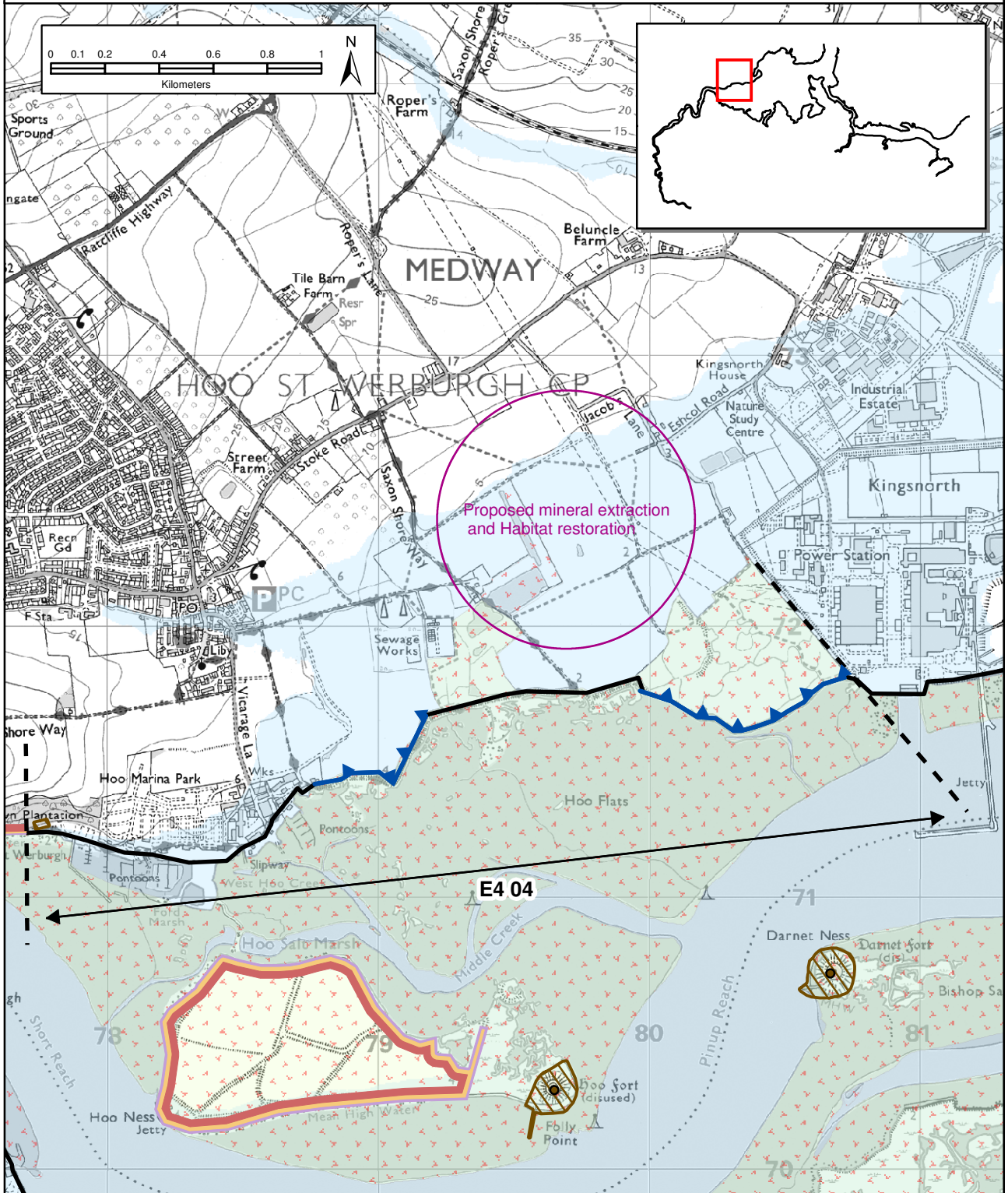


# Medway Estuary and Swale Shoreline Management Plan

## Policy Unit E4 04: Power Station to Cockham Wood



### 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
- Proposed development
- Policy Unit Boundary
- Current shoreline
- Hold the Line
- National Nature Conservation Designation
- International Nature Conservation Designation
- Important Heritage Sites (Scheduled Monuments)
- 2005 Indicative floodplain © Environment Agency
- Policy Unit Extent

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<b>Location reference:</b>	<b>Kingsnorth Power Station to Cockham Wood</b>
<b>Policy Unit reference:</b>	<b>E4 04</b>

### SUMMARY OF THE PLAN AND JUSTIFICATION

#### Plan:

*Wide intertidal mudflats and saltmarsh of international importance extend along the frontage, whilst the majority of the hinterland comprises low-lying undeveloped coastal grazing marsh and agricultural land, some of which is nationally and internationally designated for its ecological value. A marina and small residential community, south of Hoo St Werburg, are located at the western extremity of the frontage. An onshore mineral extraction operation and habitat restoration scheme has been proposed to the west of Kingsnorth Power Station. The Saxon Shore Way extends along the shoreline along the west of the frontage before moving inland.*

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

*No specific realignment positions have been identified for the SMP. The outcome of geomorphological and ecological studies plus the management of the designated European Wildlife sites will define the extent, location and implementation of the realignment and achieve the best technical, environmental and economic option. 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 for Kingsnorth Power Station to Cockham Wood is **managed realignment with localised hold the line** and the European Wildlife site. The current defence line would be maintained along some sections of the frontage and new realigned secondary defences constructed at a set-back position, ensuring continued protection to built and environmental assets. Some shoreline paths would have to be re-routed in localised areas,

No specific realignment positions have been identified for the SMP. However, an affect on designated freshwater habitat may occur, dependant on

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**Location reference: Kingsnorth Power Station to Cockham Wood**

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realignment extents. Loss of designated freshwater habitats would require mitigation / compensation measures to be implemented, and this aspect will require more detailed appraisal.

Evolution of intertidal areas will be dependant on sediment supply. It is predicted that sediment supply is expected to meet demand throughout this epoch, therefore intertidal areas will continue to be stable along the majority of frontage. However, net erosion is expected to continue in the narrow channel between Hoo Marina and Hoo Saltmarsh Island.

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**Medium-term:**

The medium term policy is to continue allowing the shoreline to realign in sections, albeit in a controlled manner, whilst continuing to provide protection to assets and low lying areas, under a policy of **managed realignment with localised hold the line**. Defences may 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 in realigned areas. This may require specific management to maximise the environment benefits and limit any potential habitat impacts.

It is predicted that intertidal areas will continue to be stable along most of the frontage as sediment supply is expected to be able to meet demand throughout this epoch. However, coastal squeeze may become more prevalent along Hoo Marina frontage as sea levels rise. As intertidal areas narrow, defences in this area may become more susceptible to undermining and therefore may require upgrading.

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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.

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 coastal squeeze may become more prevalent as sea levels rise and sediment supply in the Medway decreases over this epoch.

**Location reference:** *Kingsnorth Power Station to Cockham Wood*  
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**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)
<p><b>0-20 years</b></p>	<p>Undertake engineering works to defences to Hold the Line of sections of defences that protect key assets and construct secondary defences in suitable locations.</p>	<p>Defences will provide an appropriate level of protection to the marina.</p> <p>Areas of land affected by managed realignment will become intertidal.</p> <p>Protection of Kingsnorth Power Station.</p>	<p>Designated estuary landscape will be maintained however some features will change through realignment.</p>	<p>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 in realigned areas.</p> <p>Affect on small areas of internationally designated coastal grazing marsh and nationally important (BAP) habitat, dependant on realignment extent.</p> <p>Compensatory habitat will need to be secured before any designated habitat is lost.</p> <p>Managed realignment will result in future changes to habitat drained by Damhead Creek due to tidal flooding, and will contribute to WFD objective 2 "no changes that will cause failure</p>	<p>Potential loss of buried unknown heritage.</p>	<p>Defences will provide an appropriate level of protection to residential development.</p> <p>Re-routing of footpaths where MR is implemented.</p>

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**Policy Unit reference:** *E4 04*

**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)
				to meet surface water "good" ecological status or potential (where potential relates to HMWB or AWB) or result in a deterioration of surface water ecological status/ potentials" by accepting a sustainable change in this river water body.		
20-50 years	Undertake engineering works to defences to Hold the Line of sections of defences protecting key assets. Maintain the realigned defence line.	Defences will provide an appropriate level of protection to the marina and residential areas.  Areas of land affected by managed realignment will become established intertidal areas.	Designated estuary landscape will be maintained, potential for visual enhancement with a more natural coastline as MR is established.	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. Establishment of new habitats in realigned areas.  Potential further affect on coastal grazing marsh and nationally important (BAP) habitat, if defences realigned further.  Managed realignment will result in future changes to habitat drained by Damhead Creek due to tidal flooding, and will contribute to WFD objective	Potential loss of buried unknown heritage.	No loss of recreational or community assets.

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**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)
				<p>2 "no changes that will cause failure to meet surface water "good" ecological status or potential (where potential relates to HMWB or AWB) or result in a deterioration of surface water ecological status/ potentials" by accepting a sustainable change in this river water body.</p>		
<p><b>50-100 years</b></p>	<p>Undertake engineering works to defences to Hold the Line of sections of defences protecting key assets. Maintain the realigned defence line.</p>	<p>Defences will provide an appropriate level of protection to the marina and residential areas.</p> <p>Areas of land affected by managed realignment will become established intertidal areas.</p>	<p>Designated estuary landscape will be maintained, potential for visual enhancement with a more natural coastline as MR is established.</p>	<p>Potential effect on internationally designated intertidal habitats and nationally important (BAP) habitat with coastal squeeze, as sediment supply decreases in the estuary. Establishment of habitats in realigned areas.</p> <p>Potential further effect on coastal grazing marsh and nationally important (BAP) habitat, if defences realigned further.</p> <p>Managed realignment will result in future changes to habitat drained by Damhead Creek due to tidal flooding,</p>	<p>Potential loss of buried unknown heritage.</p>	<p>No loss of recreational or community assets.</p>

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**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)
				and will contribute to WFD objective 2 "no changes that will cause failure to meet surface water "good" ecological status or potential (where potential relates to HMWB or AWB) or result in a deterioration of surface water ecological status/ potentials" by accepting a sustainable change in this river water body.		

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