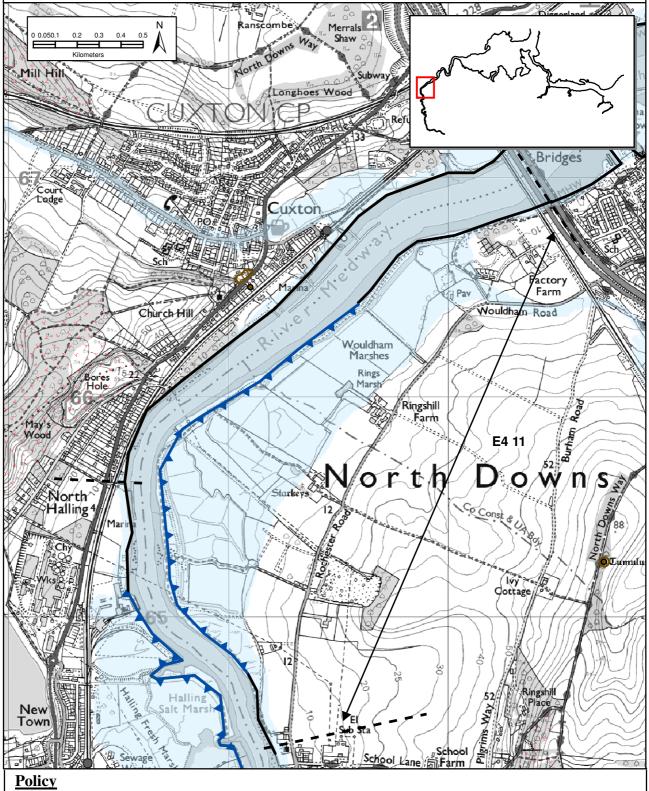
# Medway Estuary and Swale Shoreline Management Plan Policy Unit E4 11: Wouldham Marshes





From Present Day:	Medium-Term:	Long-Term:	
Managed Realignment	Managed Realignment	Managed Realignment	
Indicative erosion zone up to 2025 Indicative erosion zone up to 2055 Indicative erosion zone up to 2105	* Actual realignment extent and location will be the subject of further studies.	Policy Unit Boundary Policy Unit Extent Current shoreline	
Environmental/Cultural Heritage  A National Nature Conservation Designation International Nature Conservation Designation	Hold the Line  Important Heritage Sites (Scheduled Monuments)  2005 Indicative floodplain © Environment Agency		

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Comptrollerof Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Environment Agency, Licence number 100026380.2007.

M:\Projects\Coastal\DCMSFP\GIS\Project\_Files\PolicySMP\MedwayE411.mxd

Policy Unit reference: E4 11

## **SUMMARY OF THE PLAN AND JUSTIFICATION**

### Plan:

A low-lying area between the village of Wouldham and the Medway Bridge, rising to higher land. A small number of properties are located on the higher ground. The whole frontage is designated as an Area of Outstanding Natural Beauty.

The recommended long-term plan is to allow the coastline to realign to a more naturally functioning system, whilst continuing to provide flood defence to the Medway Bridge, the village of Wouldham and isolated properties. It is recognised that Managed realignment may be need to extend to the raised topography of the hinterland to be affordable. However a managed realignment policy is recommended to enable better control of estuarine morphology and to provide an opportunity for habitat creation in line with the Habitats Regulations Assessment.

No specific realignment positions have been identified for the SMP. Further studies will be required to investigate and define the extent, location and implementation of the realignment i.e. the best technical, environmental and economic option that best manages flood risk. These studies will also need to investigate the exact standard and alignment of any defences for this frontage

The aim of these policies is to work towards achieving a more naturally functioning estuary and the creation of important brackish and saline habitats whilst at the same time creating a shoreline with a reduced requirement for defence maintenance. This policy is considered to be sustainable in the long-term, on the basis that overall flood defence is maintained to limit erosion and flood propagation.

## Preferred policies to implement Plan:

## From present day:

The present day policy is **managed realignment** for Wouldham Marshes. The detailed alignment, will be subject to further study to address uncertainties and confirm the best technical, environmental and economic option to manage the estuary. The policy would be achieved by constructing secondary defences at a set-back position and allow the existing defences to fail. The presence of raised topography behind the flood plain, and the likely increasing cost of maintaining the existing alignment, makes this appropriate. Re-routing of shoreline footpaths may be required in localised areas.

As the coastline realigns, intertidal habitat will develop in the realigned area. Generally, mudflat and saltmarsh evolution in the channel is predicted to remain stable.

### Medium-term:

The medium term policy is to continue allowing the shoreline to realign, under a policy of **managed realignment**. Defences will require further maintenance

Policy Unit reference: E4 11

throughout this period to provide continued protection to assets. Environmental transitions will be prominent during this epoch as brackish and intertidal habitats replace the freshwater habitats. This may require specific management to maximise the environmental benefits and limit potential habitat impacts.

# Long-term:

The long-term policy is a continuation of **managed realignment**, to enable more flexible and sustainable flood and erosion risk management within the estuary. Defences will require periodic maintenance and potential upgrading with sea level rise. Under a scenario of sea level rise and climate change, fluvial flows and water levels will increase, leading to the increased potential for erosion in confined areas of the estuary. However, managed realignment may help to accommodate flood waters, reduce pressure on adjacent defences and give added protection to the hinterland.

It is expected that created habitat will become well-established during this epoch.

Policy Unit reference: E4 11

## **IMPLICATIONS OF THE PLAN FOR THIS LOCATION**

Time Period	Management Activities	Material Assets, Infrastructure & Land Use	Landscape	Natural Environment	Historic Environment	Population (Amenity & Recreational Use and Human Health)
0-20 years	Undertake engineering works to defences to Hold the Line of sections of defences that protect key assets and construct secondary defences in suitable locations.	Defences will continue to provide the appropriate standard of protection to built assets and infrastructure.  Areas of land affected by managed realignment will become intertidal.  MR may impact on current and future commercial traffic in the estuary.	Designated estuary landscape will be maintained, however, some features will change through realignment. Potential for a more 'natural' shoreline.  Overall AONB landscape value maintained.	Effect on freshwater grazing marsh.  Transition of habitats from freshwater to brackish to saline in realigned areas.	Potential loss of buried unknown heritage.	Re-routing of footpaths where MR is implemented.
20-50 years	Undertake engineering works to defences to Hold the Line of sections of defences that protect key assets and maintain realigned defences.	Defences will continue to provide the appropriate standard of protection to built assets and infrastructure.  Areas of land affected by managed realignment will become intertidal.  MR may impact on future commercial traffic in the estuary.	Potential for a more 'natural' shoreline.  Overall AONB landscape value maintained.	Establishment of brackish and saline habitats in realigned areas.	Potential loss of buried unknown heritage.	No loss of recreation features.

The above provides the <u>local</u> details in respect of the SMP-wide Plan; therefore the above <u>must</u> be read in the context of the wider-scale issues and policy implications, as presented in the preceding sections and Appendices to this Plan document.

Policy Unit reference: E4 11

## **IMPLICATIONS OF THE PLAN FOR THIS LOCATION**

Time Period	Management Activities	Material Assets, Infrastructure & Land Use	Landscape	Natural Environment	Historic Environment	Population (Amenity & Recreational Use and Human Health)
50-100 years	Undertake engineering works to defences to Hold the Line of sections of defences that protect key assets and maintain realigned defences.	Defences will continue to provide the appropriate standard of protection to built assets and infrastructure.  Areas of land affected by managed realignment will become intertidal.  MR may impact on future commercial traffic in the estuary.	Potential for a more 'natural' shoreline.  Overall AONB landscape value maintained.	Establishment of brackish and saline habitats in realigned areas.	Potential loss of buried unknown heritage.	No loss of recreation features.