3.8 GBH Wheler Will Trust**

GBH Wheler Will Trust objected to the proposed approach at BA07 (Faversham Creek), especially at BA7.1 (Ham Marshes). The Trust request further explanation on the HTL approach that is to be implemented over the period year 20 to 100 at BA07 (Faversham Creek). They highlighted the different important assets in the area, including three listed buildings at Ham Farm and the important farming practices in the area which work with environmental designations.

The MEASS project team response in Section 5.3.10 outlines how the project team have worked these risks into the Strategy.

### **5.3.9 Brent Community Association**

The Brent Community Association is primarily concerned with BA7.2 (Faversham). The Brent Community Association supports the proposed HTL Sustain approach for this area, and acknowledge this is the highest level of protection within the Strategy. However, they are concerned with the funding of this approach, as the PF score is only 20% and the other 80% would need to be acquired through other sources of partnership funding. They feel that Kent Country Council and Swale Borough Council will be unable to contribute the full amount due to the government cuts they have recently received.

The MEASS project team response in Section 5.3.10 outlines how the project team have worked these risks into the Strategy.

### 5.3.10 Summary of MEASS project team response to consultation - Non Statutory Consultees

Comments on the draft Strategy were received from a number of different organisations. We have responded directly to these organisations and we have included general themes under the public response to consultation document (see Section 5.5). The Implementation Plan (Technical Appendix H) has been updated to capture the specific risks and contingencies.

The table below summarises the Project Team’s response to the different comments received from the non statutory consultees.

**Table 6: Comments and responses to non statutory consultees**

Organisation	Response to comment
RSPB	A letter has been sent to RSPB to confirm the approach to management of the risks at Cleve Hill and the ongoing work being undertaken by the KSL Area Team to carry these discussions forward.
National Grid	A letter was sent to National Grid to update them on risk management for Benefit Area 4.7 (Chetney Marshes) and Benefit Area 6.2 (Cleve Hill). It highlighted that for both of these areas, the Project Team is aware of the important infrastructure and has a number of management plans in place to be detailed during the implementation. It suggests that National Grid will be a key consultee and stakeholder on both these sections going forward and that any design for these sites will include careful consideration of the infrastructure.
Cleve Hill Solar Park Ltd	A letter has been sent to Cleve Hill Solar Park Ltd to advice that the Project Team is aware of the potential plans for the solar park and that management and mitigation is in place within the Strategy. It suggests that a meeting should be arranged to discuss this in more detail, but outlines that although the Strategy proposes Managed Realignment here, if the solar farm plans get approval this policy would be delayed for the implementation. The Project Team also highlights that there could be potential opportunities gained from early consultations and discussions and that the KSL Area Team is keen to discuss in more detail.
Blue Transmission London Array Ltd	A letter has been sent to Blue Transmission London Array Ltd which combines information from the letters sent to both Cleve Hill Solar Park Ltd and National Grid regarding concerns for Benefit Area 6.2: Cleve Hill.
GBH Wheler Will Trust	A letter was sent to GBH Wheler Will Trust to explain the decision making process for the policies in Benefit Area 7 and also detail the freshwater habitat compensation and protection plans that there are for that area.

## 5.4 Landowners

### 5.4.1 Comments from Landowner Meeting – December 2016

During the landowner meetings the following key comments were made:

- Some landowners were open to the idea of Managed Realignment (MR) on their site. However, this is dependent on levels of compensation received and / or does not impact on their future plans for the land.
- Landowners would like the ability to maintain their own defences if the policy is NAI. This would be subject to approvals and permissions being in place for the works.
- Some landowners were not supportive with the idea of MR on the sites.
- A number of landowners were concerned about the loss of the designated sites with an NAI option.

### 5.4.2 Comments from Landowner Meeting – October 2017

During the landowner meeting the following key comments were made:

- A landowner did not like the leading option as they considered we should be reclaiming land rather than losing it.
- Other landowners agreed with the leading option along their frontage.

#### 5.4.3 Comments from NFU

The NFU provided a response to the online consultation on behalf of their members. The NFU required further clarification on how the highly productive agricultural land has been valued and how the land will be protected in the Strategy. They stated that 10% of national Grade 1 Agricultural Land is located within MEASS.

The NFU acknowledged that there has been good dialogue throughout consultation on the Strategy, but would like continued engagement when working with those affected and helping them to adapt. This level of engagement is proposed in the following phases of MEASS and the subsequent works that arise from the Strategy.

The NFU provided a number of examples where other management alternatives have been carried out (e.g. Alde Ore Estuary), as possible alternatives to the Strategy's proposed options.

#### 5.5 Public

At the public engagement drop-in sessions feedback forms were provided to obtain views on the preferred options for the Medway Estuary and Swale Strategy. The feedback form was also available online during the three month consultation for those unable to attend the drop-in sessions. The results from the feedback forms are presented in Section 6.

It should also be noted that a key focus for the consultation period was to provide information and updates as well as received feedback to the public. Whilst Section 6 provides information regarding the response received from the questionnaire, the figures below present information on the number of people who went onto the website. This gives an idea that many more people accessed the information compared to those who filled out a feedback form.

- Total page views -1,531
- Total unique page views - 953
- Entrances to the page – 891

## 6 Response from online consultation and public drop in events

### 6.1 Response received

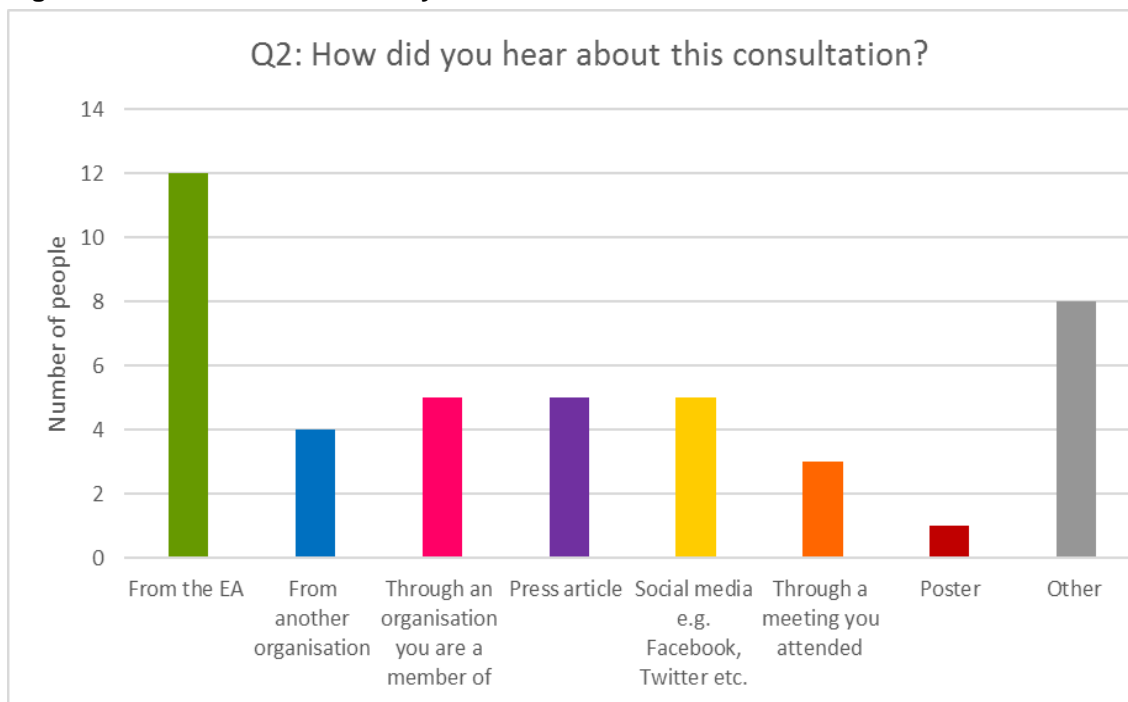
In total 44 questionnaires were completed with 28 individual responses, 15 organisations and 1 no answer responding.

**Table 7: Number of people attending exhibitions**

Exhibition	Number of attendees
Eastchurch Village hall	19 (plus 11 children from childrens club)
Riverside Country Park	20
Halling Community Centre	9

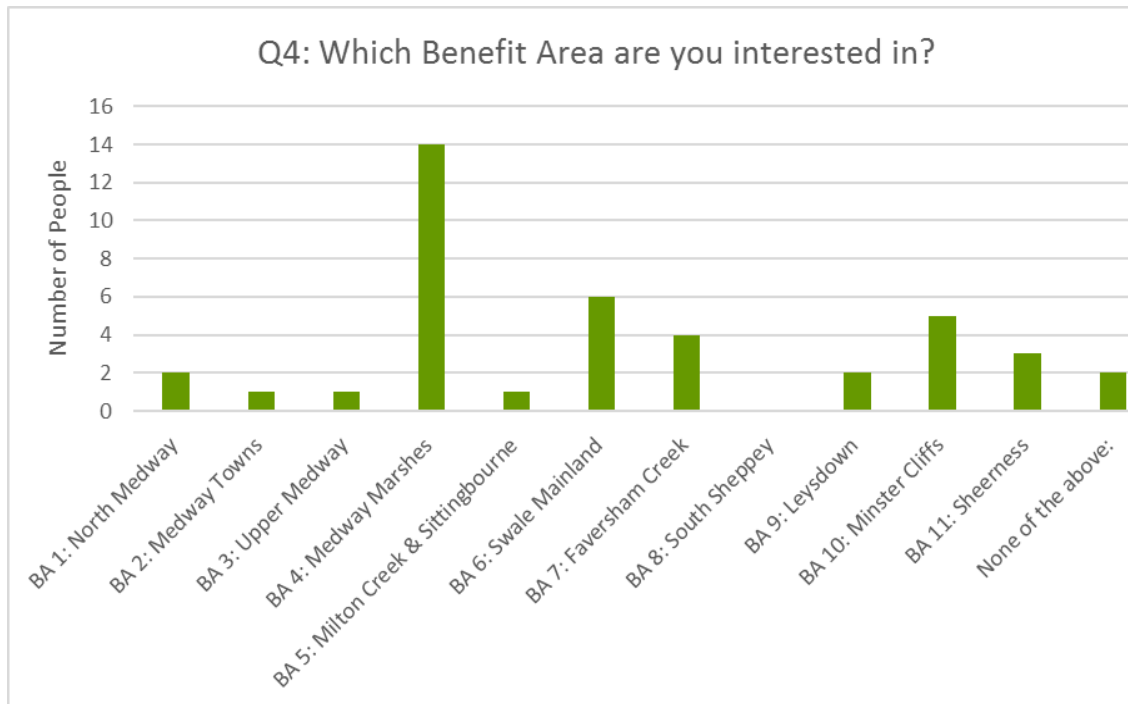
The consultation was publicised in various location. The chart in Figure 12 presents the response to the questionnaire on how people heard about the consultation.

**Figure 12: Question 2 – How did you hear about this consultation?**



From the feedback forms it was identified that BA04 – Medway Marshes was the most represented area during the consultation phase as shown in Figure 13.

**Figure 13: Question 4 – Which Benefit Area are you interested in?**

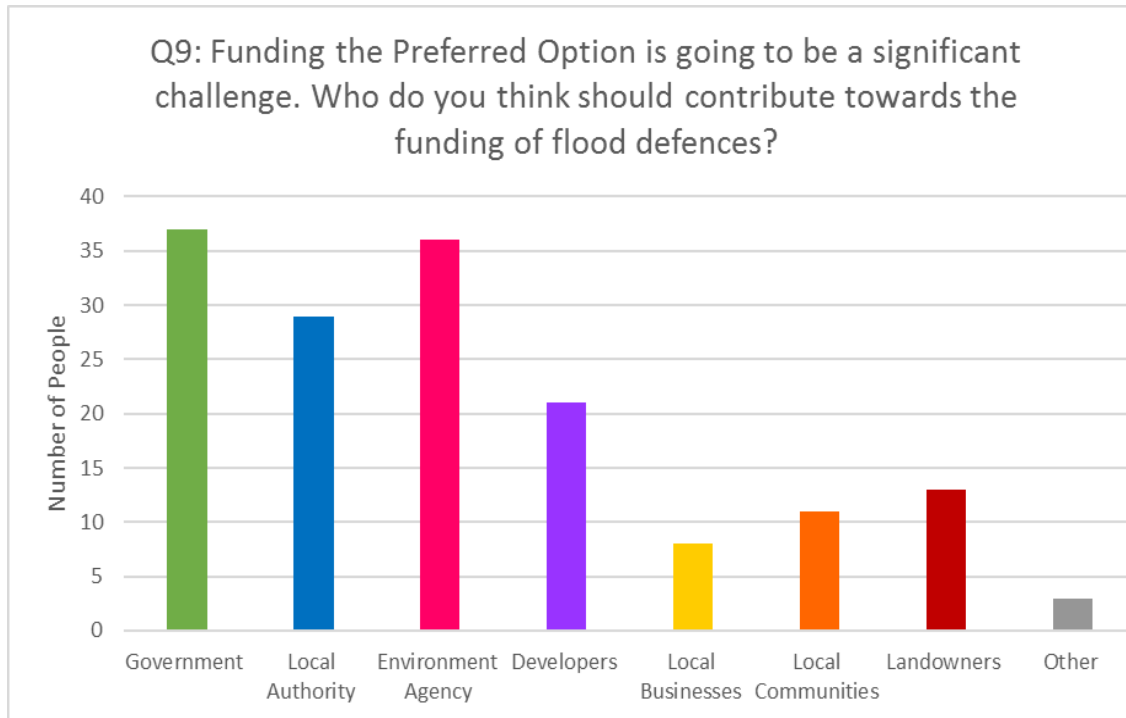


The attendees of the exhibitions and those who completed the forms online identified that they had a good understanding of the meanings of Hold the Line, Managed Realignment and No Active Intervention. It was shown that 35 out of 44 understood all three terms, 2 people did not understand Hold the Line and No Active Intervention and 1 person responded with 'don't know' for Hold the Line and No Active Intervention.

The majority of the people had a good understanding of the process for determining the preferred options in each BA with 82% of people responding yes, 13% responding no and the remaining 5% not knowing. People highlighted that they had either previously come to a drop-in session, asked questions or read the consultation documents to understand the process. There were a number of comments identifying that people considered the options to be financially driven and questioned how decisions regarding wildlife and amenities were considered.

The majority of people (35 out of 44) also identified that they understood the government's approach to partnership funding. However, although people indicated that they understood the approach they did not necessarily agree with the approach indicating it was too financially driven. Some identified that limited funds were available and that work needs to be undertaken to ensure new developments pay contributions. The public were also asked who should contribute towards funding the flood defences and the responses are presented in Figure 14.

**Figure 14: Response to Q9 from the questionnaires**



The consultation documents were then divided down into individual benefit areas to obtain an understanding from local residents and organisations on the areas that most affect them and the results presented in Table 8.

**Table 8: Responses to Questions 10 and 11**

	Question 10 - Do you understand the flood and coastal erosion risk in the Benefit Areas you are interested in?			Question 11 - Do you think the Preferred Options appropriately manages the risk within the Benefit Areas of your concern		
	Yes	No	Don't know	Yes	No	Don't know
BA1 North Medway	6			3	2	1
BA2 Medway Towns	3			3		
BA3 Upper Medway	2			1	1	
BA4 Medway Marshes	16	1		7	10	
BA5 Milton Creek and Sittingbourne	3			2	1	
BA6 Swale Mainland	10			5	4	2
BA7 Faversham Creek	6	1	3	3	3	1
BA8 South Sheppey	3			3		
BA9 Leysdown	4	1	1	1	2	2
BA10 Minster Cliffs	7	1	7	3	3	2
BA11 Sheerness	7			7		

From the above results the majority of people understood the risk to their Benefit Area however was divided on the opinion whether the risk was managed appropriately. The people who responded saying 'no' to question 11 related to the areas where land is expected to be eroded or flooded.



## 6.2 Summary of MEASS project team responses to consultation – Public Consultation

In general, there was broad agreement the approach that has been taken by the Strategy. There were concerns around areas which could be at increasing flood risk in the future and a lot of useful detail was provided which highlights local risks and concerns. Many of these elements have been built into the Implementation Plan for the Strategy so they can be mitigated through option and scheme development.

This section sets out responses to comments by aggregating the response received into key topics and themes. Overall, we have sought to address individual responses by reviewing them, and where relevant updating documents which form part of the Strategy to highlight particular risks, next steps or update options.

These response have been provided to individuals via email or letters if they left specific comments. Furthermore, they have been provide on the website through a Response to Consultation document.

### 6.2.1 General comments

#### **Some areas should include more Managed Realignment sites and less hard defences - is it suitable and sustainable to continue to protect our coastline?**

In general, the Strategy aims to work with the natural coastal and estuarine processes. The Appraisal has assessed many options for each frontage. Our priority is to optimise working with nature, and provide wider benefits (ecological, recreation, heritage) without causing adverse impacts on properties and people. However, due to many areas of the Strategy being low lying land, the flooding that can occur in that area can impact areas relatively far from the coastline. We have ensured that the numerical modelling undertaken has driven where defences are required to adequately protect different assets.

#### **Confusion between the different policies.**

The following definitions are included within MEASS:

*Hold the Line (HTL)*: means that current defences are maintained, or new defences are constructed, to hold the position of the shoreline.

*Managed Realignment (MR)*: involves the relocation of the flood defence line further inland, so assets behind the defence line are still protected from flooding, and the area in front of the new defence line will provide a flood storage area.

*No Active Intervention (NAI)*: means there is no active work to manage flood risk in that area through central government funding. Any defences currently in place will still be monitored for health and safety but no maintenance will be carried out. No new defences will be constructed for areas under a No Active Intervention policy by the Environment Agency, however individuals can work with the Environment Agency to apply to maintain or construct defences privately.

#### **Concerns around risk in areas with a No Active Intervention Policy.**

Under government guidance, for a scheme to be eligible for funding the cost of the defences has to be less than the value of the assets being protected. In NAI areas, the options assessed to manage the flood and erosion risk are more expensive than the assets that are being protected. Therefore, under government guidance, it is not viable to invest in management in these areas, including the ongoing maintenance. As such we would withdraw maintenance in

these areas, and transfer the management of the flooding and erosion risk to the riparian landowners.

The Strategy does not recommend the full removal of any defences. However, where NAI is identified as the policy, the Strategy recommends that some of the defences might be left to degrade over time. The consequences of leaving some defences to degrade or breaching defences will vary depending on the location and the health and safety implications of this.

Although there is no government funding for defences in these areas of NAI, landowners may be able to maintain or construct new defences to protect their property, subject to achieving the relevant permits and licences including Planning Permission and a Flood Risk Activity Permit from the Environment Agency.

However, in some areas NAI is proposed due to environmental designations. To protect these environmentally designated habitats there can be no construction of defences as the coastline needs to maintain in its natural state. These areas also had a policy of NAI in the Shoreline Management Plan.

### **How the Strategy can have Hold the Line with No Active Intervention policies?**

Benefit Areas can have areas of both HTL and NAI. Where this is the case it means that part of the Benefit Area is a HTL policy, and another part of the Benefit Area is NAI. This is determined by the assets at risk of flooding and the benefits attributed to protecting these. The Non-Technical Summary of the Strategy will provide maps which clearly identify these different areas.

### **Concern around impacts on Public Right of Ways including the Saxon Shore Way. Have these been considered within the Strategy development?**

We have taken footpaths into consideration within the Strategy. From discussions with Natural England and the local authorities within the Strategy, it was identified that the footpaths could be moved if required. The movement of footpaths, if needed, will be carried out; even in areas of NAI.

If a footpath is to be moved, the appropriate design and environmental assessments will be undertaken. Additional consultation will be undertaken at this time and the relevant applications undertaken to support the changes.

### **What are the key impacts on the Marine Conservation Areas?**

The Strategy area is within two Marine Conservation Zones (The Medway Estuary and The Swale Estuary) and this requires specific assessment within the Strategic Environmental Assessment (SEA) which supports the Strategy.

The Marine Conservation Zones have a number of important features which need to be carefully considered in the next stages of the Strategy when designs of schemes are looked at in more detail. Specific elements of the Marine Conservation Zones to consider in detail include:

- Estuarine rocky habitats
- Tentacled lagoon worm presence around piers/quays
- Saltmarsh and mudflat habitats.

## **How are decisions made regarding impacts on wildlife, agriculture, infrastructure and amenities?**

The natural environment helps to make the Medway and Swale Estuaries special, so we need to protect both people and the habitat for wildlife.

The process to determine future management within the different areas considers:

- existing features and assets
- potential economic losses
- the wider benefits of assets
- social impacts.

We have taken the following into consideration when developing the Strategy:

- Residential properties
- Commercial properties and land use
- Agricultural land
- Impacts to transport infrastructure including rail and roads
- Impacts to other infrastructure such as power/gas/water infrastructure
- Areas important for tourism and recreation
- Potential areas where improvements in biodiversity can be achieved.

The economic assessment that forms an important part of the Strategy has assessed the above elements for each Benefit Area. We have also assessed the preferred options against potential environmental and social impacts through the SEA. Where potential impacts could be caused, either mitigation and management at the next stage has been proposed, or changes to the options have been made. The SEA looks at impacts options can have to:

- water quality through the Water Framework Directive assessment
- designated habitat
- historic environment
- communities, amenities and livelihoods
- Local Development Plans
- freshwater biodiversity
- saline biodiversity
- agricultural land and woodland soils
- groundwater
- visual impacts on landscape
- carbon storage within the different ecosystems.

## **What happens if the Partnership Funding score is too low? Would the scheme still be carried out?**

National funding is based on the level of benefits the preferred option provides. Other third party contributions may be essential for the preferred option to proceed if national funding is insufficient. The Strategy has started to review the opportunities for co-ordinating funding between partner organisations, and this will be recorded in the final reporting.

Communities with larger populations, where more people and properties are at risk, are more likely to receive national funding than elsewhere. It may become increasingly difficult to provide flood defences for very small settlements, isolated properties and farmland. In addition to national funding, money can come from local authorities and from local contributions.

The Strategy highlights areas where there is the greatest justification for government funding as well as those where third-party funding may be required. This economic assessment has been carried out in line with government guidance, and is the same approach that is used across the country for all flood and erosion risk management schemes.

### **What does the benefit cost ratio mean?**

The benefit cost analysis follows government guidance for Flood and Coastal Risk Management, as defined by the HM Treasury Green Book. It takes account of household, environmental and other benefits including disruption to businesses, transport and other infrastructure. It is based on a calculation of damages that would occur without a coastal defence scheme and the resultant benefits and costs provided by a scheme. Based on government guidance the benefit cost ratio has to be calculated. The benefit cost ratio compares the value of the benefits protected from flooding/ erosion, with the cost of the scheme to protect them (the calculation is therefore the benefits divided by the costs). The benefit cost ratio has to be greater than 1, to show that the value of the assets is greater than the costs to protect them to ensure that tax payers money is invested wisely.

### **There does not appear to be enough detail included within the Strategy.**

A coastal strategy is developed to plan the management of the coastline over the next 100 years. The aim of the Strategy is to build upon the high-level policies that were outlined in the Medway and Swale Estuary Shoreline Management Plan and the North Foreland Shoreline Management Plan. These were developed in 2010 to protect coastal communities and prevent the loss of coastal environments. The Strategy will provide decision makers (the Environment Agency and risk management authorities) with more detail on the specific schemes, and highlight when these works should be carried out.

Owing to the long timescales that MEASS is considering, various assumptions have to be made. The Strategy will recommend options for further investigation and helps identify funding and resource needed to take these more detailed schemes forward. These options will then be considered further at the more detailed project stage to refine the details of the options.

Although the Strategy covers 100 years, it is recommended that it is reviewed regularly (every 5-10 years) to ensure that the content of the Strategy is still relevant, and if more detail is available, then this information will be used to review and update the Strategy recommendations.

### **How did you advertise the consultation of the draft Strategy?**

The public were invited to comment on the draft leading options for MEASS between November 2017 and February 2018. During this period 3 drop-in sessions were held in November to December 2017 so that you could chat to us directly.

The exhibitions were advertised via:

- an article in Inside Swale magazine (a local authority publication delivered to all residents within the borough during November 2017).
- a press release issued at beginning of public consultation phase during November 2017.
- a radio interview with Radio Kent during December 2017.

- details posted on the consultation website (<https://www.gov.uk/government/publications/medway-estuary-and-swale-flood-and-coastal-risk-management-strategy/medway-estuary-and-swale-flood-and-coastal-risk-management-strategy>).
- a briefing note sent to all affected MPs to share with their constituents.
- tweets: 1 at consultation launch, 1 prior to each public drop in event, 1 during January to remind about public consultation, all including direct link to consultation website.
- posters sent to all members of the MEASS Stakeholder Engagement Group and Parish Councils. We received confirmation that posters were displayed at: Sheerness leisure centre, Burham PC, Teynham PC, Halling PC, Eastchurch PC, Sheppey Gateway (Sheerness), St Mary's Island residents association (SMIRA) website.
- posters forwarded on to wider distribution groups by Medway and Swale Estuary Partnership (MSEP), and Medway Council.

The consultation information was also presented on the online project website for you to view and comment on. Within the webpage and online consultation the HRA and SEA were also published and available for comments.

### **How can we be kept informed as the Strategy progresses?**

We have carried out extensive consultation throughout MEASS. We have recorded in the Implementation Plan stakeholders who want more information on the Strategy and will be contacted upon any development. The plan identifies the next stages and who will be consulted during which phases.

Some key parties have also said they would like to be kept informed as the Strategy progresses. This has been recorded and we will ensure you are contacted as schemes in your areas are taken forward.

#### **6.2.2 Comments on specific Benefit Areas**

##### **Concerns around risk of NAI option on Brickfields site (BA4.4).**

It was highlighted during the public drop in events, and through consultation responses received, that the Brickfield site is an important amenity area for local residents. The extent of the local importance of this site had not been previously appreciated, and the risks associated with future flooding of this site have now been highlighted within the Strategy.

Although there is limited funding available for this area, we will consider the opportunities of including this site as part of the future scheme development. Should there be third party funding available in this area, there could be potential to extend the Hold the Line policy.

##### **How has the key infrastructure in BA4.7 (Chetney Marshes) been considered and what will be the risk for this infrastructure?**

There is key national infrastructure located on Chetney Marshes. Risks associated with impacts of flooding and options to the infrastructure has been highlighted throughout the development of the Strategy. The presence of this infrastructure is one of the key reasons why Managed Realignment was deemed unsuitable for this location. However, it was identified that a Habitat Adaptation option could be taken forward.

The Habitat Adaptation option aims to allow a more adaptive approach to managed realignment. During the next stage of the Strategy development, we would need to assess how

the infrastructure is to be protected, but considerations are likely to include localised raising of land, localised embankments, and ensuring ongoing access is provided amongst others.

We will work with the owners of the infrastructure as key stakeholders to develop the details of these plans further.

**Is there a risk of conflict with the potential solar farm plans in BA6.2 (Cleve Hill) and the proposed Managed Realignment site?**

Currently the Strategy recommends a Managed Realignment site at Cleve Hill in year 20, to help provide compensatory habitat across the Strategy. This is required as part of the legal obligations associated with the Habitat Regulations. This conflicts with recently published proposals to build a solar farm in the same area. Currently, the status and plans for the solar farm are uncertain and we are liaising, and will continue to liaise with the interested parties going forward.

Should the plans for the solar farm at Cleve Hill be approved and this moves forward to construction, the following will replace the current policy:

- We will not take responsibility for continued maintenance of the defences in this area.
- A Managed Realignment site would be proposed in the longer term following the lifetime of the solar farm.
- Managed Realignment in other parts of the Strategy would be brought forward into the second epoch, rather than as third epoch considerations.

**A number of comments and concerns were received regarding the NAI policy at Minster Cliffs (BA 9.2 and BA10).**

The proposed coastal defence policy for Minster Cliffs (western part of BA9.2 and BA10) is No Active Intervention. This is in line with the Isle of Grain to South Foreland Shoreline Management Plan 2010 and Swale Borough Council Coastal Change Management Study. The SMP included a stakeholder group of 240 organisations for the development of the plan and the policy was agreed with SBC, the South East Coastal Group and local Elected Members.

Recent discussions over the status of the Site of Special Scientific Interest (SSSI) within this section of the cliff led to a review of its interest by Natural England. This reaffirmed that the whole area of the SSSI still meets the SSSI standard. In order to conserve and enhance the geological interest of the SSSI, the site needs to remain open to coastal processes and the resulting erosion.

A further matter to be considered is whether there is the potential for direct or indirect effects on internationally designated wildlife sites further up the coast, due to the sediment released from the cliffs being transported along the coast. These include Special Protection Areas (SPAs) and Ramsar sites – sites of importance for their bird populations and afforded protection under UK law, and Marine Conservation Zones (MCZs), areas designated for the protection of marine habitats and species.

The policy for this frontage is No Active Intervention. This policy is predominantly based on the assessment of the cliffs being of geological interest, however there is also limited funding for works in the area. The number of properties (benefits) in an area determines the national funding available for works to be undertaken.

Whilst the policy on the frontage is No Active Intervention, the Strategy highlights the risk to properties as well as heritage assets in these areas and recommends that adaptation options are explored and considered for residents in the area.

Future implementation of these adaptation options would be led by Swale Borough Council who are the Lead Risk Management Authority for coastal erosion and covers this section of frontage. This is likely to include monitoring of the cliffs and studies to develop the preferred option. These studies will be dependant of the availability of funding from different sources. Engagement with the public and key stakeholders will continue throughout the implementation and future work to ensure they are kept up to date with any developments for this frontage.

The Environment Agency will continue to undertake discussions with Swale Borough Council to look at property rollback or relocation type options and funding for facilitating this. Property roll back could include the movement of individual properties further back from the cliff edge, whereas the relocation of properties could include the existing properties being left in situ and new properties constructed to house residents.

## 7 Letters of Support and DEFRA review

### 7.1 Letters of support

Through the early and ongoing consultation with different Stakeholders, the MEASS project team have been able to produce a Strategy with buy-in from key stakeholders. Appendix B of this Report presents letters of support received from Natural England, Medway Council, Swale Borough Council and Tonbridge and Malling Council.

### 7.2 Informal DEFRA review of the Statement of Case

Appendix S of the Strategy presents the Statement of Case for MEASS which presents the case for IROPI (Imperative Reasons of Overriding Public Interest).

Following the review of the Strategy by LPRG, the Statement of Case alongside the HRA will be submitted to DEFRA to be signed off. However, to reduce risks of any changes being needed, and provide confidence to LPRG that the HRA assessment has been appropriate, an informal review was undertaken by DEFRA. The comments and any responses by the MEASS project team are summarised below:

- They note that the precautionary approach appears appropriate.
- They note that the test for alternatives is well set out, justified and logical.
- They would like an update regarding NE support for Great Bell's scheme – *following a discussion with Natural England they have included a note to explain that they support Great Bells Scheme but freshwater surveys are required at implementation stage.*
- They would like a little more text added into the Statement of Case to help the reader understand the degree of confidence in freshwater habitats – *this has now been included.*
- They note that the delivery approach for the intertidal habitat appears appropriate with sufficient checks and balances in place.
- They ask the team to clarify the governance of providing the freshwater compensation given the long timescales involved - *This has been discussed with NEAS and Natural England and additional text is included.*
- DEFRA would like to see NE comments on the HRA – *the Letter of Support (see above) will be provided.*
- They anticipate sign-off of the HRA tests could be undertaken by officials but may need to sight ministers regarding the Sheppey Cliffs and Foreshore SSSI due to the political sensitivities of this site.



## 8 Conclusions – did we meet our objectives?

Table 9 provides details regarding whether the original objectives were met for the consultation (which were originally outlined in Table 2).

**Table 9: Objectives for MEASS stakeholder consultation and progress within the Strategy**

Objective/ Details	Measurable	Programme	Progress within Strategy
Increased awareness of flood and erosion risk by residents and landowners: Residents and landowners are aware of the specific risks from coastal flooding and erosion in their area, and the wider strategy area.	Responses from the feedback forms from the public e-consultation, public roadshows and landowner meetings- aim for 80% of community having a good or very good awareness of the risks	By the end of the public consultation phase (February 2018)	<b>Completed</b> – 82% of responses from questionnaire feedback had a good awareness of risk in the different Benefit Areas
Provide awareness of how options have been identified: All stakeholders understand how the options and Strategy has been developed, based on the FCERM-AG and the residual risks (financial and technical) of the schemes.	<p>The aim is to engage and provide information to:</p> <ul style="list-style-type: none"> <li>• 100% of local authorities</li> <li>• 100% of SEG</li> <li>• 100% of landowners in MR sites</li> <li>• 80% of landowners in NAI sites</li> <li>• 60% of general landowners</li> </ul> <p>Can gauge responses through the feedback forms received from landowner consultation, e-consultation and public roadshows, in addition to minutes from meetings with LA and SEG.</p>	By the end of the public consultation phase (February 2018)	<p><b>Completed</b></p> <p>All local authorities were engaged through several meetings and letters of support have been received</p> <p>All SEG members were engaged through three SEG meetings and all had minutes and briefing notes distributed to them</p> <p>100% of landowners in MR sites and 95% of landowners (some letters were returned as address was no longer correct) in NAI sites were contacted and invited for further conversations</p>
Awareness of the Partnership funding approach: All stakeholders are aware of the Partnership Funding approach and outline discussions are had with key potential contributors e.g. Southern Water and the LA's to discuss the potential for partnership working. Furthermore, the residual risk to the asset owners if funding is not achieved is discussed so they understand any residual risks.	Record of meetings with the key contributors/ landowners where partnership funding was discussed. Within the implementation plan the Project Team is able to identify the likely sources for partnership funding.	By the end of the public consultation phase (February 2018)	<p><b>Completed</b> – from questionnaires 80% of public responded saying they understood the partnership funding approach</p> <p>The Strategy has a specific funding plan as an appendix.</p>
Make sure that any stakeholder feels they can get their views heard and	All comments recorded on the feedback forms during the e-consultation, landowner meetings	Recorded in the Stakeholder report that will	<b>Completed</b> All comments have been recorded and this

Objective/ Details	Measurable	Programme	Progress within Strategy
<p>receives responses on concerns: Provide mechanisms for all stakeholders to provide feedback and ask questions and make sure all comments are responded to.</p>	<p>and public roadshows/ in meeting minutes.                      Produce a Stakeholder Report summarising the comments and outline how these have been addressed in the Strategy.                      Not every single comment can be responded to individually, but the themes of comments will be addressed. The Strategy will then be a public document.</p>	<p>be developed by February 2018.</p>	<p>Report has been produced.                      A Response to Consultation document has been produced which responds to all comments from public and will be made available on the website.                      All other comments have been responded to individually through emails and letters.</p>
<p>Gain formal approval for the Strategy from statutory stakeholders e.g. Natural England and Historic England: To undertake consultation with statutory stakeholders, and gain formal approval of the Strategy prior to submission to LPRG.</p>	<p>The SEA and HRA will be provided for consultation. Comments received will be formally recorded and addressed where appropriate. Minutes of the meetings with the stakeholders will also be recorded. Approval of SEA and HRA is provided by statutory consultees.</p>	<p>By the end of the public consultation phase (February 2018)</p>	<p><b>Completed</b>                      The SEA and HRA went through statutory 3 month consultation between November 2017 and February 2018. All comments were recorded and responded to. A letter of support from Natural England is included in Appendix B.</p>
<p>Gain support in principle for the Strategy from landowners and operators: Landowners and operators provide support in principle for the options outlined in the strategy.</p>	<p>In the Objective 2 it was aimed that 100% of landowners in MR sites and 80% of landowners in NAI sites would be contacted. It is therefore hoped that discussions will be had with 40% of them, and we will be able to get agreement from 20% of the landowners who discussions are had with. A specific focus will be put on the landowners and operators at risk in the first epoch.</p>	<p>By the end of the public consultation phase (February 2018)</p>	<p><b>Partly achieved</b>                      The number of landowners which took the opportunity to meet the Project Team for specific discussions was lower than 40%, however the management approach was at least understood by the majority of landowners following the discussions.</p>
<p>Make sure that all stakeholders feel that an open and transparent approach to stakeholder engagement is undertaken: The Strategy will aim to make sure that all stakeholders feel that an open and transparent approach to the engagement has been undertaken to make sure that there is buy-in and agreement on the Strategy prior to submission to LPRG.</p>	<p>Inclusion of comments and records of meetings in Stakeholder Report which will be submitted to Project Board for approval in February 2018 and will supplement the Strategy as an appendix.                      The key messages have been shared with the whole of the project team to make sure that a clear and concise method is delivered to all stakeholders.</p>	<p>Throughout the Strategy.</p>	<p><b>Completed</b>                      A Response to Consultation document has been produced which responds to all comments from public and will be made available on the website.                      This was disseminated and approved at Project Board.</p>

## 9 References

Environment Agency. (2015). *Medway Estuary and Swale Strategy, Record of Stakeholder Engagement Group Meeting 30<sup>th</sup> September 2015*. Croydon: Mott MacDonald.

Mott MacDonald. (2016). *Medway Estuary and Swale Strategy, Record of the Stakeholder Engagement Group Second Meeting 7<sup>th</sup> July 2016*. Croydon: Mott MacDonald.

Mott MacDonald. (2017). *Medway Estuary and Swale Strategy, Record of the third SEG meeting – 12<sup>th</sup> September 2017*. Croydon: Mott MacDonald.

# Appendices

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## A. MEASS Stakeholders

## A.1 Tier 1 Stakeholders

Stakeholder	Category	Area of Interest				Stakeholder Analysis		Engagement Group
		Tidal Medway	Medway Basin	Swale Estuary	Isle of Sheppey	Influence	Impacts	
DEFRA	High level organisation	Yes	Yes	Yes	Yes	High	Moderate	Statutory
English Heritage	High level organisation	Yes	Yes	Yes	Yes	High	Significant	Statutory
Marine Management Organisation	High level organisation	Yes	Yes	Yes	Yes	High	Significant	Statutory
National Farmers Union	High level organisation	Yes	Yes	Yes	Yes	High	Moderate	SEG
Natural England	High level organisation	Yes	Yes	Yes	Yes	High	Significant	Statutory
South East Local Enterprise Partnership	High level organisation	Yes	Yes	Yes	Yes	High	Minor	SEG
Environment Agency	High level organisation	Yes	Yes	Yes	Yes	High	Significant	Statutory
Kent County Council	LLFA	Yes		Yes	Yes	High	Significant	SEG
Medway Council	LLFA	Yes	Yes			High	Significant	SEG
Swale Borough Council	Local Authority			Yes	Yes	High	Significant	SEG
Tonbridge and Malling District Council	Local Authority	Yes				High	Significant	SEG
Kent Flood Risk Committee	FCRM	Yes	Yes	Yes	Yes	High	Significant	SEG
Southern RFCC	FCRM	Yes	Yes	Yes	Yes	High	Significant	SEG
National Grid	Infrastructure Providers	Yes	Yes	Yes	Yes	High	Significant	SEG
Network Rail	Infrastructure Providers	Yes	Yes	Yes	Yes	High	Moderate	SEG
Peel Ports (Medway Ports)	Infrastructure Providers	Yes	Yes	Yes	Yes	Moderate	Significant	SEG
Kent Wildlife Trust	Wildlife	Yes	Yes	Yes	Yes	High	Moderate	SEG
RSPB	Wildlife & Landowner	Yes	Yes	Yes	Yes	High	Significant	SEG
Gordon Henderson – Sittingbourne and Sheppey	MP			Yes	Yes	High	Moderate	Public
Helen Grant – Maidstone and the Weald	MP	Yes				High	Moderate	Public
Helen Whately – Faversham and Mid-Kent	MP			Yes		High	Moderate	Public
Rosie Duffield – Canterbury	MP			Yes*		High	Moderate	Public
Kelly Tolhurst – Rochester and Strood	MP	Yes	Yes			High	Moderate	Public

Rehman Chishti – Gillingham and Rainham	MP		Yes			High	Moderate	Public
Tracey Crouch – Chatham and Aylesford	MP	Yes				High	Moderate	Public

## A.2 Tier 2 Stakeholders

Stakeholder	Category	Area of Interest				Stakeholder Analysis		Engagement Group
		Tidal Medway	Medway Basin	Swale Estuary	Isle of Sheppey	Influence	Impacts	
BritNEd Converter Station (Nat Grid)	Infrastructure Providers		Yes			Moderate	Moderate	Asset Owner
Country Land and Business Association	High level organisation	Yes	Yes	Yes	Yes	Moderate	Moderate	Public
CPRE	Wildlife	Yes	Yes	Yes	Yes	Moderate	Moderate	Public
Damhead Creek PS	Infrastructure Providers		Yes			Moderate	Moderate	Asset Owner
Farming and Wildlife Advisory Group	Wildlife	Yes	Yes	Yes	Yes	Moderate	Moderate	SEG
Kent Wildfowling and Conservation Association	Wildlife	Yes	Yes	Yes	Yes	Moderate	Moderate	SEG
Kingsnorth Power Station	Infrastructure Providers		Yes			Moderate	Moderate	Asset Owner
London Array	Infrastructure Providers		Yes	Yes		Moderate	Moderate	Asset Owner
Lower Medway IDB	Local Authority	Yes	Yes	Yes	Yes	Moderate	Moderate	SEG
Marine Conservation Society	Wildlife	Yes	Yes	Yes	Yes	Moderate	Moderate	SEG
Medway & Swale Estuary Partnership	Countryside partnership	Yes	Yes	Yes	Yes	Moderate	Moderate	SEG
Swale Coastal Reserves Steering Group	Wildlife			Yes	Yes	Moderate	Moderate	Public
Elmley Conservation Trust	Wildlife			Yes	Yes	Moderate	Significant	SEG
Individual Landowners	Landowner				Yes	Moderate	Significant	Land Owner
British Marine Industries Federation	Recreation	Yes	Yes	Yes	Yes	Moderate	Minor	Asset Owner
Grain Power Station	Infrastructure Providers		Yes			Moderate	Minor	Asset Owner
Highways Agency	High level organisation	Yes	Yes	Yes	Yes	Moderate	Minor	Asset Owner
Historic England	High level organisation	Yes	Yes	Yes	Yes	Moderate	Minor	SEG
Kent Highway Services	Infrastructure Providers	Yes	Yes	Yes	Yes	Moderate	Minor	Asset Owner
Southern Water	Infrastructure Providers	Yes	Yes	Yes	Yes	Moderate	Minor	Asset Owner
Swale Green Grid Partnership	Countryside partnership			Yes	Yes	Moderate	Minor	SEG

Thamesport	Infrastructure Providers		Yes			Moderate	Minor	Asset Owner
The Crown Estate	Landowner	Yes	Yes	Yes	Yes	Moderate	Minor	Asset Owner
Your Tidal Thames (YTT) Catchment Partnership	Countryside partnership			Yes	Yes	Moderate	Minor	Public
National Trust	Heritage	Yes	Yes	Yes	Yes	Moderate	Minimal	Public
Sport England South East Region	Recreation	Yes	Yes	Yes	Yes	Moderate	Minimal	Public
Bobbing	Parish Council			Yes		Low	Moderate	SEG
Catermaran Yacht Club	Recreation				Yes	Low	Moderate	Public
Chatham Maritime Trust	Landowner		Yes			Low	Moderate	Asset Owner
Cuxton	Parish Council	Yes				Low	Moderate	SEG
Eastchurch	Parish Council				Yes	Low	Moderate	SEG
Faversham Creek Trust	Heritage			Yes		Low	Moderate	Public
Faversham Road Residents' Association	Community			Yes		Low	Moderate	Public
Faversham Town Council	Parish Council			Yes		Low	Moderate	SEG
Friends of Faversham Creek	Community			Yes		Low	Moderate	Public
Frindsbury Extra	Parish Council	Yes				Low	Moderate	SEG
Graveney with Goodnestone	Parish Council			Yes		Low	Moderate	SEG
Halling	Parish Council	Yes				Low	Moderate	SEG
Hartlip	Parish Council			Yes		Low	Moderate	SEG
Hoo St Werburgh	Parish Council		Yes			Low	Moderate	SEG
Isle of Sheppey Sailing Club	Recreation				Yes	Low	Moderate	Public
Iwade	Parish Council			Yes		Low	Moderate	SEG
Kent Ramblers	Recreation	Yes	Yes	Yes	Yes	Low	Moderate	Public
Leysdown	Parish Council				Yes	Low	Moderate	SEG
Lower Halstow	Parish Council			Yes		Low	Moderate	SEG
Luddenham	Parish Council			Yes		Low	Moderate	SEG
Medway River Users Association	Recreation	Yes	Yes			Low	Moderate	Public
Medway Valley Countryside Partnership	Countryside partnership	Yes				Low	Moderate	SEG
Milton Creek Trust	Wildlife			Yes		Low	Moderate	Public



Minster Beach Windsurf Club	Recreation				Yes	Low	Moderate	Public
Minster-On-Sea	Parish Council				Yes	Low	Moderate	SEG
Oare	Parish Council			Yes		Low	Moderate	SEG
Ospringe	Parish Council			Yes		Low	Moderate	SEG
Queenborough	Parish Council				Yes	Low	Moderate	SEG
Queenborough Fishermen's Association	Fisheries		Yes	Yes	Yes	Low	Moderate	Public
Residents Association	Community	Yes	Yes	Yes	Yes	Low	Moderate	Public
Rochester Oyster and Floating Fisheries	Fisheries		Yes	Yes		Low	Moderate	SEG
St Mary Hoo	Parish Council		Yes			Low	Moderate	SEG
St Mary's Island Residents Association	Community		Yes			Low	Moderate	Public
Stoke	Parish Council		Yes			Low	Moderate	SEG
Teynham	Parish Council			Yes		Low	Moderate	SEG
The Faversham Society (Planning Committee)	Community			Yes		Low	Moderate	Public
Tonge	Parish Council			Yes		Low	Moderate	SEG
Upchurch	Parish Council			Yes		Low	Moderate	SEG
Upnor Sailing Club	Recreation	Yes	Yes			Low	Moderate	Public
Warden	Parish Council				Yes	Low	Moderate	SEG

\* Not directly affecting stakeholders responsible area

### A.3 Tier 3 Stakeholders

Stakeholder	Category	Area of Interest				Stakeholder Analysis		Engagement Group
		Tidal Medway	Medway Basin	Swale Estuary	Isle of Sheppey	Influence	Impacts	
KCC - Kent Downs AONB Unit	Environmental Groups	Yes				Low	Minor	Public
Friends of North Kent Marshes	Wildlife	Yes	Yes	Yes	Yes	Low	Minor	Public
Groundwork Kent and Medway	Environmental Groups	Yes	Yes	Yes	Yes	Low	Minor	Public
Kent & Essex IFCA	Fisheries	Yes	Yes	Yes	Yes	Low	Minor	Public

Kent and Essex Sea Fisheries Committee	Fisheries	Yes	Yes	Yes	Yes	Low	Minor	Public
Kent Fisheries Consultative Association	Fisheries	Yes	Yes	Yes	Yes	Low	Minor	Public
KCC - Kent Downs AONB Unit	Environmental Groups	Yes				Low	Minor	Public
North Kent Yachting Association	Recreation	Yes	Yes	Yes	Yes	Low	Minor	Public
Country Land and Business Association	Landowner	Yes	Yes	Yes	Yes	Low	Minor	Public
RNLI, Eastern Division	Emergency Services	Yes	Yes	Yes	Yes	Low	Minor	Public
Royal Yachting Association, SE Region	Recreation	Yes	Yes	Yes	Yes	Low	Minor	Public
Seasalter Shellfish	Fisheries			Yes	Yes	Low	Minor	Public
Sustainable Sheppey	Environmental Groups				Yes	Low	Minor	Public
Sustrans	Environmental Groups	Yes	Yes	Yes	Yes	Low	Minor	Public
Tourism South East	Recreation	Yes	Yes	Yes	Yes	Low	Minor	Public
Whitstable Oyster Fisheries Co	Fisheries			Yes	Yes	Low	Minor	Public
Wild Spaces Fund	Wildlife	Yes	Yes	Yes	Yes	Low	Minor	SEG
Wildlife Sailing	Recreation		Yes	Yes	Yes	Low	Minor	Public
Allhallows	Parish Council		Yes*			Low	Minimal	SEG
Bapchild	Parish Council			Yes*		Low	Minimal	SEG
Bat Conservation Trust	Wildlife	Yes	Yes	Yes	Yes	Low	Minimal	Public
Bumblebee Conservation Trust	Wildlife	Yes	Yes	Yes	Yes	Low	Minimal	Public
Butterfly Conservation	Wildlife	Yes	Yes	Yes	Yes	Low	Minimal	Public
Cliffe and Cliffe Woods	Parish Council		Yes*			Low	Minimal	Public
Cooling	Parish Council		Yes*			Low	Minimal	Public
High Halstow	Parish Council		Yes*			Low	Minimal	Public
HM Coastguard, MCA	Emergency Services	Yes	Yes	Yes	Yes	Low	Minimal	Public
Kent Bat Group	Wildlife	Yes	Yes	Yes	Yes	Low	Minimal	Public
Kent Federation of Amenity Societies	Recreation	Yes	Yes	Yes	Yes	Low	Minimal	Public
Kentish Stour Countryside Partnership	MP			Yes		Low	Minimal	Public
Kingfisher Angling Preservation Society	Wildlife	Yes	Yes	Yes	Yes	Low	Minimal	Public
Newington	Parish Council			Yes*		Low	Minimal	Public

Sheppey Coastguard	Emergency Services		Yes	Yes	Yes	Low	Minimal	Public
Sheppey Prisons	Landowner				Yes	Low	Minimal	Public
St James, Isle of Grain	Parish Council		Yes*			Low	Minimal	Public
Swale National Nature Reserve	Landowner			Yes	Yes	Low	Minimal	Public
The Churches Conservation Trust	Landowner	Yes		Yes		Low	Minimal	Public
The Cruising Association	Recreation	Yes	Yes	Yes	Yes	Low	Minimal	Public
GeoConservation Kent	Environmental Groups	Yes	Yes	Yes	Yes	Very Low	Minor	Public
Kemsley Community Angling Preservation Society	Fisheries			Yes		Very Low	Minor	Public
Sheppey Environment Forum (CC2150)	Environmental Groups				Yes	Very Low	Minor	Public
Sheppey Matters	Environmental Groups				Yes	Very Low	Minor	Public
City of Rochester Society	Heritage		Yes			Very Low	Minimal	Public
Dickens' Country Protection Society	Heritage	Yes	Yes			Very Low	Minimal	Public
Kent Police Marine Unit	Emergency Services	Yes	Yes	Yes	Yes	Very Low	Minimal	Public
Maidstone Museum	Heritage	Yes				Very Low	Minimal	Public
Maritime and Coastguard Agency (MCA)	Emergency Services	Yes	Yes	Yes	Yes	Very Low	Minimal	Public
Medway Chamber of Commerce	Community	Yes	Yes			Very Low	Minimal	Public
Oare Gunpowder Works	Heritage			Yes		Very Low	Minimal	Public
Sheppey Environment Forum (CC2150)	Environmental Groups				Yes	Very Low	Minor	Public
Sheppey Matters	Environmental Groups				Yes	Very Low	Minor	Public

\* Not directly affecting stakeholders responsible area

## **B. Letters of Support**

### **B.1 Natural England Letter of Support**

Date: 17 August 2018  
Our ref: 227644  
Your ref: MEASS NE Letter of Comfort



Jeremy Colbeck  
Environment Agency

**BY EMAIL ONLY**

Customer Services  
Hornbeam House  
Crewe Business Park  
Electra Way  
Crewe  
Cheshire  
CW1 6GJ

T 0300 060 3900

Dear Jeremy,

**Flood and Coastal Risk Management consultation – Option/Scheme advice to the Environment Agency (EA): Medway Estuary and Swale (Coastal Defence) Strategy – MEASS .**

**Location:** The Strategy area includes the Isle of Sheppey, Medway Estuary and Swale: The boundaries of the Strategy area are: Southern: Allington Sluice as the upstream tidal limit of the Medway; Northern/Western: the village of Stoke on the Hoo Peninsula and the Eastern: the Sportsman Public House on Cleve Marshes near Faversham

**Medway Estuary and Marshes; The Swale; Outer Thames Estuary: Special Protection Area (SPA)**

**Peter's Pit : Special Area of Conservation (SAC)**

**Medway Estuary and Marshes; The Swale : Ramsar Site**

**Medway Estuary and Marshes; The Swale; Sheppey Cliff and Foreshore; Tower Hill and Cockham Wood; Halling to Trottscliffe Escarpment; Holborough to Burnham Marshes; Peter's Pit : Site of Special Scientific Interest (SSSI)**

**The Swale Estuary,; The Medway Estuary : Marine Conservation Zone**

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The area covered by the proposed Medway Estuary and Swale (Coastal Defence) Strategy (MEASS) includes extensive areas of both nationally and internationally designated nature conservation sites and one of the primary aims of the Strategy was to maintain the integrity of Natura 2000 sites, recognising the importance of this area with regards to nature conservation.

Following the ongoing consultation and information received from the Environment Agency regarding this proposal, we write to confirm that it is Natural England's view that **the proposed Medway Estuary and Swale (coastal defence) Strategy is likely to lead to an environmentally acceptable solution.**

#### **Appropriate Assessment**

An Appropriate Assessment (AA) of the Strategy has been undertaken in accordance with the Conservation of Habitats and Species Regulations 2017. This assessment concluded **adverse effects on the integrity** (AEOI) of the following sites - the Medway Estuary and Marshes SPA and

Ramsar; and the Swale SPA and Ramsar, and Natural England agrees with this conclusion. These adverse effects are due to the need to realign the coast to address coastal squeeze impacts **(c535ha including 35ha of historic losses ) on intertidal habitat (primarily saltmarsh loss)** and therefore cause saline inundation impacts **on freshwater habitat potentially (c873ha)**, which is currently protected by flood defences that are/will cause the coastal squeeze impacts.

The AA is based on information available at a strategic level and, whilst we accept the conclusions, it does not preclude the requirement for more detailed AAs to be undertaken for each scheme when design details are further developed and when detailed surveys are available to further clarify the impacts, mitigation measures and refine the habitat loss impacts and therefore the compensation needs.

We advise that we consider the AEOI conclusion is unavoidable due to the Strategy's requirement to address coastal squeeze impacts on the Natura 2000 sites. This was the same approach taken for the corresponding Shoreline Management Plans, and is in-line with the advice, given by Natural England, that 'Holding the Line' of existing defences behind coastal habitats is likely to be a more damaging option than allowing natural or planned realignment of the coastline, thus allowing intertidal habitats to respond to sea level rise. Also, Natural England's advice is that the long term protection of freshwater sites in-situ behind seawalls is likely to be unsustainable and therefore freshwater habitat should be relocated further inland away from areas of flood risk where they can be better conserved into the future.

The MEASS Project Team worked positively with Natural England on the above advice and have developed a Strategy that sets out a pragmatic strategic approach to addressing coastal squeeze and saline inundation impacts on designated habitats whilst delivering the key primary objective to reduce flood and erosion risk to properties and infrastructure, as well as having regard to secondary objectives such as whole life costs etc.

## **Compensation Requirements and the Habitat Creation Programme**

### **Detailed surveys**

Further detailed assessments, including habitat and species surveys, are required to fully assess both the impacts and the compensation offer. The current assessment at a strategic level lacks the detail required to ensure the level of certainty required when assessing impacts and developing compensation. We understand that EA are planning surveys early next year both on the sites that are potentially impacted and also at Great Bells Farm (160ha of potential compensation, on a site created in 2013). This information, together with the management plan and monitoring to date of Great Bells Farm, will allow a detailed assessment of the interest features impacted and how these are addressed by the proposed compensation. Natural England is reasonably confident that Great Bells Farm should be able to compensate for the freshwater impacts to the SPAs given its close proximity and the current bird interest. The concern is for the Ramsar Wetland interests; detailed botanical and invertebrate surveys are required to see how the interest features impacted compare with what has developed at Great Bells Farm. Again, given its location and wetland composition, it is hoped that this will be suitable. Once the survey details are available next year we can work with the EA to maximise the potential of the compensation being offered at Great Bells, as well as look for other fresh water sites and programme in the impacts on the MR site to ensure that the coherence of the network of sites can be maintained during this transition phase.

### **Monitoring**

Monitoring is required to ensure the appropriate delivery of compensation habitats (quantity and quality of habitat), over the three epochs. This monitoring will ensure that EA meet their legal obligations and also that they do not over deliver. The Strategy's requirements are based on current predictions of sea level rise and modelling of complex estuarine systems; there are a number of uncertainties that may vary the requirements either way. However, we know that the Strategy area,

particularly the Medway, is losing salt marsh and the early epochs requirements are lower than the later epochs therefore, this provides an opportunity to review and address, both ways, the requirement based on evidence from monitoring on the ground observation and any new evidence.

### **Intertidal Habitat**

Currently the Strategy has identified **c535ha** (including 35ha historic losses) of saltmarsh habitat loss, see table 10 in the HRA (and in the appendix of this letter). Table 12 in the HRA (see Appendix) identifies the potential opportunities for managed realignment (MR) to address these coastal squeeze impacts. Compensation measures for coastal squeeze to intertidal habitat are usual offered at a 1:1 ratio and therefore this is the planned compensation quantity. Also the MR sites are identified to maximise saltmarsh development as this is the only intertidal habitat predicted to be lost. There is ~42ha of compensation for saltmarsh habitat to be identified, this shortfall is not required until the 3<sup>rd</sup> epoch therefore the requirement is left to be identified by EA's local team Habitat Creation Programme. This Programme reports to EA nationally and DEFRA and therefore offers a secure programme to ensure future timely delivery.

There is a risk that in addition to this shortfall not all of the identified MR sites will go forward, future monitoring may also require more delivered habitat. There are limited alternatives for MR within the Medway and Swale however, the Project Team have identified that there are potential opportunities to provide compensation for intertidal habitat outside of the Strategy area.

Potentially, a proposed MR site at St Mary's Marshes, that is currently being considered as part of the Thames Estuary 2100 Strategy, could help to compensate habitat losses in the MEASS. Ideally, compensation should be provided as close as possible to the impacted site however, work specifically carried out to address habitat losses from Flood and Coastal Erosion Risk Management (FCERM) concluded that habitat within the same Coast Habitat Management Plan could be used to address impacts from FCERM. St Mary's Marshes MR site is located within the same CHaMP area (the Greater Thames Area) and is located in close proximity to the Medway Estuary. Therefore, these factors provides support for accepting St Mary's Marshes, in part, to address coastal squeeze impacts in the MEASS. In addition to the evidence provided by the CHaMP, consideration will also need to be given regarding how the bird interest features of the MEASS SPAs would utilise this site and, hence, provide greater certainty that St Mary's Marshes is appropriate compensation.

### **Freshwater Habitat**

The freshwater habitat impacts are identified as potentially (c873ha) – (see Table 9 in the HRA and the location of these impacts can be seen in Table 13 of the HRA and in the Appendix of the this letter) and currently only 160ha have been secured through Great Bells Farm.

We have advised EA that this current lack of secured freshwater habitat is a key risk, however, HTL on these designated sites to protect freshwater is not a sustainable solution. Therefore, while securing freshwater habitat further inland may take greater time and is potentially more costly upfront it provides an opportunity to deliver freshwater habitat in a more sustainable location for the future and provide more resilient flood defences (further back from the sea with habitat at the toe to protect them).

Natural England has also proposed a number of potential freshwater sites to EA, that are currently being managed for freshwater interest under countryside stewardship options and could be further managed to meet compensation requirements e.g. Stoke Marshes on the Isle of Grain. EA needs to be mindful that the restoration of freshwater habitat particularly on arable land can be a lengthy process. Time is required to return the soil structure and the wildlife interest to develop therefore, we reiterate our advice that EA should seek to secure the management of land for compensating for freshwater habitat well in advance of the proposed impacts as potentially the site may take 10 to 20 years to develop suitable interest to compensate for current Natura 2000 sites (

although some of the supportive features for SPA may return more rapidly).

## **SSSI**

All of the internationally designated sites are also underpinned by nationally designated SSSIs. It is Natural England advise that based on the current assessment at this strategic level the conservation interest of the SSSIs is also best conserved and enhanced through the same approach of coastal realignment and creation of freshwater habitat further inland.

Since this proposal is within the vicinity of a number of SSSIs, we stress that this letter does not constitute Natural England's assent or advice for the purposes of section 28H of the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). When details of the proposed operation become available, and before carrying it out, the operating authority, having considered its general duty under section 28G(2) of the Wildlife and Countryside Act 1981, is required to give notice to Natural England. The operating authority is required to carry out the operation in accordance with the provisions of section 28H of the Wildlife and Countryside Act 1981 as the proposed operation is within the vicinity of a SSSI.

This advice is offered based on the information provided to date. It is given without prejudice to any advice that Natural England may offer in accordance with its statutory role under the Conservation of Habitats and Species Regulations 2017, or any assent that may be required under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). Formal comment on the proposal will be provided following consultation on the Environmental Statement as required under the relevant Regulations. We look forward to receiving further information as the proposal is developed.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

We look forward to working with the EA in the future to ensure the successful delivery of the Strategy, to help protect homes, business and infrastructure from flooding and to secure a heathy natural wildlife sites into the future.

Yours sincerely

Angela Marlow

Senior Adviser for the coast  
Natural England - Kent and Sussex Team



**Table 9: Summary of final Strategy impacts on freshwater SPA/Ramsar habitat due to increased flooding. Note that these are reduced figures compared with Table 7 due to the assessment of alternatives undertaken and the updated Strategy policies.**

Strategy epoch	Projected loss of freshwater SPA/Ramsar habitat (ha)
Epoch 1 (0-20 years)	289 ha
Epoch 2 (21-50 years)	584 ha
Epoch 3 (51-100 years)	0*
<b>Total</b>	<b>873 ha</b>

\*Although increased loss would be expected with sea level rise, the figures for Epochs 1 and 2 have been calculated using modelling which has already accounted for rise in sea level and therefore all compensation will be captured by year 50. There could be a requirement for additional Managed Realignment sites in the third epoch. If these are undertaken on sites with designated freshwater habitat, additional compensation would need to be sought as part of these schemes.

**Table 10: Summary of Strategy impacts on intertidal saltmarsh habitat due to coastal squeeze**

Strategy epoch	Projected loss of intertidal saltmarsh SPA/Ramsar habitat (ha)
Epoch 1 (0-20 years)*	110.3 ha
Epoch 2 (21-50 years)	134.8 ha
Epoch 3 (51-100 years)	290 ha
<b>Total</b>	<b>535.1 ha</b>

\*Includes historic loss since SMP of 35ha

**Table 12: The MR sites proposed to be taken forwards based on a Strategy Wide assessment**

Epochs	MR Site	Area of saltmarsh habitat (ha)	Total Ha provided	Cumulative compensation (ha)
1	22 – Kemsley	4.8	115.4	115.4
	13 – Danes Hill	1.9		
	41 – Spitend	7.3		
	36 – Elmley	66.2		
	# Tailness Marsh	5.6		
	2 – Abbots Court	29.6		
2	27 - Cleve Hill	202.7	202.7	318.1
3	20 - Chetney Marsh	175	175	493.1

Source: Mott MacDonald, 2017

**Table 13: Hectares of freshwater habitat compensation required. A total of 873ha is required over the Strategy lifetime.**

Year	Policies causing freshwater impacts	Hectares of freshwater compensation required
<b>EPOCH 1</b>		<b>289</b>
5	MR site at BA1.3, BA8.3, and BA8.4	143
9	NAI policy at BA4.2a – estimated will become at risk by year 9 due to deterioration of defence condition.	32
11	MR site at BA1.3	37
20	NAI policy at BA4.5 - estimated will become at risk by year 20 due to deterioration of defence condition.	77
<b>EPOCH 2</b>		<b>584</b>
21	NAI policy at BA4.2b - estimated will become at risk by year 21 due to deterioration of defence condition.	88
25	BA4.7 Managed Realignment – Habitat Adaptation Policy.	385
30	NAI policy at BA7.1 - estimated will become at risk by year 30 due to deterioration of defence condition.	111

## **B.2 Letter of support from Medway Council**



**SENT BY EMAIL**

**Planning Service  
Physical & Cultural Regeneration**

Medway Council

Gun Wharf

Dock Road

Chatham

Kent ME4 4TR

Telephone: 01634 306000

Direct line: 01634 331420

Email: [priscilla.haselhurst@medway.gov.uk](mailto:priscilla.haselhurst@medway.gov.uk)

09 August 2018

Dear Jon,

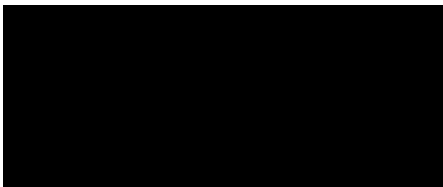
**Medway Estuary and Swale Strategy**

Thank you for your recent correspondence including the information pack containing the preferred option for each Benefit Area relevant to the Medway administrative area.

We note that the options have been developed based on comments received from ourselves, and other stakeholders including landowners and the public.

We thank you for the opportunity to input into the strategy and can confirm that we support the preferred options identified subject to the further engagement and consultation highlighted for some of the Benefit Areas within the implementation plan.

Yours sincerely



**Priscilla Haselhurst  
Flood Risk Manager**

### **B.3 Letter of support from Swale Borough Council**

Swale House, East Street,  
Sittingbourne, Kent ME10 3HT  
DX59990 Sittingbourne 2  
Phone: 01795 417850  
Fax: 01795 417141  
www.swale.gov.uk



Environment Agency  
Jon.byne@environment-agency.gov.uk

**Please ask for:** Councillor David Simmons  
**Telephone:** 01795 532100  
**Fax:** 01795 417477  
**E-mail:** [davidsimmons@swale.gov.uk](mailto:davidsimmons@swale.gov.uk)  
**Our Ref:**  
**Your Ref:**  
**Date:** 30 July 2018

Dear Jon

**Re: Medway Estuary and Swale Strategy – Update and Letter of Support request**

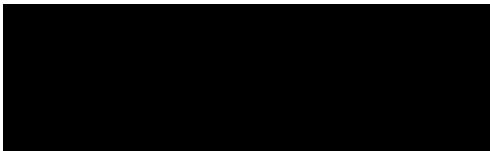
Thank you for your letter of 11 July 2018 with regard to the above Management Strategy covering the tidal Medway Estuary, the Swale Estuary and the Isle of Sheppey.

I thank you for the documents provided in the information pack which includes the final preferred option for each Benefit Area (BA) relevant to the Swale area.

I am pleased to confirm the support of Swale Borough Council for the Medway Estuary and Swale Strategy, and also the continued support of this Strategy for the future.

We will continue to work closely with the Environment Agency to explore funding opportunities for property adaptation options and acknowledge that there will be significant financial challenges associated with these options into the future.

Yours sincerely



Councillor David Simmons  
Cabinet Member for Environment and Rural Affairs



Are you registered to vote?  
[www.swale.gov.uk/all-about-voting](http://www.swale.gov.uk/all-about-voting)



## **B.4 Letter of support from Tonbridge and Malling Council**



[www.tmbc.gov.uk](http://www.tmbc.gov.uk)

[www.tmbc.gov.uk/localplan](http://www.tmbc.gov.uk/localplan)

[localplan@tmbc.gov.uk](mailto:localplan@tmbc.gov.uk)

Jon Byne  
Environment Agency  
Orchard House  
Endeavour Park  
London Road  
West Malling  
Kent ME19 5SH

Contact	Ian Bailey
Email	<a href="mailto:ian.bailey@tmbc.gov.uk">ian.bailey@tmbc.gov.uk</a>
Your ref.	
Our ref.	
Date	2 <sup>nd</sup> October 2018

Dear Jon,

### **MEASS Letter of Support**

Tonbridge & Malling Borough Council would like to offer support for the Medway Estuary and Swale Flood and Coastal Erosion Risk Management Strategy (MEASS).

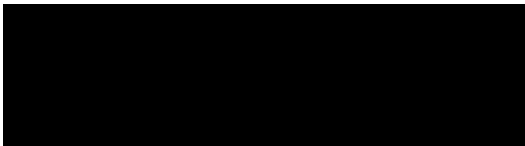
We welcome the preferred options for those parts of the tidal Medway flowing through the borough. We do not envisage any conflicts with the development strategy in the Council's emerging Local Plan.

We support the maintenance and future raising of the defences along the west bank of the Medway (Benefit Area 3.3) and support the localised raising of the defences around Aylesford and Wouldham to protect properties and assets at risk of flooding on the east bank of the Medway (Benefit Area 3.4).

We think the MEASS would benefit from the inclusion of a glossary of terms to explain the various potential actions.

I hope this is of assistance,

Yours Sincerely,



Ian Bailey  
Planning Policy Manager  
Tel: 01732 876061



## C. SEG

### C.1 Terms of Reference

## 2 Stakeholder Engagement Group Roles and Responsibilities

The SEG is a group of selected key stakeholders who will act as the link between the Project Team (led by the Environment Agency) and the wider community. The members of the SEG include local Councils, Parish Councils, Environmental Groups and key businesses/ infrastructure organisations who will represent the opinions of and transfer information back to the wider community. The SEG is not a decision-making forum. Instead its discussions will provide information and views which will inform the Project Team's thinking, as the Strategy is developed.

### 2.1 Project Team and SEG member roles

To enable the Project Team to work effectively with the SEG and vice versa, a Charter has been developed which outlines the role and responsibilities of the Project Team and the SEG Members. A copy of the Charter is presented in Appendix A with key roles and responsibilities outlined further below.

### 2.2 The SEG Charter

The Charter and the membership of the SEG were discussed at the meeting. Attendees agreed to accept the roles and responsibilities outlined in the Charter, and that these become the terms of reference for the SEG. The organisations who agreed to become members of the SEG and accepted the Charter as the SEG's term of reference include:

- Southern Regional Flood and Coastal Committee (SRFCC)
- Peel Ports Medway
- Iwade Parish Council
- RSPB
- Minster Parish Council
- Swale Borough Council
- Stoke Parish Council
- Medway Council
- Medway Swale Estuary Partnership
- Kent County Council
- Rochester Bridge Trust
- Kent Wildlife Trust
- Natural England
- Tonbridge and Malling Parish Council
- Teynham Parish Council

A small number of organisations are waiting to confirm their acceptance of the Charter including the Marine Management Organisation (MMO), Thames Gateway Kent

Partnership and National Grid. At the meeting it was decided that they would let the Project Team know by the 21<sup>st</sup> October (3 weeks after the meeting) if they wish to agree to the Charter and become a member of the SEG. No changes to the Charter are expected following the meeting.

### **2.3 Potential future members of the SEG**

During the meeting the SEG members also suggested other potential members. Some of these organisations had already been invited by the Project Team and could not attend, this included:

- National Farmers Union
- Elmley Conservation Society
- St Mary's Island Residents Association
- Medway Bridge Marina
- Kent Flood Risk Committee
- Kent Wildfowling and Conservation Association
- Historic England
- Upper and Lower Medway Internal Drainage Board
- Medway Valley Countryside Partnerships
- Dong Energy
- Farming and Wildlife Advisory Group
- National Trust
- Network Rail
- Leysdown Parish Council
- Luddenham Parish Council
- Oare Parish Council
- Queenborough Parish Council
- Upchurch Parish Council
- Warden Parish Council
- Hoo St Werburgh Parish Council
- Cuxton Parish Council
- Frindsbury Extra Parish Council
- Halling Parish Council
- High Halstow Parish Council

Other suggestions for SEG membership included:

- Canterbury City Council
- Eon
- BP
- London Thames Port
- Burden Aggregates
- Kent Police

- Maidstone Borough Council.
- Royal Engineers at Rochester
- Houseboats and sailing clubs
- Shephard Neame Brewery Faversham – Jonathon Neame
- Swale Marina, Conyer
- Medway and Swale Boating Association

A suggestion was provided regarding linking to development strategies in North Kent. One member noted the North Kent Environmental Group which is a group set up by Natural England and Local Authorities. This Group aims to consider the potential impact of housing and development plans on bird disturbance, taking into account the Habitats Regulation Assessment process.

The Project Team will consider contacting these organisations prior to the next SEG meeting planned for March to gauge interest on being part of the SEG and attending meetings.

#### **2.4 Ground rules for SEG meetings**

At the start of the meeting the SEG decided upon a number of ground rules which they agreed to follow during the meeting and for any further SEG meetings. It is hoped that these rules will enable meetings to run to the agenda and ensure effective discussions. The ground rules agreed are listed below:

- Mobile phones on silent during the meeting;
- A record will be made during the day – all members have a responsibility to ensure that everything is being recorded accurately and to raise questions if they don't believe this is correct;
- Post-it notes can be added to the 'reservoir' and 'who else' sheets throughout the day to raise any questions or provide information that members felt had been missed/ members wanted to raise;
- There is no expectation of confidentiality within the group, and items may be attributed to allow them to be followed up if required;
- The whole Group will help to keep the sessions running to time; Penny Walker (External Facilitator) will monitor the time;
- Photos may be taken of the Group and used in the record of the meeting.

## C.2 Charter

# Medway Estuary and Swale Coastal Flood Strategy

## Stakeholder Engagement Group Charter

V1 September 2015

### Introduction

The Medway Estuary and Swale Strategy is a project led by the Environment Agency which will set out how to sustainably reduce flood and erosion risk to 18,000 homes in the Medway Estuary, Swale and Sheppey over the next 50-100 years while also protecting and enhancing the local environment.

The Stakeholder Engagement Group (SEG) will be a link between the Project Team (led by the Environment Agency) and the wider community.

The SEG will be formed in Autumn 2015 and will meet regularly while the Strategy is being developed. After the Strategy is adopted by the Operating Authorities (planned for 2017), the Stakeholder Engagement Group will be disbanded.

The Stakeholder Engagement Group is not a decision-making forum. Its discussions will provide information and views which will inform the Project Team's thinking, as the Strategy is developed.

Organisations or Groups will be invited to propose one member for the Stakeholder Engagement Group to represent any interests and concerns of their wider Groups.

### Member commitment

Members of the Stakeholder Engagement Group will:

- Attend meetings or send a delegate where attendance is not possible.
- Where a delegate is sent, the member will brief that person on the Strategy and the work of the Stakeholder Engagement Group so that the delegate can play a full role at the meeting.
- Provide local knowledge to help the Project Team develop and test the feasibility of flood and coastal erosion risk management options.
- Help the Project Team understand local communities' aspirations for the Strategy (and future schemes), bringing ideas and opportunities which the Strategy could support such as recreation enhancements, access improvements and wildlife opportunities.
- Treat other Stakeholder Engagement Group members with respect, acknowledging that differing views and objectives may be represented.
- Help communicate the progress of the Strategy to the wider community by acting as a point of contact for the organisation or group that they represent.

### Environment Agency's commitment

The Environment Agency will:

- Provide at least six weeks' notice of the date of meetings of the Stakeholder Engagement Group.
  - Circulate draft aims and agendas and appropriate briefing materials in advance of meetings of the Stakeholder Engagement Group.
  - Circulate a draft record of the Stakeholder Engagement Group's meeting within 3 weeks of each meeting.
  - Inform the Stakeholder Engagement Group of the use it has made of its views and information, in developing the Strategy.
- Provide an independent facilitator to run Stakeholder Engagement Group meetings.

### C.3 Questions and Responses from SEG Meetings

**Table 10: SEG Meetings Questions and Responses**

Question	Response
<b>First SEG Meeting</b>	
Do you feel that the SEG allows you to influence the development of the Strategy?	Thirteen people believed that the SEG allowed them to influence the Strategy, one person didn't and there were 3 maybes.
Has the session helped you understand how we plan to develop the Strategy?	All responses to this question were yes.
Do you feel you have enough information to act as a representative for you organisation/community?	Of the 16 responses to this question all responded with yes. A question was raised at this point over the HRA implications of the options and the need to have more detailed discussions.
Do you have any other comments on the long list of options that you haven't had an opportunity to make?	The comments provided are outlined below: <ul style="list-style-type: none"> <li>- Protect existing saltmarshes before there is nothing left to protect</li> <li>- Nice to have Sheppey recognised and SBC included</li> <li>- Important to include Minster Parish Council as stakeholders</li> <li>- It would be useful (idealistic) for EA to identify the implications for navigation and nature conservation objectives in light of MR objectives: i.e. what is the impact? With that info, projects within SMP strategies are able to make an informed decision regarding sustainability in the marine/coastal area for that particular project area. If cross-referenced with local plans this would ensure integrated decision at the coast - is this possible?</li> </ul>
How effective overall was this meeting?	Of the attendees 15 people scored the event a 4 (good)
Do you, or another representative plan to attend the next SEG meeting in March 2016?	All responders answered yes to this question.
As the representative for your organisation / community, are you happy for the Environment Agency to provide your organisations contact details to members of your community to allow them to provide comment? This may be through our website on gov.uk	There were 3 members who did not wish for their contact details to be provided to members of the community. Therefore, the members of the SEGs email addresses will not be published, but if a member of the SEG would like to contact someone else in the group the Project Team can pass on contact requests.
<b>Second SEG Meeting</b>	
Is this project EU led or Environment Agency led?	The answer is both. The Environment Agency is leading the development of the Strategy but it is being developed in line with both UK and EU regulations.
How will landowners be compensated? Previously EU funding has been used to help provide the compensation.	It is too early in the project to know how much compensation will be required. Therefore there is some uncertainty around how this compensation will be met.
Is it true that saltmarsh is increasing?	In some areas the saltmarsh is increasing and in others it is decreasing. Therefore, an assessment has been made on the impacts of coastal squeeze to help determine the amount of saltmarsh compensation that will be required. We will ensure that this is explained fully during public consultation.
What we do in the lower part of the estuary will affect the upper part of the Medway (Tonbridge, Wateringbury etc.)	The Project Team are assessing each of the individual benefit areas as well as the wider Strategy and surrounding areas. Therefore these impacts will be understood and incorporated into the option development.
Is the assessment missing the socio-economic benefits? Should it consider other plans such as SE LEP and high-quality agriculture land?	The Strategic Environment Assessment does consider other plans and considers mitigation where plans do not line up / agree. The Strategy objectives also take account of the socio-economic benefits.
How much land is protected against flooding (for agricultural / homes / people)?	In the assessments we consider if it is feasible to protect an area, the environmental impacts and the socio-economic impacts. This assessment is undertaken on a case by case basis.

Question	Response
An integrated approach is essential with other plans to avoid contradiction.	Comment have been noted by the Project Team.
How accurate / specific is the modelled sea level rise?	Sea levels vary around the estuary area, and this has been taken account of in the model. The outer estuary is generally less variable than the inner estuary. The UK climate predications are the sea level rise will be 4mm per year, rising to 15mm per year in 2080 (UKCP09). This data has been incorporated into the modelling.
Is this information [sea level rise] available in print?	The maps that have been presented as part of the workshop material show the flood risk under a 1 in 1000 year event, with 100 years' worth of sea level rise.
The Government has published new climate change predictions; the south east has the greatest amount of change.	These new predications have been taken into account.
Have you considered the impact of managed realignment on residential properties?	During the development of the Preferred Option, the value of the land and properties behind the current defence line, which may be at risk of flooding with managed realignment will be considered. The value of the assets is based on Treasury guidance.
Are you aware that Front Brents scheme funding may be affected by the government withdrawing funding?	Yes, but it is believed that Swale Borough Council are challenging this.
Why do most managed realignment areas seem to have longer walls than the original schemes?	For Medway it was cheaper to build and maintain a new set-back defence, as part of the Managed Realignment scheme, than to continue to maintain the existing defence along the coastline. The whole life costs of the annual maintenance of the soft defence along the coastline, exceeded the whole life costs of new set-back wall due to a reduced maintenance cost as works to repair the defence after every storm are no longer required. Additionally, some of the defences were tied back into higher ground, reducing the height of the required defences. This is often an approach taken with Managed Realignment sites that not only reduces the cost of building the defence, but also works with the natural topography.
To what extent does modelling take account of greater sea level rise in SE / Sheerness	Sea Level Rise data is based on the Government's latest predictions.
Should defences be higher than 'average' on Sheerness where sea level rise is the greatest?	Any capital works to defences in Sheerness will take account of the higher rates of sea level rise and impacts on isostatic uplift in south east England.
Can other authorities / groups do similar works at lower costs? Or using different funding sources?	These are some areas where community groups are taking this forward themselves.
We need to see which managed realignment sites are viable and how they affect the overall system.	The Project Team will assess impacts of Managed Realignment sites at the Benefit Area scale and across the wider Strategy area.
Will your economic discussions consider other people (authorities) carrying out works, potentially at lower cost?	Yes, this will be assessed as part of our funding strategy, but is likely to be looked into in more detail during the project level appraisals, which will occur following the development and approval of the Strategy.
Do WEM Framework contractors present value for public money? Can local contractors be used, who could do it cheaper?	The Water and Environment Management Framework provides access to the best suppliers. The WEM Framework is an agreement between the Environment Agency, consultants and contractors ('supplier'). It has fixed, best value, commercially efficient terms for the award of contracts to deliver projects, programmes and services for customers across the Environment Agency. The Framework is also available for use by Local Authorities and, in particular, Lead Local Flood Authorities (LLFAs), as well as other Risk Management Authorities in the Defra family.  The Environment Agency always aims to achieve the best value, best practice and most sustainable outcomes. If the EA is the lead partner in a project, the WEM Framework is the normal procurement route for larger capital schemes or programmes. However, we assess each project on its merits and risks and are prepared to work in partnership with others (including in-kind contributions) to get the best outcomes for both the environment and tax payer while carrying out works in a safe manner.
Managed realignment may affect an entire land holding and therefore the eligibility for further funding?	This will be part of further discussions with farmers and landowners who will be consulted with during the appraisal of the short list.



Question	Response
There are spectacular opportunities to create habitat. Do the EA have a legal duty to create it?	The EA have a legal obligation to develop habitat if it is required under the Habitat Regulations. However, they also aim to develop habitat where it will have multiple benefits e.g. recreational and other social and community benefits.
Why we were not told that BA 1.1 (Stoke) was not for discussion today?	The Project Team apologised, but following further modelling the flood extents have been reviewed and it was shown that the flood cell that covers BA1.1 is linked to the larger flood cell that covers the Hoo Peninsula, which is a part of the Thames Estuary Plan (TE2100). Therefore any works to reduce flooding in BA1.1 need to be considered in line with the rest of the Hoo Peninsula and the TE2100 Strategy. The Project Team were apologetic but as the boundary between this Strategy and the TE2100 is at the village of Stoke, it was thought that there may still be some points of interest to SEG members representing BA1.1 in BA 1.2 (Kingsnorth). The TE2100 plan is further ahead in its consultation, but The Project Team discussed this with the relevant stakeholders separately and provided contact details for the TE2100 plan.
What is the relationship between the Shoreline Management Plan (SMP) and the Strategy?	The Shoreline Management Plans (SMPs) were developed in 2008. The SMPs were a high level study which aimed to provide a general understanding of the area. The SMP is a published document which will not be altered or updated. The Strategy, currently being developed, now aims to build on the SMP policies and provide more detail. The aim is to be able to highlight to the Environment Agency and the Local Authorities the areas where works are potentially viable and should be assessed in more detail, and also suggest when works need to start to be undertaken. This will allow the local authorities to better plan and develop their funding strategies and programmes.
Why have local communities not been asked about the Strategy?	The Project Team has been consulting with local communities through the SEG – one of the key aims of the SEG is to provide a link between the Project Team and the wider community (as outlined in the SEG Charter which all members have agreed to). There will be public consultation on the Strategy once the draft Preferred Options have been developed. Additionally Richard Westcott has attended community meetings and has passed on the concerns and comments to the Project Team.
How does flash flooding input into this plan?	This Strategy only covers the risks from coastal flooding, whereas Catchment Management Plans cover inland flood risk. However the Environment Agency have a strategic responsibility for all the flooding, so the Project Team are liaising with the EA inland flood risk team and other teams to ensure that there is a continuity between the different plans and Strategies.
What is the timescale for engagement?	The next SEG meeting is programmed for February 2017 following the development of the draft Preferred Options prior to Public Consultation. Public Consultation will be undertaken over 3 months in Spring 2017.
What is the planned lifespan of the defences once they have been built?	The Strategy will cover a 100 year assessment period, therefore in the assessment the cost of maintaining the defences will need to be included. The lifespan of an individual defence will vary based on not only the type of defence but also the environment e.g. open coast versus protected area. On average concrete defences have a 50 year residual life and wooden groynes have a 20-25 year residual life.
How do cumulative benefits get taken into account for Managed Realignment options? E.g. if only a few are deliverable does that reduce the overall benefit of Management Realignment protected throughout the MEASS area?	The Project Team will discuss this further with the NFU to understand the question in more detail.
<b>Third SEG Meeting</b>	
Does the Shoreline Management Plan get periodically reviewed?	The SMP is not intended to be updated, the Strategy will be reviewing and building upon the Shoreline Management Plan by providing a more detailed assessment of managed policies that will be proposed to implement the SMP.
Which land owners have you spoken to?	The Project team have used Land Registry data and sent out letters to all corresponding landowners. Key landowners were also invited to a discussion with project team in December 2016 when the short list of options were being assessed.
Concern that Halling Common landowners have not been contacted.	The project team will review the addresses the letters were sent to.
What about land not covered by the Land Registry? Do you know what you do not know?	Due to the limitations of this strategic level study, the project team can only use land registry data, supplemented with the local EA team knowledge. It is realised that they may be inaccuracies in this, but more detailed consultation will be undertaken when the schemes are taken to project level.

Question	Response
Did you consult the Local Authority about Leybourne Lakes areas?	The team have consulted with the planners and engineers at Local Authorities and will also be going to committee.
Can you explain how we are balancing the people, land, environment, and costs?	The project team explained that this will be addressed in the next section of the meeting.
Are the Church commissioners in Sheppey consulted?	Yes, the project team have sent them a letter.
Has the NFU and Defra been part of the consultation?	The NFU are here today as members of the SEG and will continue to be consulted with. DEFRA will be consulted with during the ongoing development of MEASS.
Will there be a list of people consulted and when?	There will be for everyone who is on the Public Record. There may be some people or organisation who do not want to be named. A Stakeholder Report will set out how we have consulted and who with, and will be available at the end of the public consultation.
When the list of consultees is produced it should be noted that not all organisation contacted will be in agreement.	The Project team will find out whether people want their views made public, and a note will be made that by participating in the consultation will not necessarily imply support for the final proposals put forward by the EA.
Can the slides be made available?	Yes, they have been added as an appendix to this record of the meeting (Appendix A).
Is Private investment part of the cost benefit calculations?	Yes, the new way of calculating funding is done on a Partnership Funding approach. The calculator works out how much government funding is available by determining the PF score. This is based on the value of the benefits and number of houses better protected, the costs of the options and the creation of any new intertidal habitat. The remaining part of the funding will have to come from other sources including private funding if appropriate.
Do you take into account Private funding that is already available?	Yes, these are ongoing conversations.
Can we see how the calculator works?	The project team have provided a summary document.
Are there any private funders / developers out there who are currently offering money? Are conversations underway?	Conversations are underway with some of the landowners. However, if defences are not protecting houses or property, government funding may be difficult to justify and landowners may need to provide any defences if they wish to protect land.
Landowners are keen to manage defences / frontages but are frustrated with delays.	The project team do wish to continue to talk to landowners to get the best outcomes for everyone. As part of this Strategy the EA will be looking at how to help landowners with this process.
If we are breaching an embankment or wall, will the project team need consent to change the Coastal Path footpath?	Yes, the project team are working with Natural England on this at the moment.  The coastal path legislation is such that it allows roll back of the coastal path and it would be expected that any MR would ensure coastal access was re-routed along the rear of the new coastal alignment.

Source: Mott MacDonald 2016/2017

## **D. Landowner Consultation**

### **D.1 Letters to landowners from meetings in Phase 3**

## ADDRESS

15 November 2016

Dear Sir/Madam

**Managing flood risk – developing the Medway Estuary and Swale Strategy**

In September 2015 we wrote to let you know that we are working on the Medway Estuary and Swale Strategy. This project is planning how flood and erosion risk will be managed over the next 100 years.

As a landowner within the Strategy area we are inviting you to attend a face-to-face meeting with a member of our project team. We would like the opportunity to update you with the progress of the project and discuss the short list options for the coastal/tidal frontages which may affect your land. The options include maintaining existing defences, increasing defence heights, or moving defences to a new location further inland. From these discussions, your comments will be used to help us inform the appraisal process and select the preferred options.

To enable us to have discussions with all the landowners within the Strategy area we are holding a series of appointments on two dates across the Strategy area:

<b>Thursday 8 December 2016 from 2pm</b>	<b>Cuxton Social Club</b> 104 Bush Road, Cuxton, Rochester, Kent, ME2 1EZ
<b>Monday 12 December 2016 from 2pm</b>	<b>Carmel Hall</b> Ufton Lane, Sittingbourne, Kent, England, ME10 1AN

Therefore we request if you would like the opportunity to have a meeting with us could you please reply to [MEASS@environment-agency.gov.uk](mailto:MEASS@environment-agency.gov.uk) with your preferred date and an indication of your preferred timeslots. Appointments will be allocated on a first come, first served basis. Please indicate at least two available slots and we will contact you to confirm your allocated appointment time.

<b>2 – 3pm</b>	<b>3 – 4pm</b>	<b>4 - 5pm</b>	<b>5 - 6pm</b>	<b>6 - 7pm</b>	<b>7 - 8pm</b>
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If you are unable to attend one of the sessions, we are still very keen to talk to you. Please contact us at [MEASS@environment-agency.gov.uk](mailto:MEASS@environment-agency.gov.uk) or call me on 02084 746788. We can arrange a convenient time over the coming weeks to call or provide you with further information.

I have attached a briefing note which provides some more information on our work to develop the strategy.

Yours sincerely,

**Richard Westcott**  
**Partnership and Strategic Overview Team - West Kent**

Orchard House, Endeavour Park, London Road, Addington, West Malling, Kent, ME19 5SH  
[www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)

## Medway Estuary and Swale Strategy (MEASS)

### Sustainable Coastal Management and Potential for Intertidal Habitat Creation

Our management of the coastline of South East England has to balance the needs of the millions of people, birds and other species that live there. Sea level is expected to rise by 0.75 metres over the next century, which presents us with a major challenge. The current ageing coastal defences will be put under increased pressure, but also with sea level rise the extents of internationally designated habitats will begin to reduce.



*Managed Realignment at Wallasea Island*

#### Background

The main device for setting direction and policy around the coast is through Shoreline Management Plans, which this strategy is aiming to build upon and develop further. These documents broadly outline where we will keep or set-back defences. Where there are urban areas and properties to protect, we will keep the defences in place. Where there are opportunities to adapt to a more sustainable management regime we will set the defences

further inland and allow the coastline to change usually reverting to more natural processes, promoting the development of healthy estuaries. In doing all of this, we must consider what the impacts are to people and wildlife, and where necessary, compensate for those impacts.

We calculate that, in implementing our Shoreline Management Plans, we should create 665 ha of intertidal habitat in Medway and Swale Estuaries over the next 50 years to mitigate against the loss of intertidal habitat from coastal squeeze. Some potential sites have been identified for creating intertidal habitat through realignment of the sea defences. During the development of the strategy these will be appraised further.

#### Managed Realignment in the MEASS Area

Managed realignment is different from abandoning defences; it is about moving the line of defences further inland in a controlled way to provide a more sustainable approach to managing the coastline. Partly it is an environmental decision, as defences prevent the natural evolution of the shoreline, but partly it is an economic and social decision. We must consider the value of the land behind the defences, the use of the land by the landowner and local community, and the cost of keeping the existing defences in place.



*Managed Realignment at Medmerry*

The aim would be to optimise the site for saltmarsh to flourish, as this is a type of habitat which is particularly highly valued.

The benefits of managed realignment schemes often go beyond providing for wildlife, and can provide benefits for people including footpaths and cycleways for recreation, bird hides and lookout points for bird watching. This in turn can increase tourism and help the local economy. Some real-world examples and benefits can be found online at <http://www.coastalfutures.org.uk/benefits.html>

## Medway Estuary and Swale Coastal Flood Risk Strategy

**This briefing note provides an update on our work on the Medway Estuary and Swale Coastal Flood Risk Strategy.**

### What's the challenge?

Flooding is a real risk currently facing communities and landowners in the low-lying areas around the Swale and Medway estuaries.

Aging flood defences, rising sea levels and climate change mean that flood risk to people, properties and agricultural land will significantly increase in the coming years. Over the next 100 years we expect that approximately 18,000 properties will be at an increased risk of tidal flooding in this area.

### Background

The strategy is building upon the Medway Estuary and Swale and the Isle of Grain to South Foreland Shoreline Management Plans (SMPs) which were adopted in 2010. The SMPs set out the most sustainable management policies for the different sections of the coastline over the next 100 years, and were developed using extensive consultation. These policies are either Hold the Line, Managed Realignment or No Active Intervention. Our strategy will cover the Medway Estuary, Medway Towns to Stoke, Sittingbourne, Conyer, Faversham, and the Isle of Sheppey and will set out the specific schemes which will deliver the SMP policies.

### What have we been doing recently?

We've been busy gathering information which will help us to understand what is in the area at the moment and how it may be affected in the future. These include:



*Habitat mapping on the Isle of Sheppey*

#### Environmental surveys

Habitat and aquatic macro-invertebrate surveys have provided more information on the flora and fauna in the strategy area.

#### Strategic Environmental Assessment (SEA) Scoping

We consulted on the SEA Scoping report at the end of last year. We received responses from Natural England, Kent Wildlife Trust, RSPB, Wouldham Parish Council, Stoke Parish Council and Elmley Nature Reserve.

These valuable responses have provided us with more local information to ensure that our assessment is accurate. We will prepare a full SEA which will address the Habitat Regulations Assessment and Water Framework Directive Assessment to assess the preferred options.

### Coastal process studies

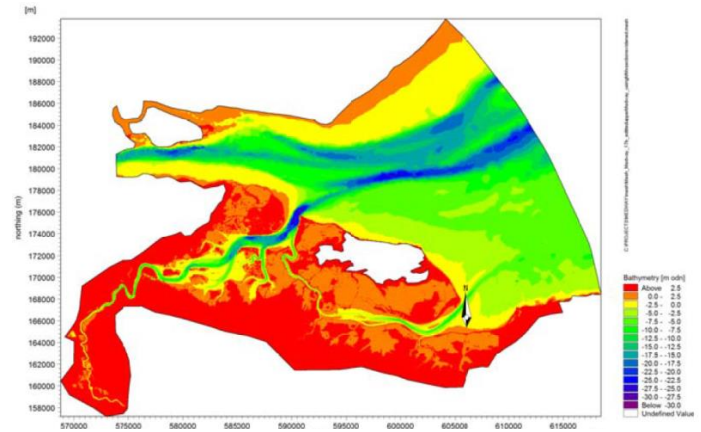
We have carried out further studies to understand how the estuary may behave over the next 100 years. In the coming years, changes in coastal processes may affect the extents of mudflat and saltmarsh.

These studies have provided important information on the areas at risk of change and the impact this could have on the internationally designated sites of environmental importance. We will use this information to refine the short list of options along the different sections of the strategy-area.

## Modelling

We've also carried out hydrodynamic modelling to estimate the extent of flooding under different flood events over the next 100 years, taking account of sea level rise.

This information will feed into the short-listed options assessment to identify where the existing defences need to be raised and where we might be able to realign the defences and create habitat.



Model bathymetry used for the coastal process and flood extent mapping

## Refining the options

The final short-list of options has been developed taking all the information for the data gathering stages. This short-list of options will now go on to be examined in more detail to determine the preferred options that are to be taken forwards. We have used all the information we have gathered to examine the long-list of options in terms of their technical, environmental, financial and social costs and benefits. This has given us a short-list. We will now look at refining the short-list down to the preferred options which will be consulted on in during 2017.

## What are we doing over the next few months?

Over the coming months we plan to:

- develop outline designs and costings for the short list of options
- carry out a benefit/cost assessment to determine the most economically viable options
- use the SEA to understand the environmental impacts of the short list of options
- continue to work with statutory stakeholders and the Stakeholder Engagement Group (SEG), and begin discussions with land and asset owners.



Approval and Submission expected in Winter 2017/8

## Find out more and get involved

This strategy could result in significant changes to the local area so we want local communities to be involved in shaping the schemes. Over the next year we will be holding events to discuss the options. If you would like to get involved, please contact us using the details below.

**Summer 2017 – public consultation** - We will be carrying out wider public consultation with communities on the preferred options.

We expect to complete the final strategy report in **Winter 2017/8**. If you want any more information on the strategy, please contact Richard Westcott at: **03708 506 506** or email [meass@environment-agency.gov.uk](mailto:meass@environment-agency.gov.uk); or contact your local Parish Council who have been invited to join the SEG.

You can also find more information through our webpage:

[www.gov.uk/government/publications/medway-estuary-and-swale-flood-and-coastal-risk-management-strategy](http://www.gov.uk/government/publications/medway-estuary-and-swale-flood-and-coastal-risk-management-strategy)

## D.2 Letters to landowners from meetings in Phase 4



Mr xxxxxxxx  
xxxxxx  
xxxxxx  
xxxx

8<sup>th</sup> September 2017

Dear Mr xxxxxx

### **Managing flood risk – developing the Medway Estuary and Swale Strategy**

Following our previous discussions on the Medway Estuary and Swale Strategy we are now writing to you to discuss the progress we have made, and present the leading options which we are consulting upon.

To provide you with more information we have developed an information pack. which summaries the process we have used to assess the short-list of options and determine the leading option for each Benefit Area (BA). Please can you review this pack for the areas that you own, and provide any comments on the preferred options using the feedback form by 15 November 2018. Due to the size of the Strategy area, the information pack and supporting documents can be downloaded from our website: <https://ea.sharefile.com/d-s22d63a98f284c08a>

If you are unable to access the pack online please send an email to [MEASS@environment-agency.gov.uk](mailto:MEASS@environment-agency.gov.uk), or call 03708 506 506 to request to collect a copy from our local office.

In addition, we are holding two landowner information sessions during October 2017 at the Riverside Country Park, Lower Rainham Road, Gillingham, Kent, ME7 2XH. These will be held on Thursday 12<sup>th</sup> and Wednesday 18<sup>th</sup> between 3pm and 7pm.

During these sessions, we will be available to answer your queries about the leading options and the process we have followed. If you would like to attend one of the meetings could you please reply to [MEASS@environment-agency.gov.uk](mailto:MEASS@environment-agency.gov.uk) with your preferred date or phone 03708 506 506.

If you have any further questions or comments prior to the information sessions please contact us using the email addresses provided.

Yours sincerely,

**Jon Byne**  
**Partnership and Strategic Overview Team - West Kent**

Mr xxxxxxxx

Xxxxxxxx

Xxxxxxxx

xxxxxxx

8<sup>th</sup> September 2017

Dear Mr xxxxxx

## **Managing flood risk – developing the Medway Estuary and Swale Strategy**

I am writing to inform you of the Medway Estuary and Swale Strategy, which is currently being developed. As one of the landowners within the Strategy area, we would like to consult with you on the proposed options to manage coastal flooding and erosion risk.

### **What is the Medway Estuary and Swale Strategy?**

The Medway Estuary and Swale Strategy is being developed to tackle the increasing flood risk caused by ageing flood defences, rising sea levels and climate change. The Strategy will help to protect people and property within and around the Medway Estuary, Medway Towns, Swale Estuary, Sittingbourne, Faversham and the Isle of Sheppey.

Over the past 2 years we have used the evidence previously gathered in the Medway Estuary & Swale Shoreline Management Plan (SMP), the Isle of Grain to South Foreland SMP and our own detailed studies to develop options that manage coastal flood and erosion risk for the next 100 years.

Due to the large extent of the Medway Estuary and Swale, we have split the coastline into a series of Benefit Areas (BA's) based on flood risk. The extents of each of the BA's are explained in more detail in the information pack.

The options we have developed to manage flood risk within each of the BA's take into account:

- the best technical solution
- the impacts and benefits for local communities
- the environment
- the cost to the tax payer.

### **How can you be involved?**

We have previously consulted with parish councils, who represent their local communities, the National Farmers Union, and key asset owners in the Strategy area to incorporate their views in the proposed options. We have now developed a series of leading options following our technical, economic and environmental assessments. We would like to consult with you on these, prior to full public consultation which commences in November 2017. Is there any additional information you can provide which could influence the decision on the leading option?

The information pack mentioned above summarises the process we have used to assess the short-list of options and determine the preferred option for each BA. Please can you review this pack for the areas that you own, and provide any comments on the preferred options using the feedback form by 15 November 2018. Due to the size of the Strategy area, the information pack and supporting documents can be downloaded from our website: <https://ea.sharefile.com/d-s22d63a98f284c08a>.

If you are unable to access the pack online please send an email to [MEASS@environment-agency.gov.uk](mailto:MEASS@environment-agency.gov.uk), or call 03708 506 506 to request to collect a copy from our local office.

We are also holding two landowner information sessions during October 2017 at the Riverside Country Park, Lower Rainham Road, Gillingham Kent, ME7 2XH. These will be held on Thursday 12th and Wednesday 18th October between 3pm and 7 pm.

During these sessions, we will be available to answer your queries about the leading options and the process we have followed. If you would like to attend one of the meetings could you please reply to [MEASS@environment-agency.gov.uk](mailto:MEASS@environment-agency.gov.uk) with your preferred date or phone 03708 506 506.

If you have any further questions or comments prior to the information sessions please contact us using the email addresses provided.

Yours sincerely,

**Jon Byne**  
**Partnership and Strategic Overview Team - West Kent**

Mr xxxxxxxx  
xxxxxxx  
xxxxxxx  
xxxxxxx

8<sup>th</sup> September 2017

Dear Mr xxxxxx

## **Managing flood risk – developing the Medway Estuary and Swale Strategy**

I am writing to inform you of the Medway Estuary and Swale Strategy, which is currently being developed. As one of the landowners within the Strategy area, we would like to inform you of the upcoming consultation on the proposed options to manage coastal flooding and erosion risk

### **What is the Medway Estuary and Swale Strategy?**

The Medway Estuary and Swale Strategy is being developed to tackle the increasing flood risk caused by ageing flood defences, rising sea levels and climate change. The Strategy will help to protect people and property within and around the Medway Estuary, Medway Towns, Swale Estuary, Sittingbourne, Faversham and the Isle of Sheppey.

Over the past 2 years we have used the evidence previously gathered in the Medway Estuary & Swale Shoreline Management Plan (SMP), the Isle of Grain to South Foreland SMP and our own detailed studies to develop options that manage coastal flood and erosion risk for the next 100 years.

Due to the large extent of the Medway Estuary and Swale, we have split the coastline into a series of Benefit Areas (BA's) based on flood risk. The extents of each of the BA's are explained in more detail in the information pack.

The options we have developed to manage flood risk within each of the BA's take into account:

- the best technical solution
- the impacts and benefits for local communities
- the environment
- the cost to the tax payer

### **How can you be involved?**

We are now at the stage where we have a series of leading management options, that have been developed following the Governments guidance, to manage the coastal flood and erosion risk. We are undertaking public consultation over winter 2017/8, and would like to offer you this opportunity to provide your thoughts on the options, and let us know if there is any information you believe may help further inform the option development. An e-consultation site will be set up to provide you with the opportunity to provide your feedback, and we will also be holding a series of public drop-in session in early December.

Please look-out for information in local parish publications and on our website over the coming months to provide you with more information on the upcoming consultation. Our website will also provide you with additional background information about the development of the strategy, and our progress (<https://www.gov.uk/government/publications/medway-estuary-and-swale-flood-and-coastal-risk-management-strategy> ).

If you have any further questions or comments please contact us using our email address ([MEASS@environment-agency.gov.uk](mailto:MEASS@environment-agency.gov.uk)).

Yours sincerely,

**Jon Byne**  
**Partnership and Strategic Overview Team - West Kent**

## **E. Public Consultation**

### **E.1 Posters and Questionnaire from Drop-in Events**

We hope that today's drop in session has been useful for you. We would appreciate your feedback to help us finalise the development of the Strategy.

Name .....

Contact Email .....

Area of Interest .....

**1) Are you responding as an individual or on behalf of an organisation or group?  
Please select from the following options:**

- Responding as an individual
- Responding on behalf of an organisation (Please specify which organisation or group you are responding on behalf of and include what type it is. E.g. business, environmental group)
- Other

Name of organisation or group: .....

If other please specify: .....

**2) How did you hear about this consultation?**

- From the Environment Agency
- From another organisation
- Through an organisation you are a member of
- Press article
- Social media e.g. Facebook, Twitter, etc.
- Through a meeting you attended
- Poster
- Other

If other, please specify: .....

### 3) Can we publish parts of your response that are not personally identifiable?

- Yes
- No

### 4) Which benefit area are you interested in?

- Benefit Area 1: North Medway
- Benefit Area 2: Medway Towns
- Benefit Area 3: Upper Medway
- Benefit Area 4: Medway Marshes
- Benefit Area 5: Milton Creek and Sittingbourne
- Benefit Area 6: Swale Mainland
- Benefit Area 7: Faversham Creek
- Benefit Area 8: South Sheppey
- Benefit Area 9: Leysdown
- Benefit Area 10: Minster Cliffs
- Benefit Area 11: Sheerness
- None of the above

### 5) Having read the Consultation Document, do you understand what Hold the Line, Managed Realignment and No Active Intervention mean?

	Yes	No	Don't Know
Hold the Line			
Managed Realignment			
No Active Intervention			



6) Please explain your answer to question 5).

.....  
.....  
.....  
.....

7) Do you understand our process for determining the Preferred Options?

- Yes
- No
- Don't know

Please explain your answer:

.....  
.....

8) Having read the Consultation Document, do you understand the Government's approach to funding?

- Yes
- No
- Don't know

Please explain your answer:

.....  
.....

**9) Funding the preferred option is going to be a significant challenge. Who do you think should contribute towards the funding of flood defences? Please tick all that apply:**

- Government
- Local Authority
- Environment Agency
- Developers
- Local Businesses
- Local Communities
- Landowners
- Other

Please explain your answer:

.....  
.....

**10) Having read the Consultation Document, do you understand the flood and coastal erosion risk in the Benefit Areas you are interested in?**

- Yes
- No
- Don't know

Please explain your answer:

.....  
.....  
.....  
.....

**11) Do you think the Preferred Options appropriately manages the risk within the Benefit Areas of your concern?**

- Yes
- No
- Don't know

Please explain your answer:

.....

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**12) If you have any additional information about the Benefit Areas of your concern, please detail below:**

Please detail below:

.....

.....

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.....

.....

.....

.....

**13) Has the information in this consultation been presented clearly?**

- Yes
- No

If no, how can we improve future consultations?

.....

.....

.....

.....

**14) Have you been able to express your opinion fully?**

- Yes
- No

If no, please provide any additional comments

.....

.....

.....

.....

**Thank you for participating and providing your feedback to help with finalising the Medway and Swale Strategy.**

# Medway Estuary and Swale Strategy

**Welcome to the public consultation drop-in for MEASS to develop a sustainable coastal flood risk strategy for the next 100 years.**

Today we are here to:

- explain the purpose of the strategy, its aims and the legal processes followed
- discuss the process for determining the preferred option
- provide information on the work done so far, and how it could impact areas you are interested in
- discuss the preferred options and listen to any concerns you have
- explain how the strategy will develop over the coming months.



*Saltmarsh areas along the south of the Isle of Sheppey*



*River Medway at Aylesford*

## Ways of Working

We will use your comments to review the preferred option.

## You can help us by:

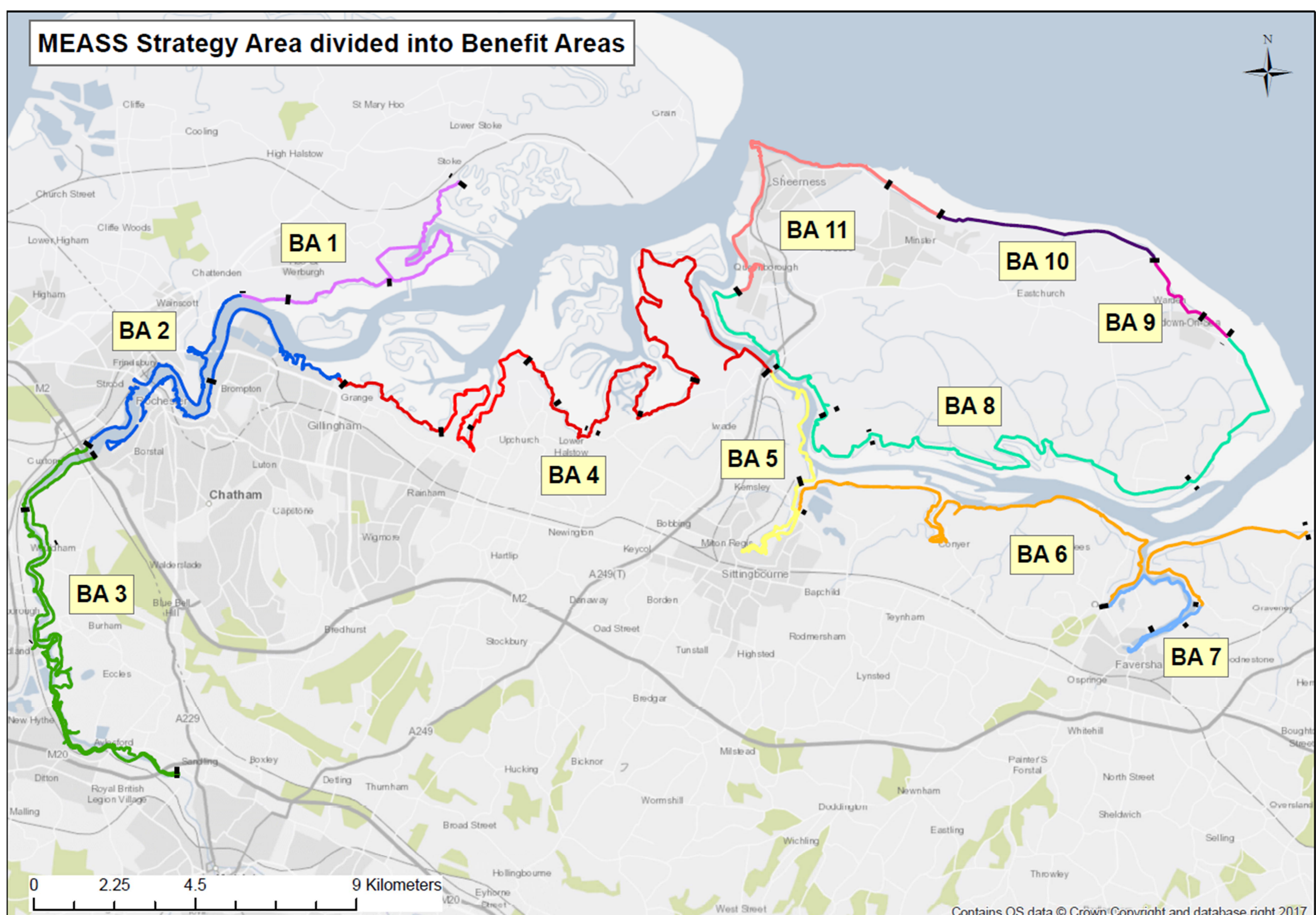
- Asking questions to help you fully understand the project.
- Provide feedback on the preferred options.
- Letting us know if information you provide is confidential.

# Medway Estuary and Swale Strategy

## Why is a strategy needed along the Medway Estuary and Swale?

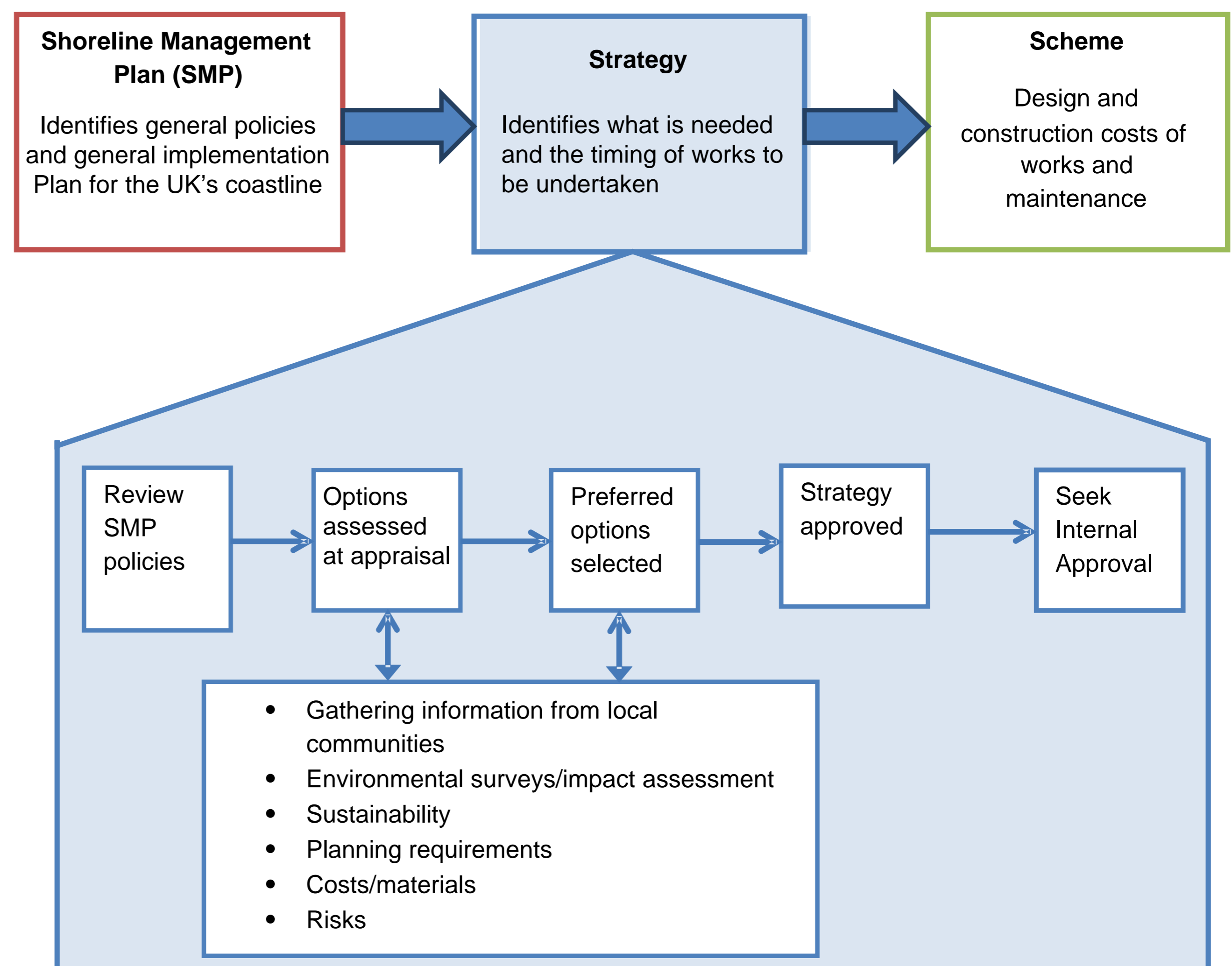
- Flooding and coastal erosion is a risk currently facing communities and landowners in the low-lying areas.
- Aging flood defences, rising sea levels and climate change mean that flood risk to people, properties and agricultural land will significantly increase in the coming years.
- Over the next 100 years we expect that approximately 18,000 properties will be at an increased risk of tidal flooding.
- Maintaining these defences is becoming increasingly expensive and challenging, and we need to improve them to reduce flood risk in the future.

MEASS will help us understand potential risks from coastal flooding and erosion, and create a management plan for the coastal frontage over the next 100 years.



# What is a flood and coastal erosion risk strategy?

- In the UK we take a tiered approach to managing flood and erosion risks.
- During each stage, the area of assessment gets smaller, and the amount of detail increases.



*Diagram explaining how the strategy fits into the tiered approach to manage flood and erosion risk, and the work that goes in to develop the strategy*



Barton's Point



Shellness

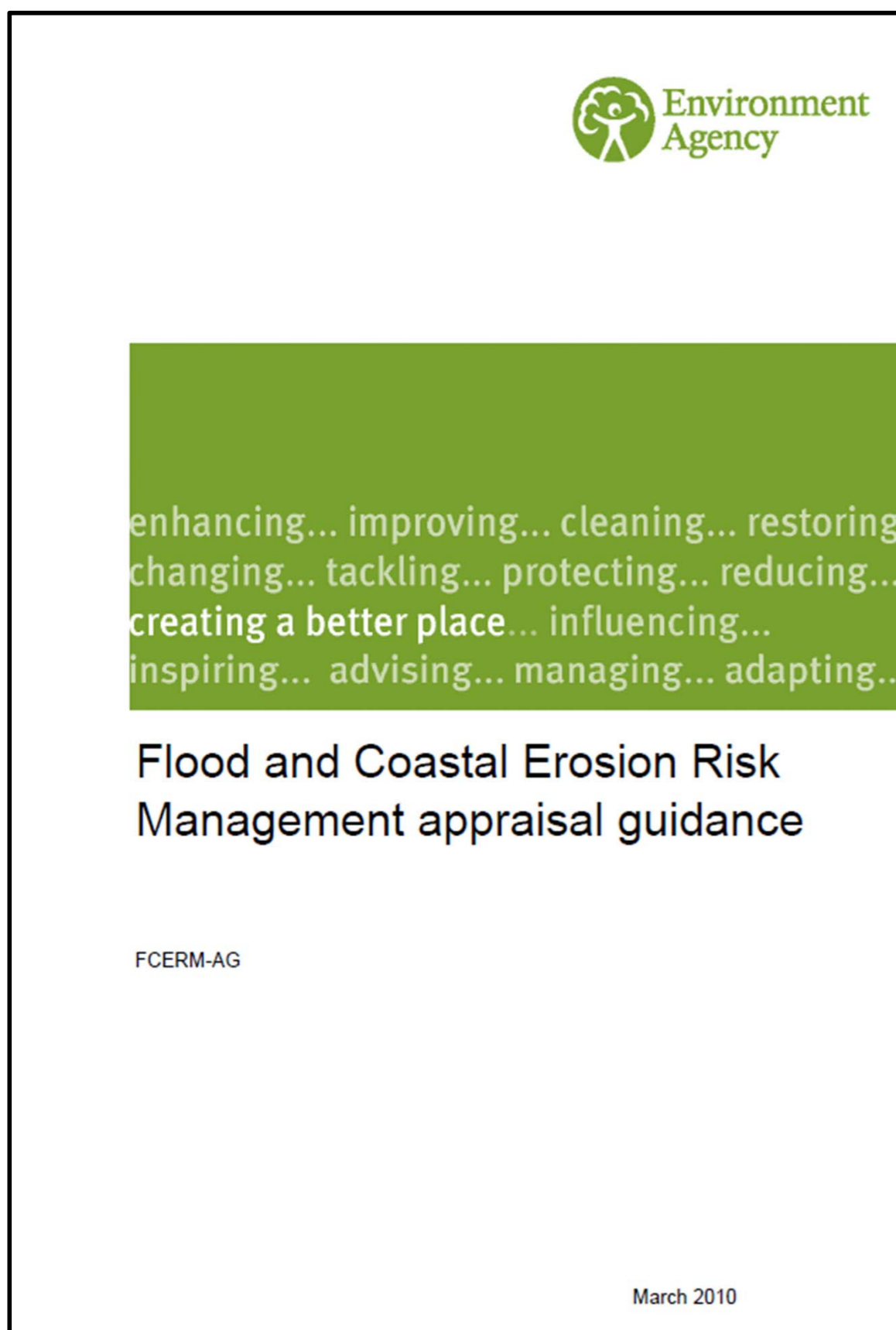


Wouldham

Once the Strategy is approved there are a number of stages that need to be completed prior to construction:

- a more detailed assessment of the costs and benefits associated with the options
- environmental surveys
- detailed design of the options for construction
- obtaining relevant licences and approvals.

# Key Guidance the MEASS Follows



*Image of the front cover of the appraisal guidance*

## National Flood and Coastal Risk Management appraisal guidance

This guidance focuses on managing flood and erosion risk by:

- reducing the threat to people and their property
- delivering economic, social and environmental benefits
- working with natural processes
- adapting to future risk and changes (e.g. climate change)
- being sustainable.

## European Birds and Habitats Directives

Aims to maintain the integrity of sites and the biodiversity of habitats and species. Potential impacts of schemes on the designated sites and protected species need to be identified and impacts reduced.



*Green Sandpiper – one of the bird species that is found in the area*



*Photograph taken of the flooding at Shellness during 2013.*

## Water Framework Directive (WFD)

Aims to protect the ecological quality of inland and coastal waters. Ensuring schemes do not have a negative impact on water quality, and aims to improve water quality where possible.



# Economic Assessment

An economic assessment compares the costs of the options with the value of assets better protected against flood risk (benefits).

## What is a benefit?

A benefit is any asset that is better protected from flooding or erosion, including:

- residential and commercial properties
- agriculture land
- recreation
- road and rail infrastructure,
- health impacts and emergency services.

## How are costs calculated?

Costs are calculated over the 100 years of the MEASS, including:

- business case development and design work.
- capital costs to construct the schemes.
- maintenance costs,
- costs for compensating environmental impacts.

## Benefit Cost Ratio (BCR)

$$\text{Benefit Cost Ratio (BCR)} = \frac{\text{Benefits}}{\text{Costs}}$$

**Benefits**  
 Value of property and infrastructure protected against flooding and erosion

---

**Costs**  
 The whole life costs of the scheme to protect against flooding and erosion

- For a scheme to be eligible for government funding, the cost of the scheme has to be less than the value of the assets being protected i.e. the BCR is greater than 1.
- The higher the BCR is, the greater the amount of government funding that could potentially be available, subject to approval.

# Partnership Funding

## What is it?

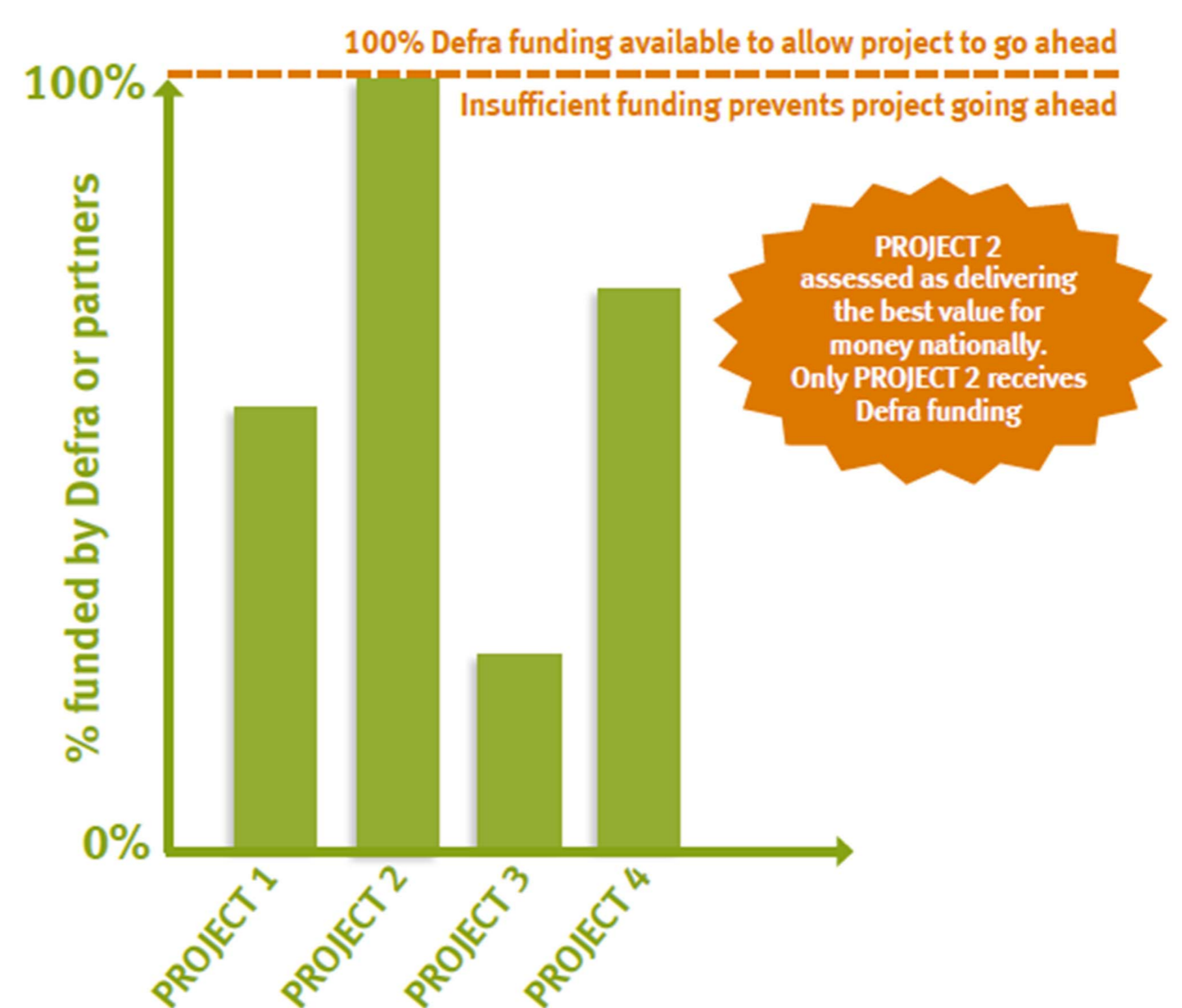
The Partnership Funding (PF) awards coastal defence schemes a percentage of government funding based on the scheme achieving specific outcomes. The outcomes are based on:

- reducing flood and erosion risk (based on the value of benefits associated with a scheme)
- number of properties better protected from flood and erosion risk
- the creation of new habitats.

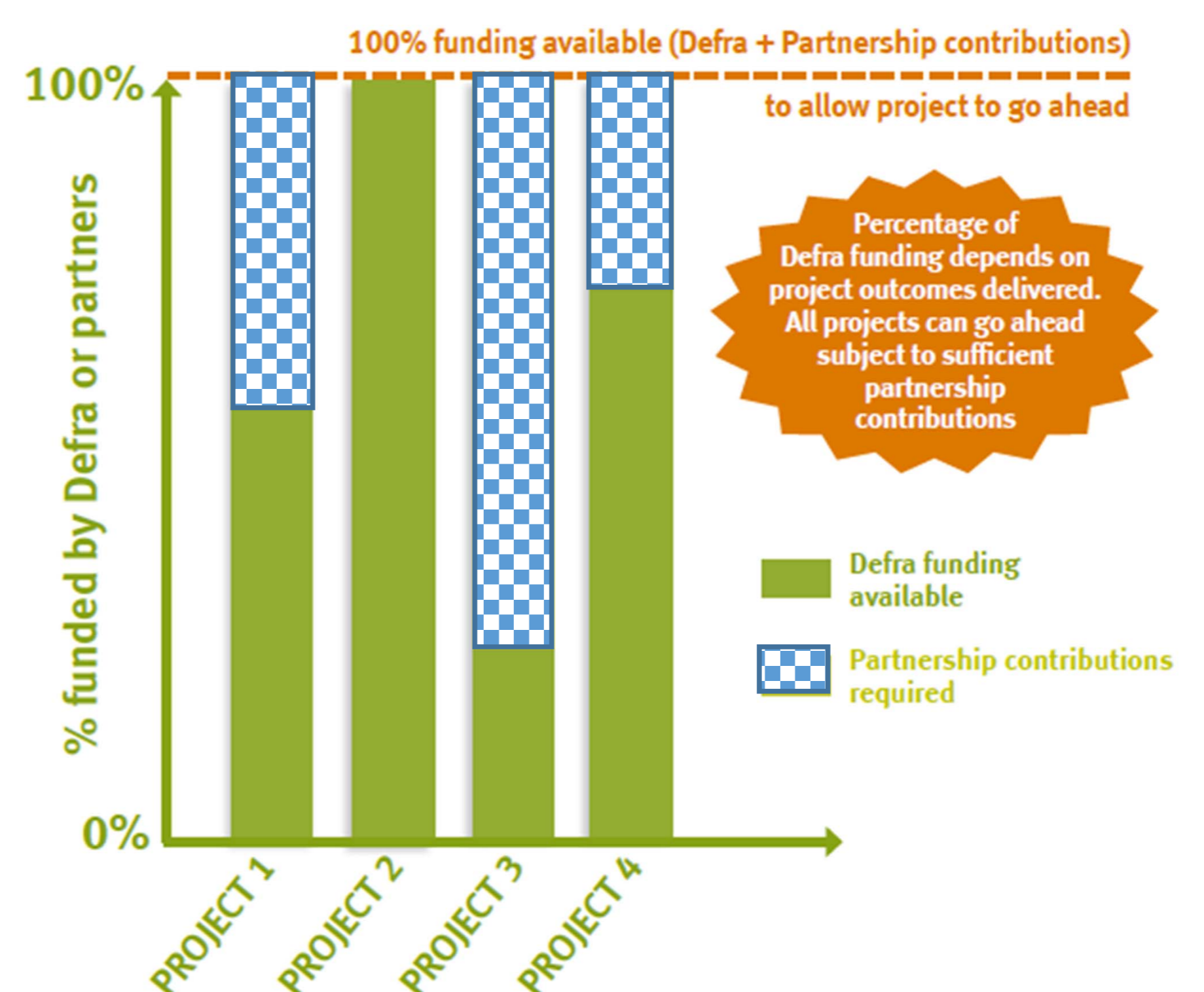
## How Does it Work?

- Projects are given a score to determine the % of the scheme's costs eligible for government funding.
- The rest of the funding needs to be covered by third party funders e.g. organisations such as water companies and other private funders.
- Government funding can be applied for, as long as the shortfall is met from third party contributions.
- This process ensures tax payers' money is spent where it can deliver most benefit for least cost.

Pre-2011 Defra 'all or nothing' funding system

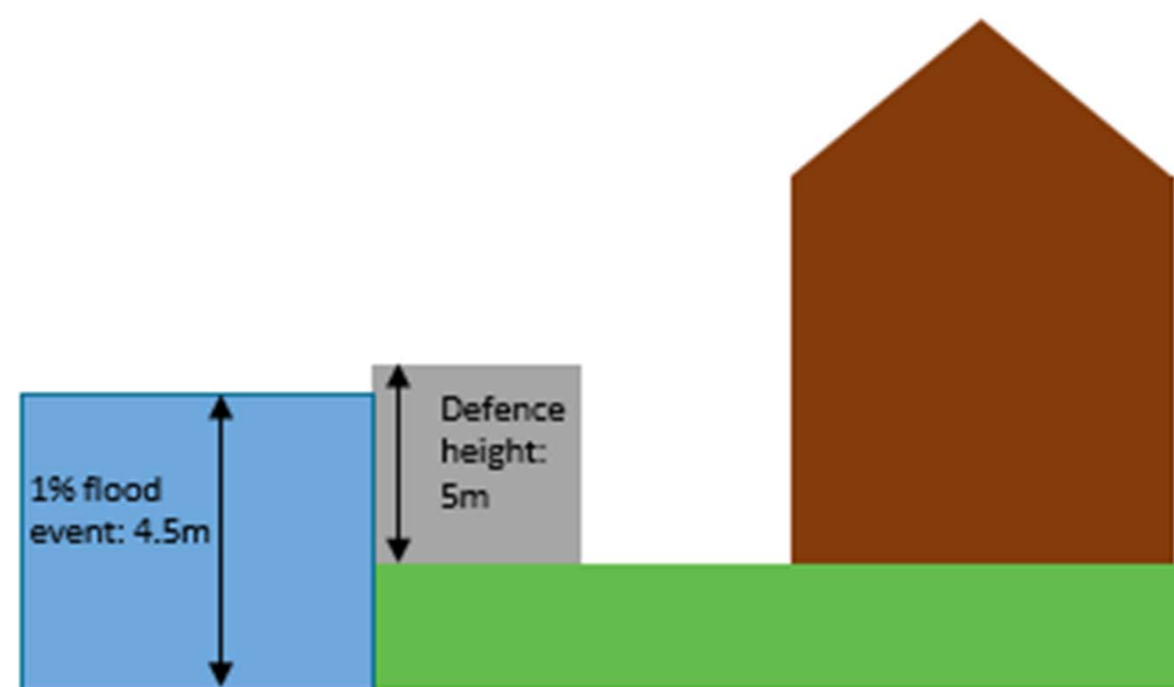


Current Defra 'partnership funding' system

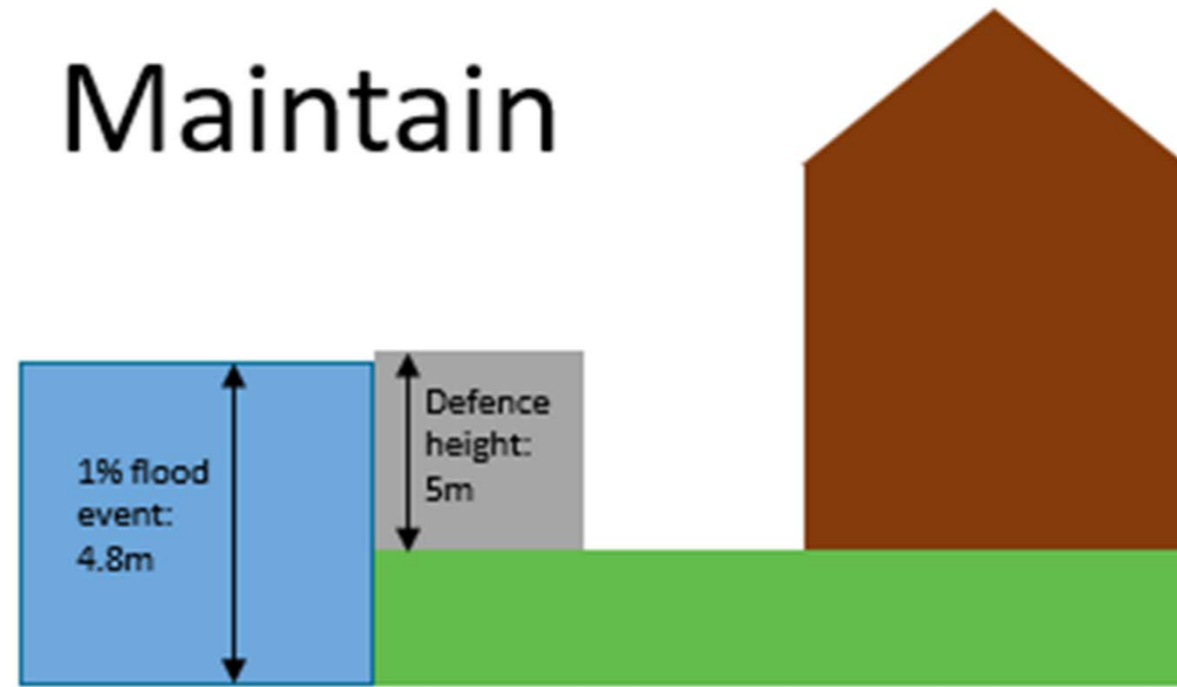


# Preferred Option – Hold the Line

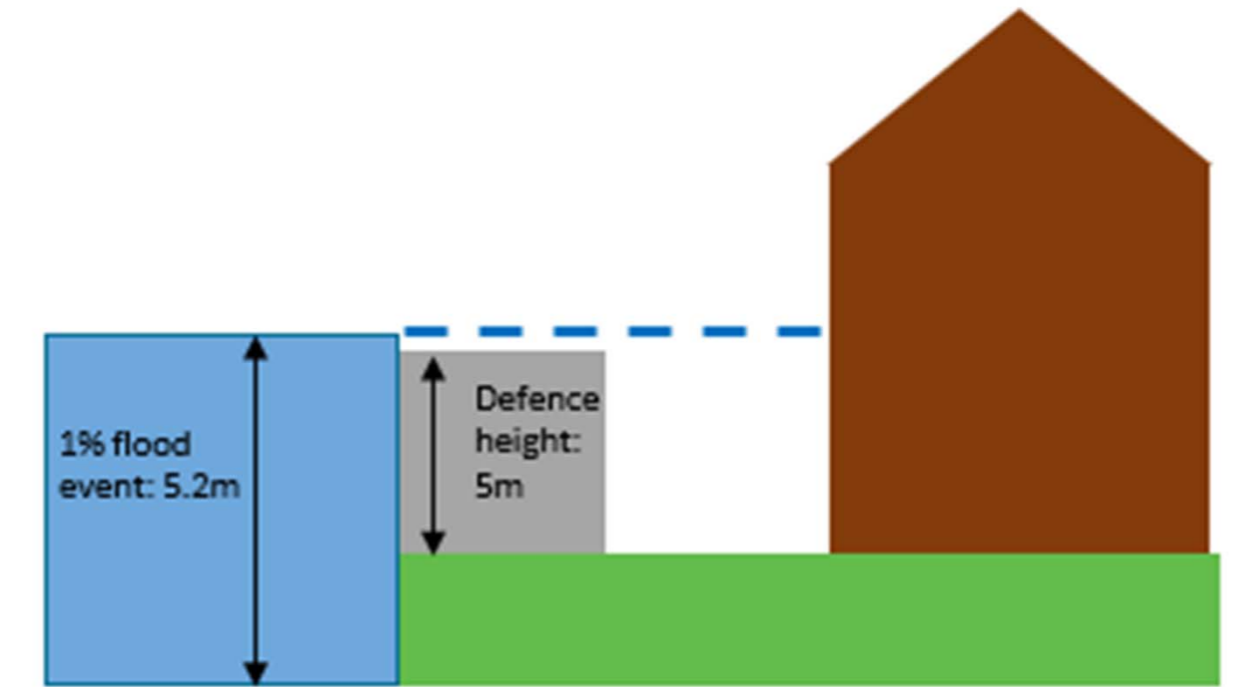
There are three different approaches to hold the line assessed in this strategy:



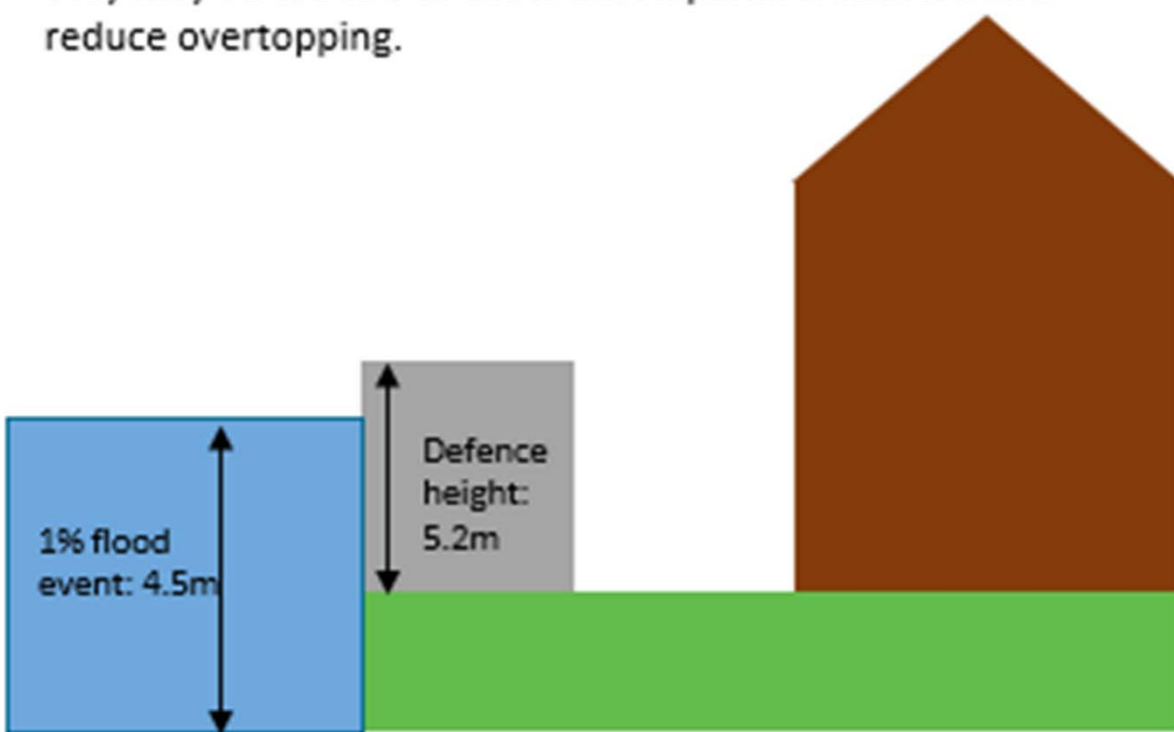
At the start of the first epoch (present day), defence heights will protect to a particular standard of protection, however they may be too low to allow the required freeboard and reduce overtopping.



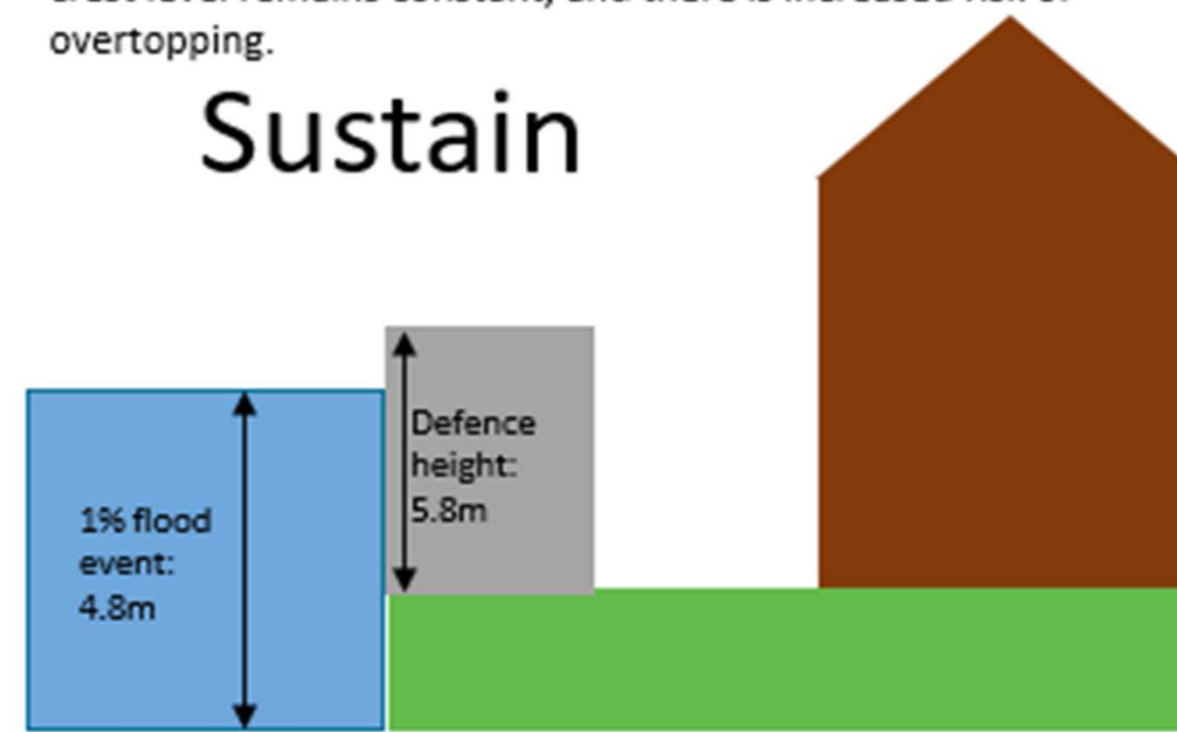
By year 50, the sea level has increased however the defence crest level remains constant, and there is increased risk of overtopping.



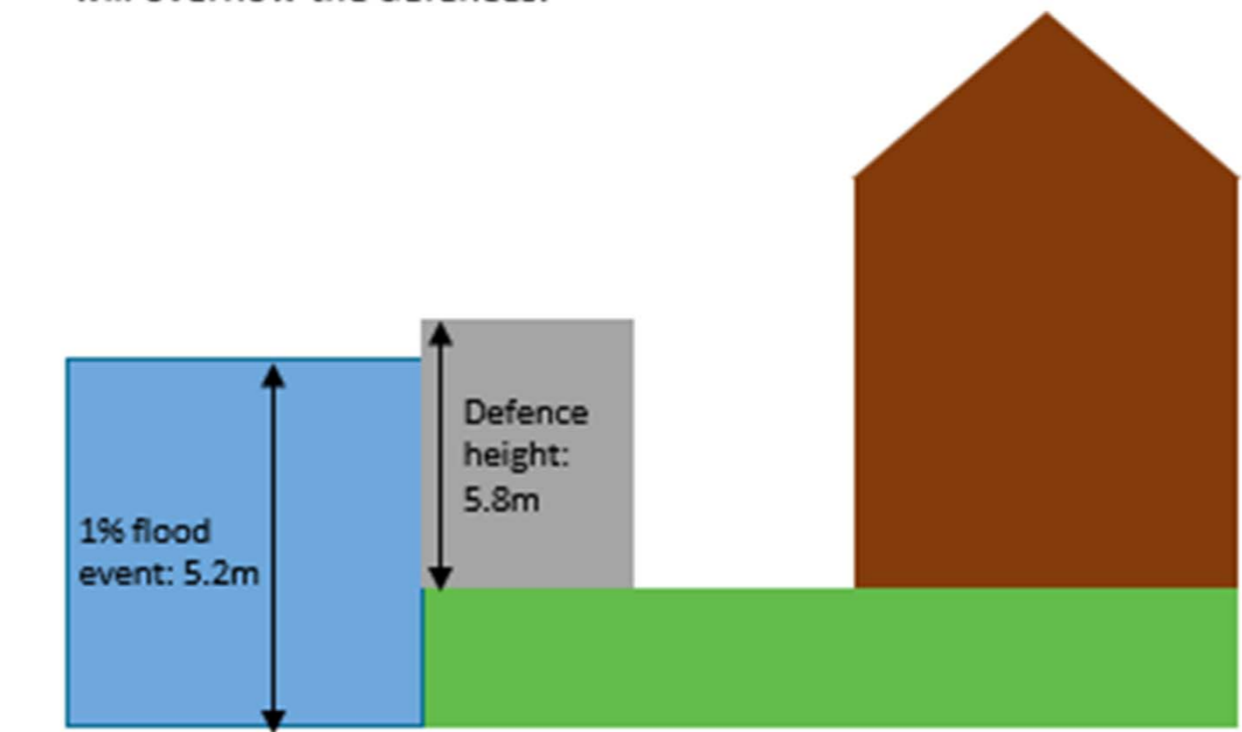
By year 100, in many places the water level in extreme events will overflow the defences.



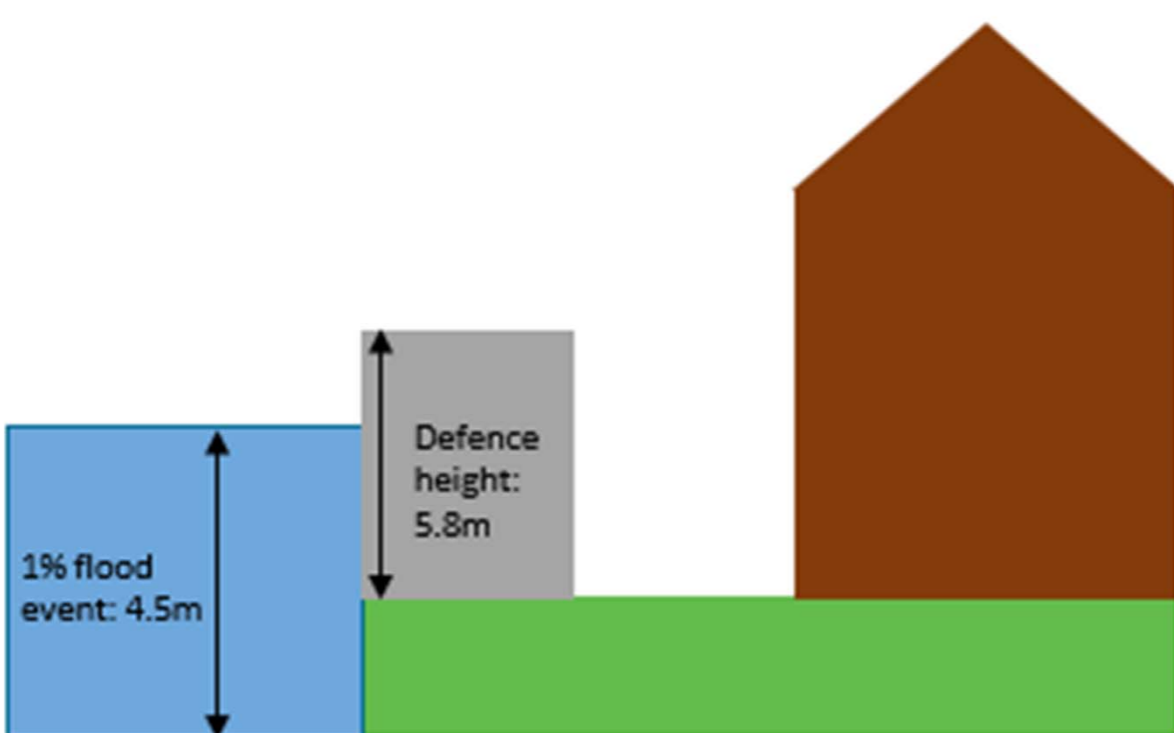
At the start of the first epoch (present day), defence heights will be increased to protect to a particular standard of protection with the required freeboard. In most places this will improve the current standard of protection.



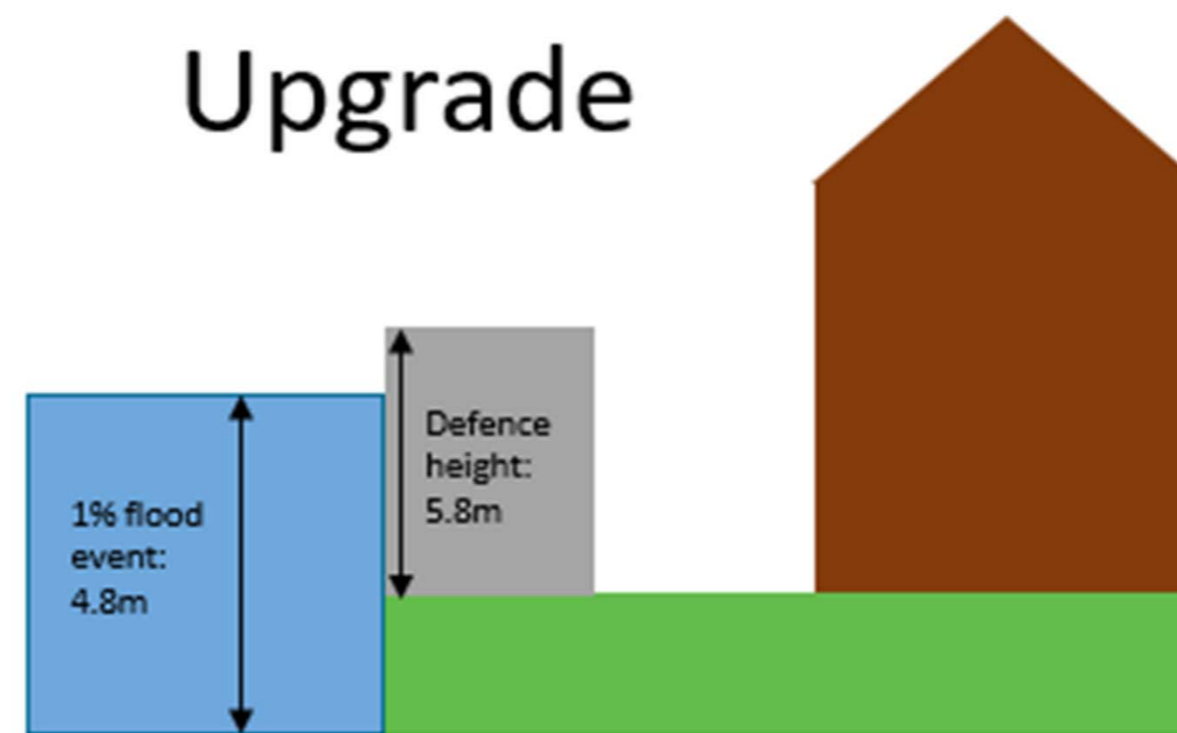
By year 50, the sea level has increased and therefore in year 50 the defence heights will increase further in height to provide the required standard of protection in 100 years. Therefore it will provide a higher standard of protection in year 50.



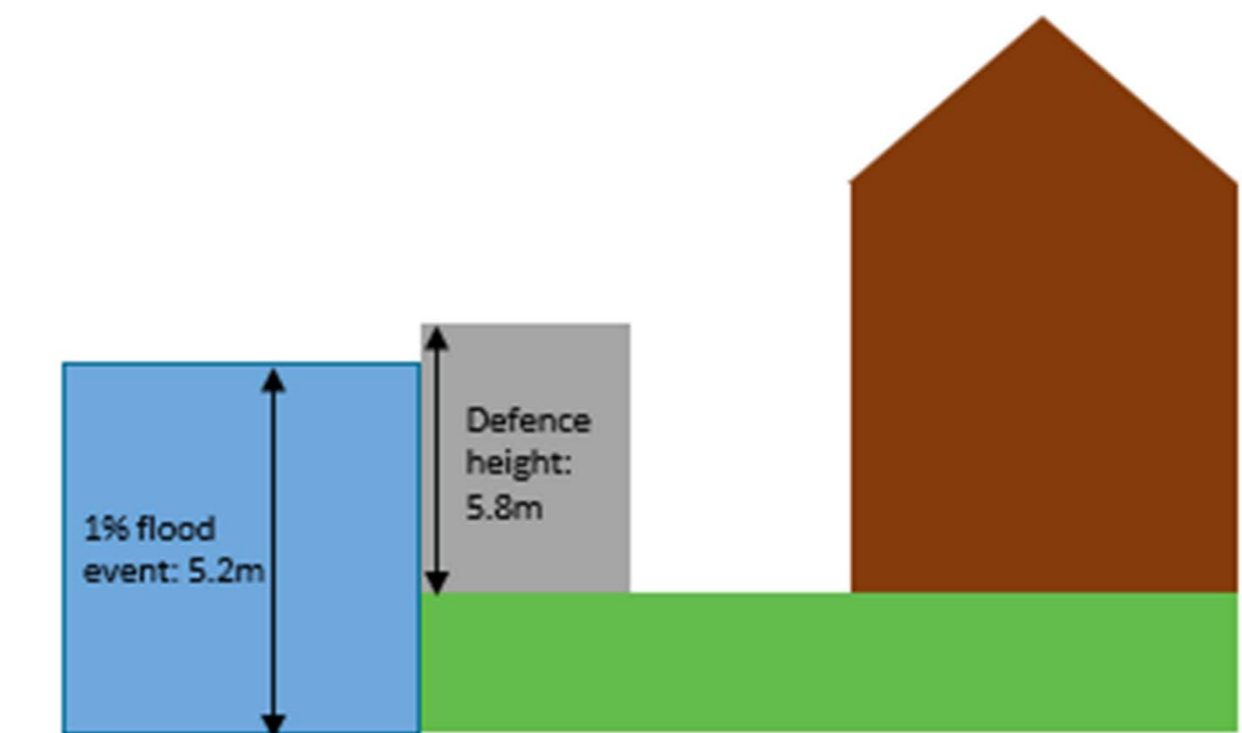
By year 100, the defence height built in year 50 will still be providing the required standard of protection, despite increased sea levels.



At the start of the first epoch (present day), defence heights will be increased to protect to a particular standard of protection in 100 years. Therefore the standard of protection will be higher than required in year 0.



By year 50, the sea level has increased but defences have been built to the 100 year crest level and therefore continue to provide a higher standard of protection in year 50.



By year 100, the defence height built in year 0 will still be providing the required standard of protection, despite increased sea levels.



*Concrete Stepped Revetment and beach at Sheerness*



*Sheet piled wall along Strood Canal*



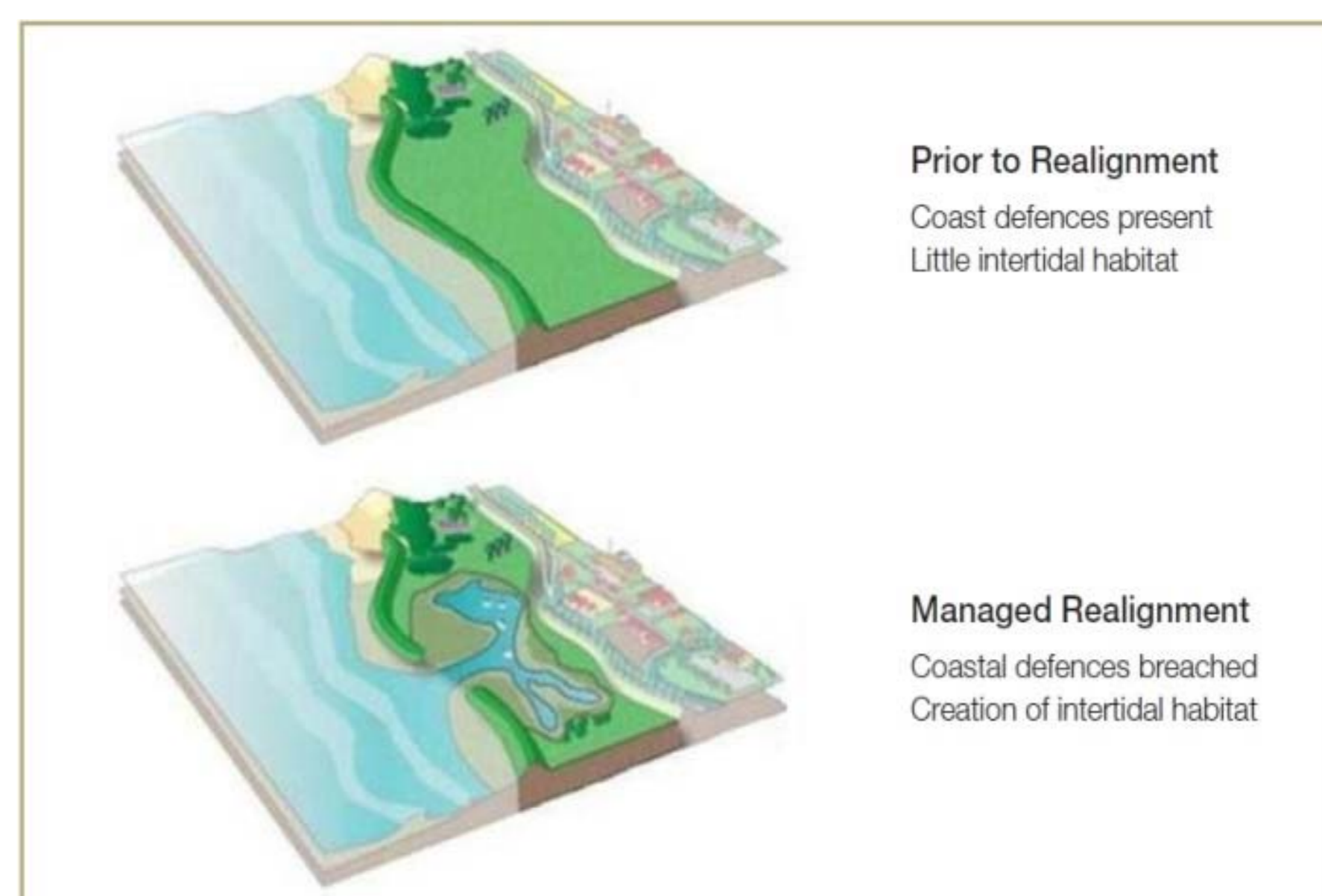
*Earth embankments along the Swale Estuary*

# Preferred Option – Managed Realignment

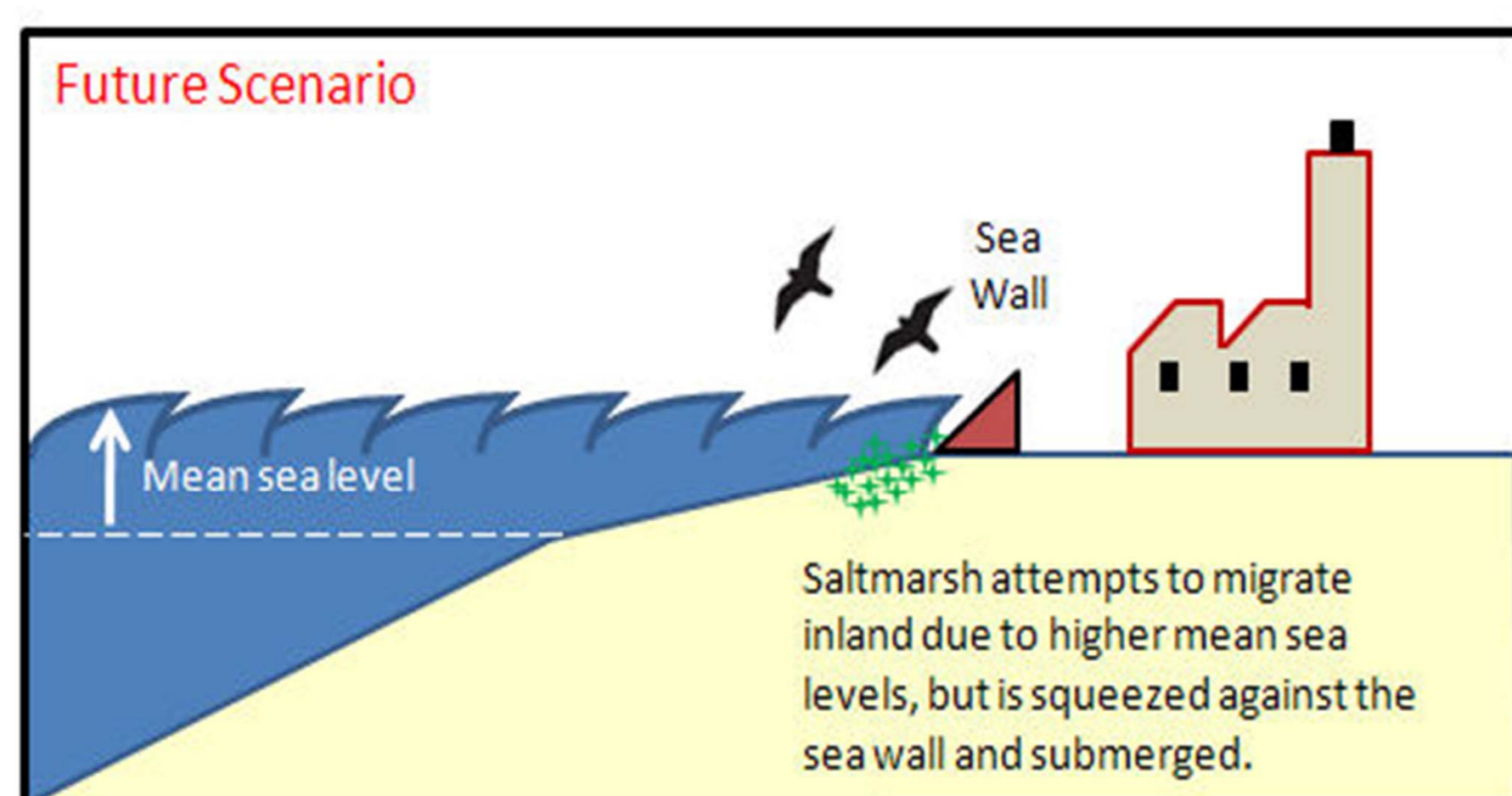
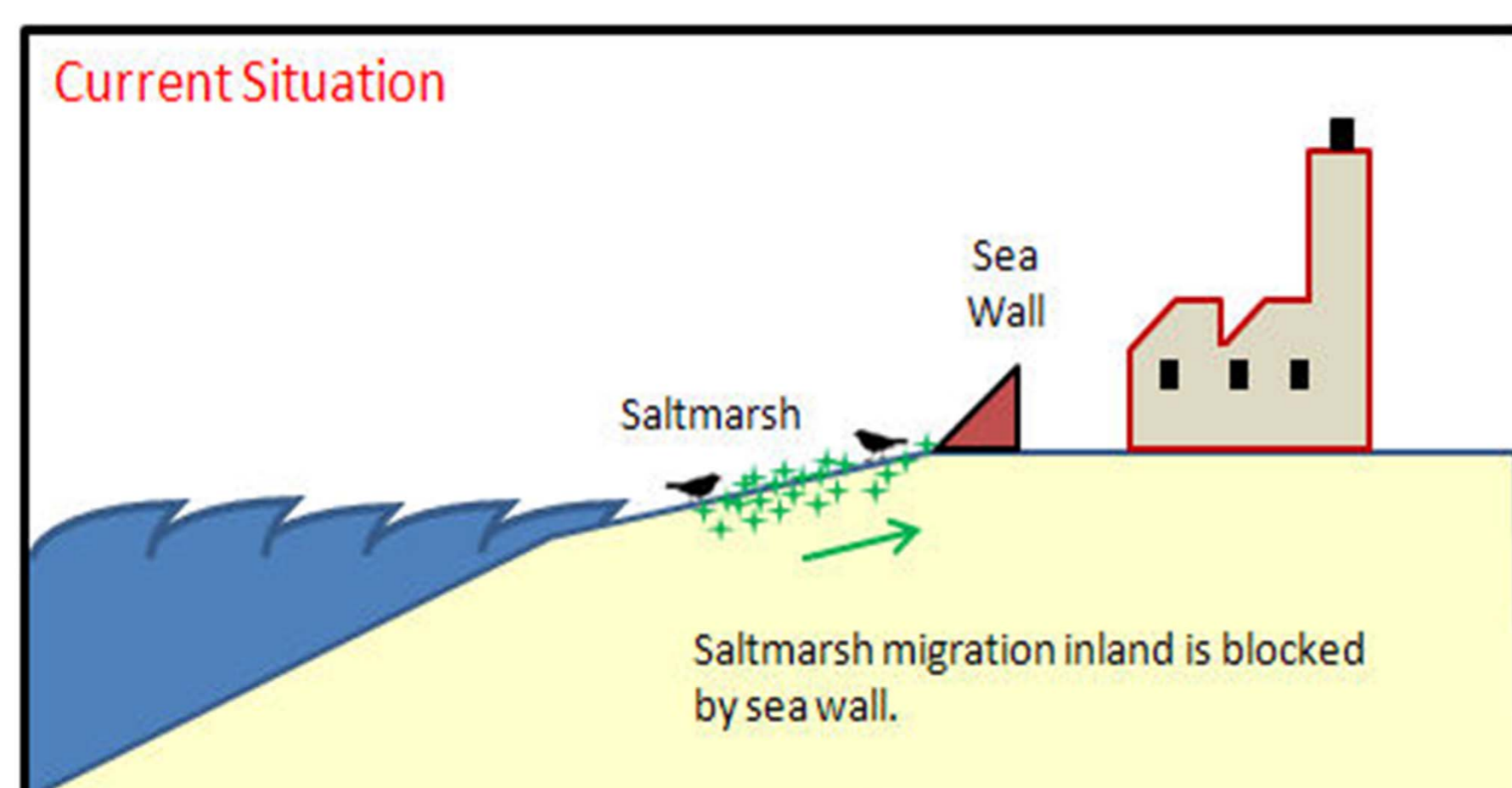
Managed Realignment (MR) is a multi-functional, multi-benefit approach to managing coastal flood risk.

The key benefits of MR are:

- moves the defence line inland, which reduces the long term costs
- sustainable approach to managing flood risk
- naturally adapts to climate change and sea level rise
- creates valuable intertidal habitat.



## Reduces Coastal Squeeze



## Reduces Flood Risk



# Preferred Option – No Active Intervention

No Active Intervention involves the operating authority (Environment Agency/local authority) reducing, and eventually ceasing, all work on the defences including patch and repair maintenance. This is due to there being no economic justification for government funding to realign or replace the defences.

Nature is allowed to take its course, however it is not likely that impacts will occur immediately in a lot of areas. This option does not discriminate against private investment in the defences, subject to licensing and approval.



*River Medway at Halling*



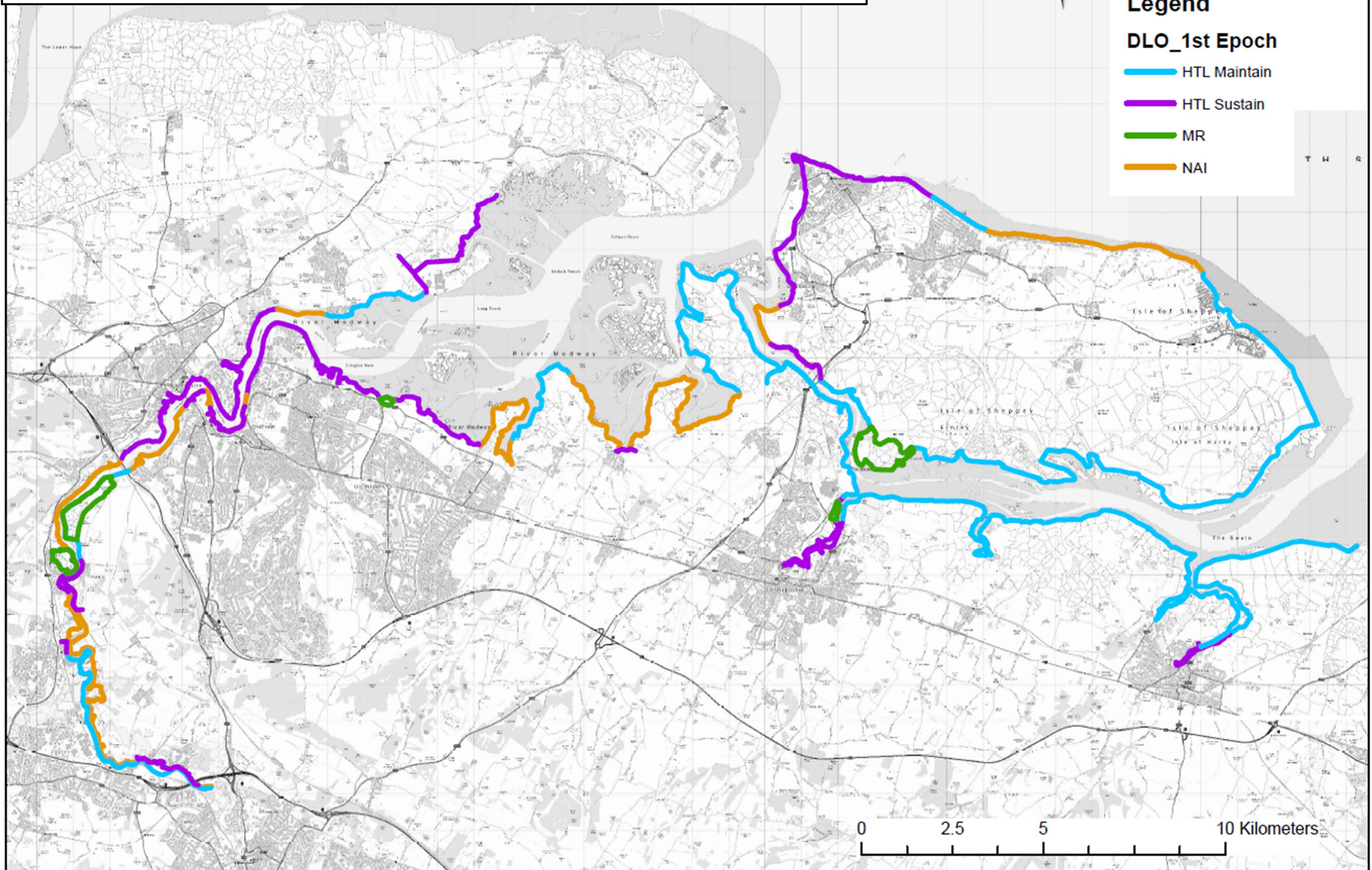
*Marshes on the south of the Isle of Sheppey*

## Potential Impacts

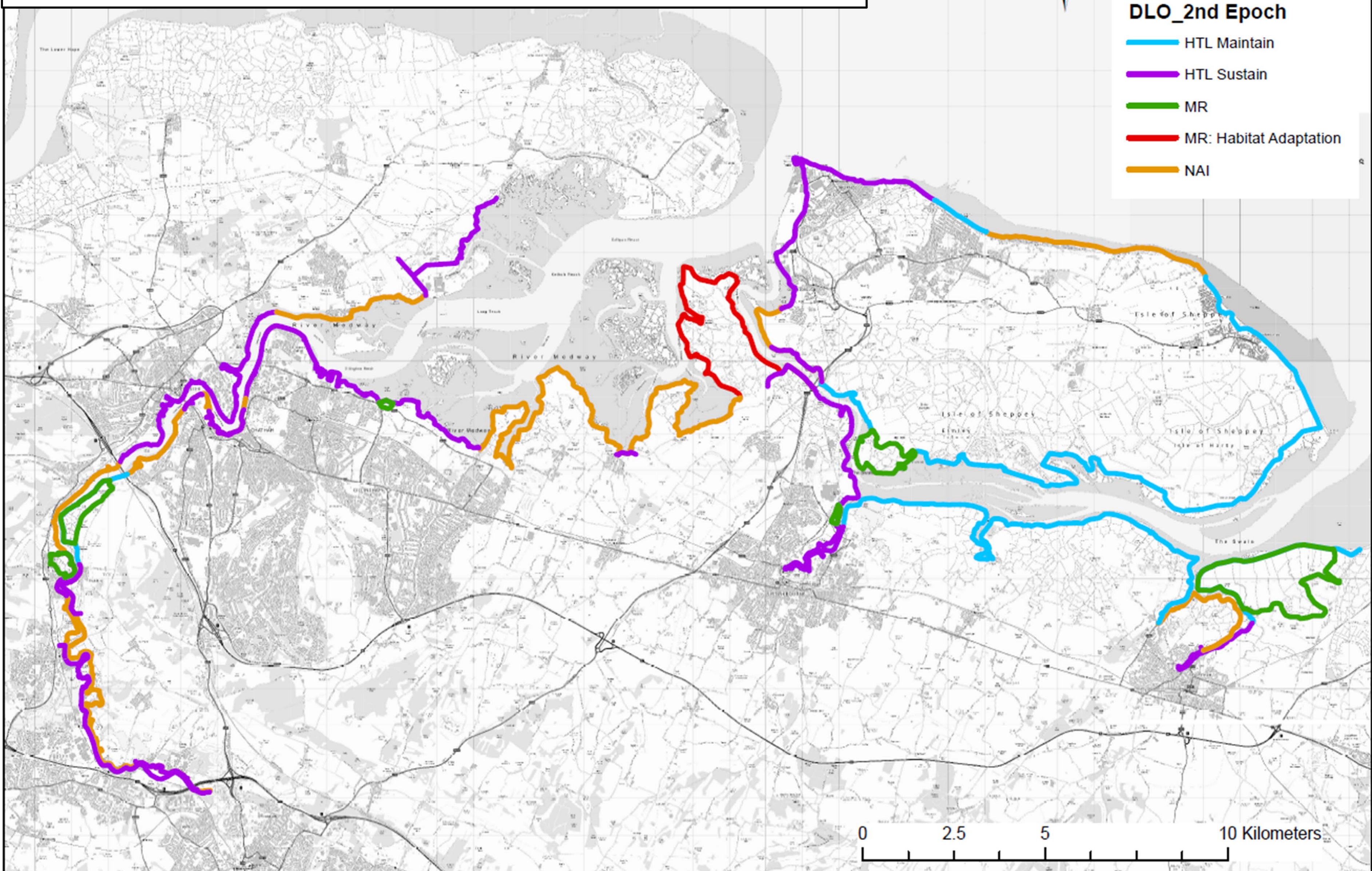
- Failure and breaching of the defences.
- Inundation of land.
- Potential impacts on freshwater habitat.

# Preferred Options

MEASS Draft Leading Options for years 0-20



MEASS Draft Leading Options for years 20-100



## F. Sub Benefit Area Map

# MEASS Strategy Area divided into Benefit Areas





