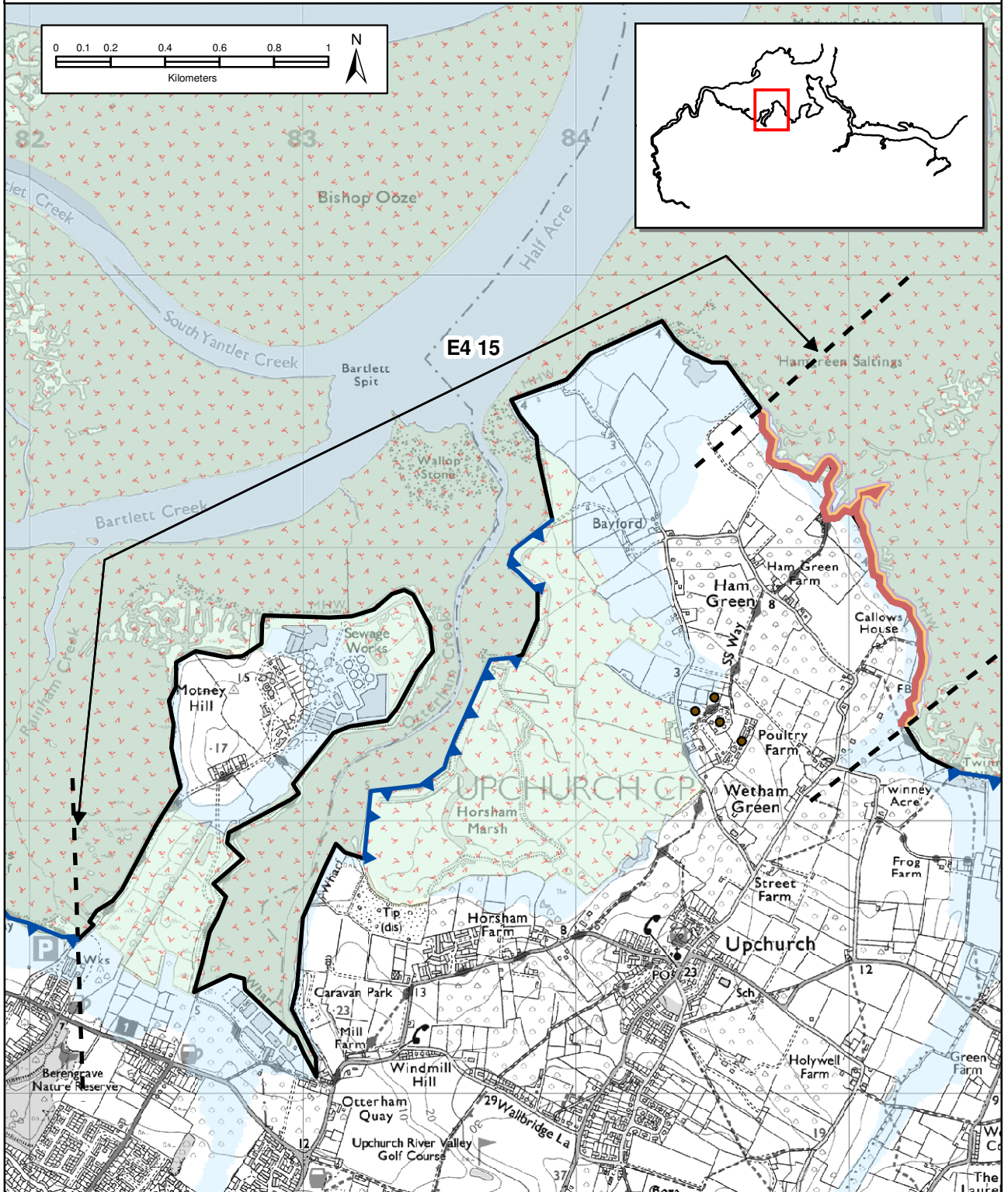










# Medway Estuary and Swale Shoreline Management Plan

## Policy Unit E4 15: Motney Hill to Ham Green



### Policy

| From Present Day:                                | Medium-Term:                                     | Long-Term:                                       |
|--|--|--|
| Managed Realignment with localised Hold the Line | Managed Realignment with localised Hold the Line | Managed Realignment with localised Hold the Line |

-  Indicative erosion zone up to 2025
-  Indicative erosion zone up to 2055
-  Indicative erosion zone up to 2105
-  Indicative realignment location\*
-  Policy Unit Boundary
-  Policy Unit Extent
-  Current shoreline
-  Hold the Line

### Environmental/Cultural Heritage

-  National Nature Conservation Designation
-  Important Heritage Sites (Scheduled Monuments)
-  International Nature Conservation Designation
-  2005 Indicative floodplain © Environment Agency

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**Location reference:** Motney Hill to Ham Green

**Policy Unit reference:** E4 15

### SUMMARY OF THE PLAN AND JUSTIFICATION

**Plan:**

*The frontage incorporates the shoreline around Motney Hill, Otterham and the western and northern edge of the Upchurch peninsular. Sections of the frontage form part of the Nor Marsh and Motney Hill RSPB Reserve. Localised settlements of Otterham, Upchurch and Ham Green are interspersed with agricultural land and freshwater marsh. Intertidal areas adjacent to the shoreline as well as areas of freshwater habitat at Motney Hill and at Horsham Marsh are nationally and internationally designated for their ecological importance.*

*The recommended long-term plan is to allow the coastline to realign to a more naturally functioning system where possible, creating brackish and saline habitat in some locations, whilst continuing to provide flood and erosion defence to assets and backing low-lying land. It is recognised that this section of shoreline provides an opportunity for localised environmental enhancement and habitat creation through localised managed realignment.*

*No specific realignment positions have been identified for the SMP. The potential impact on internationally designated sites will be a limiting factor on realignment extents and therefore, 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 and any mitigation measures required for loss of designated habitat.*

*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.*

*The effect of these policies on designated conservation sites has been assessed in partnership with Natural England.*

**Preferred policies to implement Plan:**

**From present day:** The present day policy **is managed realignment with localised hold the line** for Motney Hill to Ham Green. 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 will be implemented by maintaining the current defence line along some of the frontage and by constructing realigned secondary defences in localised areas at a set-back position, ensuring continued protection to assets. Re-routing of shoreline footpaths will be required in localised areas.

No specific realignment position has been identified for the SMP. However, set

**Location reference:** Motney Hill to Ham Green

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back would involve the loss of areas of designated freshwater habitat, the amount of which is dependant on the realignment extent. The loss of the designated freshwater habitats would require mitigation / compensation measures to be implemented, and this aspect will require more detailed appraisal.

The evolution of intertidal areas will be dependant on sediment supply. However, it is predicted that intertidal areas will continue to remain stable throughout this epoch as sediment supply is expected to meet demand throughout this epoch in the Medway.

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**Medium-term:**

The medium term policy is to continue allowing the shoreline to realign in sections, whilst continuing to provide protection to assets and low lying areas, under a policy of **managed realignment with localised hold the line**. Defences will require further maintenance throughout this period as sea levels rise. However, the increased saltmarsh and intertidal area, in sections where defences are set-back, will afford added protection to the hinterland.

Environmental transitions will be prominent during this epoch as brackish and intertidal habitats replace some of the freshwater interests. This may require specific management to maximise the environmental benefits and limit potential habitat impacts.

It is predicted that intertidal areas will continue to be stable in this sheltered section of the estuary.

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**Long-term:**

The long-term policy is a continuation of **managed realignment with localised hold the line**, to enable more flexible and sustainable flood and erosion risk management within the estuary. All defences will require periodic maintenance and potential upgrading with sea level rise.

It is expected that created habitat in realigned areas will become well-established during this epoch and provide added protection to the hinterland. However, elsewhere erosion of intertidal habitats may become more prevalent due to coastal squeeze driven by rising sea levels rise and a predicted decrease in sediment supply.

**Location reference:** *West Motney Hill to Ham Green*

**Policy Unit reference:** *E4 15*

### 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)  |
|--------------------|--|---|--|---|--|---|
| <b>0-20 years</b>  | 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.<br><br>Areas of land affected by managed realignment will become intertidal. | Designated estuary landscape will be maintained however some features will change through realignment. | No net loss of internationally designated intertidal habitats and nationally important (BAP) habitat. However, due to coastal squeeze, loss will occur in some areas as will accretion elsewhere. Creation of internationally and nationally important saltmarsh habitat.<br><br>Effect on internationally designated coastal grazing marsh and nationally important (BAP) habitat, dependant on realignment extent.<br><br>Compensatory habitat will need to be secured before any designated habitat is lost.<br><br>Potential for contamination of water resources under a managed realignment policy. | Potential loss of buried unknown heritage. | Defences will continue to provide protection to built assets.<br><br>Re-routing of footpaths where MR is implemented. |
| <b>20-50 years</b> | Undertake engineering works to defences to Hold the Line of sections of defences protecting  | Defences will continue to provide the appropriate standard of protection to built assets and  | Designated estuary landscape will be maintained. Potential for visual enhancement with                 | No net loss of internationally designated intertidal habitats and nationally important (BAP) habitat. However, due to coastal squeeze,  | Potential loss of buried unknown heritage. | Defences will continue to provide protection to built assets.   |

*The above provides the local details in respect of the SMP-wide Plan; therefore the above must 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.*

**Location reference:** *West Motney Hill to Ham Green*

**Policy Unit reference:** *E4 15*

**IMPLICATIONS OF THE PLAN FOR THIS LOCATION**

| <b>Time Period</b>  | <b>Management Activities</b>   | <b>Material Assets, Infrastructure &amp; Land Use</b>   | <b>Landscape</b>  | <b>Natural Environment</b>   | <b>Historic Environment</b>                | <b>Population (Amenity &amp; Recreational Use and Human Health)</b>                                  |
|---------------------|--|---|---|--|--|--|
|                     | key assets. Maintain secondary defences.   | infrastructure.<br>Areas of land affected by managed realignment will become intertidal.  | a more natural coastline as MR is established.  | loss will occur in some areas as will accretion elsewhere. Establishment of brackish / saline habitats in realigned areas.<br><br>Potential further effect on coastal grazing marsh and nationally important (BAP) habitat, if defences realigned further.<br><br>Potential for contamination of water resources under a managed realignment policy. |  | No loss of recreational assets.  |
| <b>50-100 years</b> | Undertake engineering works to defences to Hold the Line of sections of defences protecting key assets. Maintain secondary defences. | Defences will continue to provide the appropriate standard of protection to built assets and infrastructure.<br><br>Areas of land affected by managed realignment will become intertidal. | Designated estuary landscape will be maintained, potential for visual enhancement with a more natural coastline as MR is established. | Potential effect on internationally designated intertidal habitats and nationally important (BAP) habitat with coastal squeeze, as sediment supply decreases in the estuary. Establishment of habitat in realigned areas.<br><br>Potential further effect on coastal grazing marsh and nationally important (BAP) habitat, if defences               | Potential loss of buried unknown heritage. | Defences will continue to provide protection to built assets.<br><br>No loss of recreational assets. |

*The above provides the local details in respect of the SMP-wide Plan; therefore the above must 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.*

**Location reference:** *West Motney Hill to Ham Green*

**Policy Unit reference:** *E4 15*

**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) |
|-------------|-----------------------|--|-----------|--|----------------------|--|
|             |                       |  |           | realigned further.<br><br>Potential for contamination of water resources under a managed realignment policy. |                      |  |

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*The above provides the local details in respect of the SMP-wide Plan; therefore the above must 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.*