

Summary of Specific Policies

Policy Development Zone		Policy Plan			
		Now - 2025	2025 - 2055	2055 - 2105	Explanation
G1	Bradwell-on-Sea	HtL	HtL	HtL	The current line will be held throughout all epochs. The defence is under pressure but there are overriding constraints for realignment.
G2	Bradwell Marshes	HtL	HtL	HtL	The current line will be held throughout all epochs.
G3	Dengie Marshes	HtL	HtL	HtL	The current line will be held throughout all epochs. The defence is partly under pressure but there are overriding constraints for realignment.

Key:

HtL – Hold the Line

MR1 – Managed Realignment - Allow local and limited intervention











MR2 – Managed Realignment - Breach of frontline defence after building landward defence

NAI – No Active Intervention

Changes from Present Management

For all three epochs there is no change from the existing policy.

Policy Appraisal Results (key and explanation: see Table 4-1 on page 95)

Policy Development Zone	Policy																											
		Policies appropriate to the diverse nature of Essex and South Suffolk Essex	Flood and erosion risk to people and property	Future opportunities	Use of natural processes	Positive and negative impact on other frontages	Cross-shore impact on near-shore activities	Time available for adaptation for communities, individuals and partner organisations	Infrastructure	Socio-economic activities	Public services	Communities	Deprived communities	Impact on socio-economic features of regional, national or international significance	Designated habitats and species	Biodiversity Action Plan (BAP) targets	Designated geological sites	Maintaining the evolving nature of the coastal landscape	Designated Heritage Assets	Significant undesignated heritage assets	Quality of Preservation	Archaeological Potential	Historic Landscape	Expected Scale of Mitigation	Impact on access to and along the coast			
G. Dengie Peninsula																												
G1 (Bradwell-on-Sea)	HtL	7	9	9	2	2		9	9	9	9	9	9	9	5	5		7	9	9	9	9	9	9	9	8		
G2 (Bradwell Marshes)	HtL		9	9	8	8		9	9	9	9	9	9	9	9	5	5			9	9	9	9	9	9	9	9	9
G3 (Dengie Marshes)	HtL		9	9	8	8		9	9	9	9	9	9	9	9	5	5			9	9	9	9	9	9	9	9	9

Policy maps

Figure 4-25 Management Unit G, Present Day

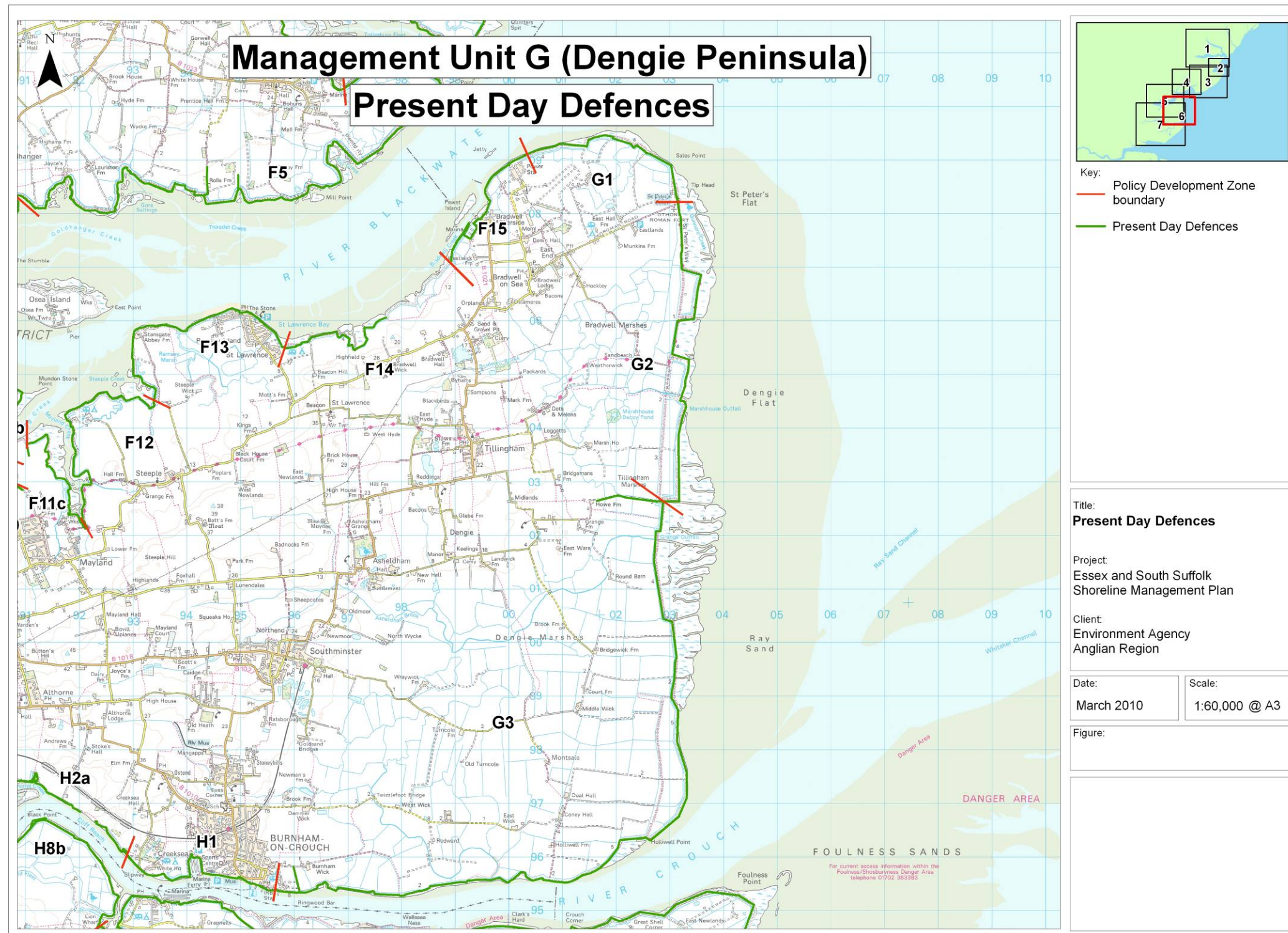


Figure 4-26 Management Unit G, epoch 1

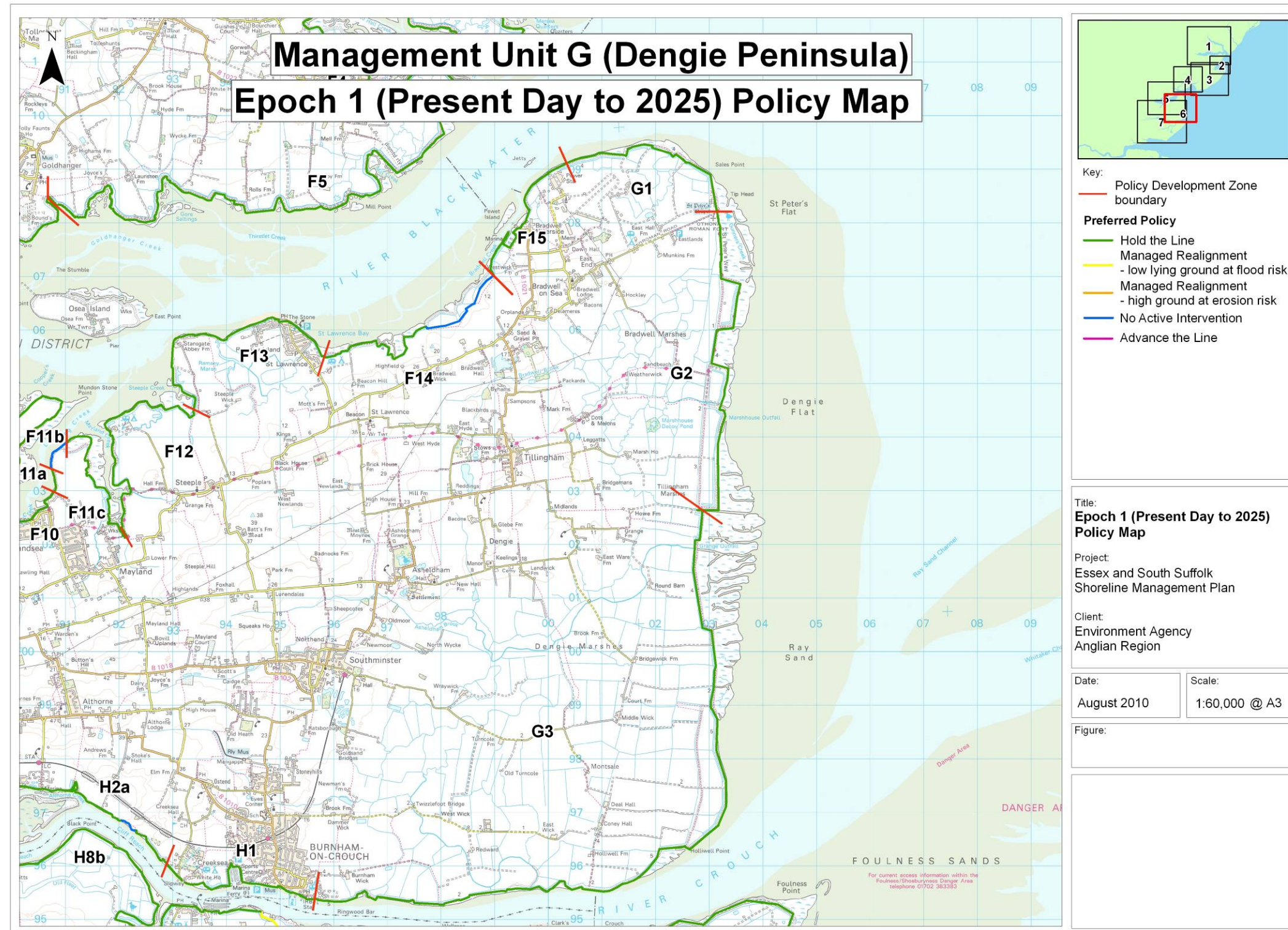


Figure 4-27 Management Unit G, epoch 2

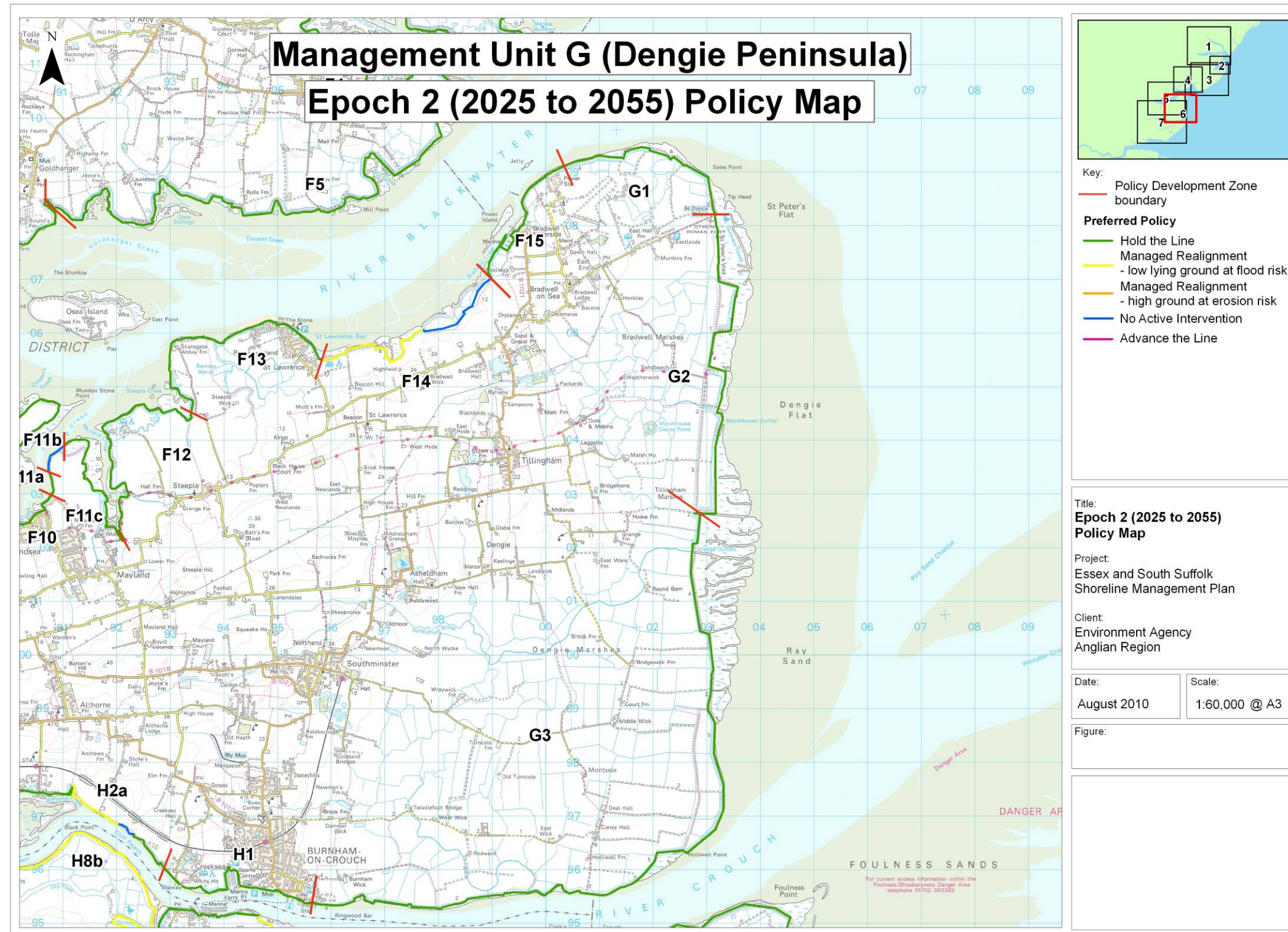
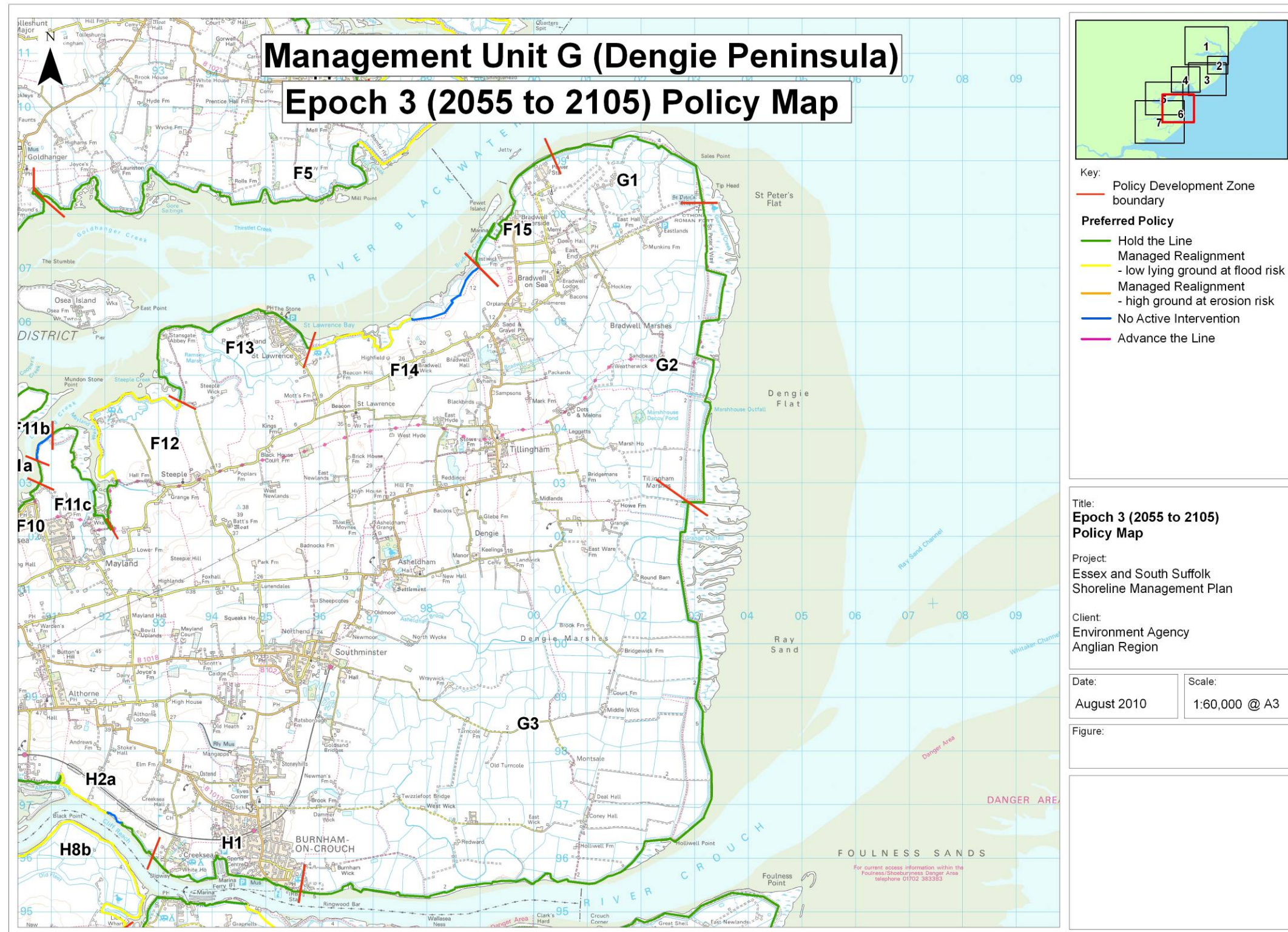


Figure 4-28 Management Unit G, epoch 3



4.9 Management Unit H – Crouch and Roach Estuaries

Summary of the Plan: Recommendations and Justification

The overall intent of management for the Crouch and Roach Estuaries is to sustain and support the viability of communities, tourism and commercial activities while creating new intertidal habitats and focusing flood and erosion risk management on frontages where it is most needed. The policy to achieve this intent is to maintain flood and erosion defence to all dwellings, key infrastructure and tourism facilities at risk of flooding and erosion, combined with a gradual increase of natural processes by realigning some of the defences that are under pressure.

The frontages where the existing flood defences will continue to be held at their current alignment include Burnham on Crouch, North Fambridge and South Woodham Ferrers, Battlesbridge, Hullbridge, Brandy Hole, South Fambridge, Canewdon West, Stambridge, Rochford, Barling Marsh, Little Wakering and Great Wakering.

For a number of these frontages, the defences are under pressure. This concerns Canewdon West (H8a), Barling Marshes (H14) and Great Wakering (H16). Landward realignment at these sites could create a more sustainable shoreline management approach, but for these frontages this is not seen as a realistic option because of overriding constraints. At West Canewdon the existing frontline defence contains refuse, at Barling Marshes there is a landfill site behind the defences and at Great Wakering some of the land is in use as military ranges. The policy for all these frontages is to hold the existing alignment for all three epochs, but it needs to be noted that the management of the defences at these locations will remain challenging. The SMP's Action Plan includes a study to assess the economic feasibility of realigning the seabanks and dealing with the contamination, for input into the next SMP review. It needs to be noted that these constraints have contributed to decisions to propose realignments across the river in order to reduce the pressure on the shoreline, for example North Fambridge (PDZ H2b) across the river from Canewdon West (PDZ H8a). If further study changes the decision on PDZ H8a, then this may change the proposed policy for PDZ H2b given the high quality of preservation of its historic grazing marshes.

At Bridgemarsh Island, sections of North Fambridge, Canewdon, Wallasea Island, Paglesham Eastend and Paglesham Churchend (PDZs H2a, H2b, H8b, H10, part of H11a and H11b) the defences are also under pressure, but for these frontages the policy is managed realignment. The proposed Wallasea Wetland Project in H10 is a significant managed realignment project in the centre of the Roach and Crouch estuary system. Consequently the timing and extent of future

managed realignments will be dependant on the monitoring and development of the Wallasea scheme.

Landward realignment at these frontages would create a more sustainable situation by reducing the pressure on defences and moving towards a more natural estuary and creek evolution with increase of tidal prism and intertidal area. All dwellings and infrastructure will remain protected (including the railway line from South Woodham Ferrers to Southminster and the communities and Conservation areas at Paglesham), which will require moving some of the defences to a more sustainable sheltered position, possibly in the form of counterwalls. These new defences will be put in place before breaching the current ones and will effectively be new frontline flood defences, so dwellings and infrastructure will remain protected throughout. This removes any liability for flooding of the local community from local landowners wishing to maintain defences in future.

The realignments will come at the expense of largely Grade 3 and 4 agricultural land, but also of some Grade 1 and 2 land at Paglesham. They will affect partly designated freshwater habitats, but they will also create new intertidal habitats. They could have significant impact on heritage assets, particularly in the potential sites between Bridgemarsh and North Fambridge (H2b), and generally because of the archaeological potential of the sites; this will require mitigation by design and recording as part of implementation of the Plan. There are footpaths on top of the banks at most potential sites; these will need to be sustained, for example through re-routing. The impact of the potential realignments on tourism and recreation (including sailing) and on oyster fisheries is difficult to quantify, and realignments can have both positive and negative impacts. These impacts will be taken into account during project appraisal and scheme development, which will be carried out with full stakeholder involvement (including landowners, communities and Parish councils) before any works start. The realignment that the SMP proposes for Wallasea Island (PDZ H10) is the same that is currently being developed by the RSPB.

Realignment is proposed for Wallasea Island (H10) in epoch 1; for Burnham on Crouch to Bridgemarsh (PDZs H2a), Canewdon (PDZ H8b), Paglesham Churchend and Paglesham Eastend (PDZ H11, both a and b) in epoch 2 and for Bridgemarsh to North Fambridge (PDZ H2b) in epoch 3.

There are six frontages for which the SMP's broad scale economic analysis supports an intent to maintain or upgrade the standard of protection, including taking into account impacts of climate change. These are South Woodham Ferrers, Battlesbridge and Hullbridge (PDZ H4), Eastwards of Brandy Hole (PDZ H5), Rochford (PDZ H13), Barling Marsh (PDZ H14), Little Wakering (PDZ H15) and Great Wakering (PDZ H16). For all the other defended frontages, detailed

analysis beyond the SMP is needed to determine the appropriate standard of protection.

The frontages where the current No Active Intervention approach will be continued include The Cliff near Burnham-on-Crouch (a geological SSSI, in PDZ H2), sections near Brandy Hole (PDZ H5) and Paglesham Creek (PDZ H9).

Summary of Specific Policies

Policy Development Zone		Policy Plan			
		Now - 2025	2025 - 2055	2055 - 2105	Explanation
H1	Burnham on Crouch	HtL	HtL	HtL	The current line will be held throughout all epochs.
H2a	From Burnham on Crouch to Bridgemarsh	HtL	MR2	HtL	The current line will be held in epoch 1. In epoch 2, Managed realignment by breach of the existing defence while continuing flood defence to all dwellings and the railway line. The currently undefended section at The Cliff will remain undefended.
H2b	Bridgemarsh to North Fambridge	HtL	HtL	MR2	The current line will be held in epoch 1 and 2. In epoch 3, Managed realignment by breach of the existing defence while continuing flood defence to all dwellings and the railway line. Note that the alignment of the new defence is under discussion.
H3	North Fambridge and South Woodham Ferrers	HtL	HtL	HtL	The current line will be held throughout all epochs.
H4	South Woodham Ferrers, Battlesbridge and Hullbridge	HtL+	HtL+	HtL+	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.
H5	Eastwards of Brandy Hole	HtL+	HtL+	HtL+	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded. The currently undefended sections will remain undefended.

Policy Development Zone		Policy Plan			
		Now - 2025	2025 - 2055	2055 - 2105	Explanation
H6	Landward of Brandy Hole Reach	HtL	HtL	HtL	The current line will be held throughout all epochs.
H7	South Fambridge	HtL	HtL	HtL	The current line will be held throughout all epochs.
H8a	South bank of Longpole, Shortpole and Raypitts Reaches (Canewdon West)	HtL	HtL	HtL	The current line will be held throughout all epochs. The defence is under pressure but there are overriding constraints for realignment.
H8b	Canewdon	HtL	MR2	HtL	The current line will be held in epoch 1. In epoch 2, Managed realignment by breach of the existing defence while continuing flood defence to dwellings
H9	Paglesham Creek	NAI	NAI	NAI	No erosion expected, therefore no defences needed.
H10	Wallasea	MR2	HtL	HtL	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings, tourist facilities and roads.
H11a	Paglesham Churchend	HtL	MR2	HtL	The current line will be held in epoch 1. In epoch 2, realigned defences will be required to protect the community of Paglesham Churchend ahead of any Managed realignment by breach of the existing defence while continuing flood defence to the dwellings and infrastructure.

Policy Development Zone		Policy Plan			
		Now - 2025	2025 - 2055	2055 - 2105	Explanation
H11b	Paglesham Eastend	HtL	MR2	HtL	The current line will be held in epoch 1. In epoch 2, realigned defences will be required to protect the community of Paglesham Eastend ahead of any Managed realignment by breach of the existing defence while continuing flood defence to the dwellings and infrastructure.
H12	Stambridge	HtL	HtL	HtL	The current line will be held throughout all epochs.
H13	Rochford	HtL+	HtL+	HtL+	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.
H14	Barling Marsh	HtL+	HtL+	HtL+	The current line will be held throughout all epochs. The defence is under pressure but there are overriding constraints for realignment. The standard of protection will be maintained or upgraded.
H15	Little Wakering	HtL+	HtL+	HtL+	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.
H16	Great Wakering	HtL+	HtL+	HtL+	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.

Key:

HtL – Hold the Line

MR1 – Managed Realignment - Allow local and limited intervention

MR2 – Managed Realignment - Breach of frontline defence after building landward defence

NAI – No Active Intervention





















Where a “+” is added to the policy label, this means that the Standard of protection will be maintained or upgraded





















Changes from Present Management






























Change from existing policies will take place in the currently defended PDZs where Managed Realignment is proposed. Realignment is proposed for Wallasea Island (H10) in epoch 1; for Burnham on Crouch to Bridgemarsh (PDZs H2a), Canewdon (PDZ H8b), Paglesham Churchend and Paglesham Eastend (PDZ H11, both a and b) in epoch 2 and for Bridgemarsh to North Fambridge PDZ H2b) in epoch 3.

Policy Appraisal Results (key and explanation: see Table 4-1 on page 95)

Policy Development Zone	Policy																								
		Policies appropriate to the diverse nature of Essex and South Suffolk Essex	Flood and erosion risk to people and property	Future opportunities	Use of natural processes	Positive and negative impact on other frontages	Cross-shore impact on near-shore activities	Time available for adaptation for communities, individuals and partner organisations	Infrastructure	Socio-economic activities	Public services	Communities	Deprived communities	Impact on socio-economic features of regional, national or international significance	Designated habitats and species	Biodiversity Action Plan (BAP) targets	Designated geological sites	Maintaining the evolving nature of the coastal landscape	Designated Heritage Assets	Significant undesignated heritage assets	Quality of Preservation	Archaeological Potential	Historic Landscape	Expected Scale of Mitigation	Impact on access to and along the coast
H. Crouch & Roach																									
H1 (Burnham on Crouch)	HtL	8	9	9	5	5	5	9	9	9	9	9	9	5	5		8	9	9	9	9	9	9	9	
H2a (From Burnham on Crouch to Bridgemarsh)	MR2				9	7		8		1					5	5				2	2	2	3	2	8
H2b (Bridgemarsh to North Fambridge)	MR2				9	7		8		1					5	5				1	1	1	1	1	8
H3 (North Fambridge and South Woodham Ferrers)	HtL		9	9	8	8	5	9	9	9	9	9	9	9	5	5				9	9	9	9	9	9

Policy Development Zone	Policy																									
		Policies appropriate to the diverse nature of Essex and South Suffolk Essex	Flood and erosion risk to people and property	Future opportunities	Use of natural processes	Positive and negative impact on other frontages	Cross-shore impact on near-shore activities	Time available for adaptation for communities, individuals and partner organisations	Infrastructure	Socio-economic activities	Public services	Communities	Deprived communities	Impact on socio-economic features of regional, national or international significance	Designated habitats and species	Biodiversity Action Plan (BAP) targets	Designated geological sites	Maintaining the evolving nature of the coastal landscape	Designated Heritage Assets	Significant undesignated heritage assets	Quality of Preservation	Archaeological Potential	Historic Landscape	Expected Scale of Mitigation	Impact on access to and along the coast	
H4 (South Woodham, Battlesbridge and Hullbridge)	HtL	8	9	9	5	5	5	9	9	9	9	9	9	5	5		8	9	9	9	9	9	9	9		
H5 (Eastwards of Brandy Hole)	HtL		9	9	5	5	5	9	9	9	9	9	9	9	5	5			9	9	9	9	9	9	9	
H6 (Landward of Brandy Hole Reach)	HtL		9	9	5	5	5	9	9	9	9	9	9	9	5	5			9	9	9	9	9	9	9	9
H7 (South Fambridge)	HtL		9	9	5	5	5	9	9	9	9	9	9	9	5	5			9	9	9	9	9	9	9	9
H8a (South bank of Longpole, Shortpole and Raypitts Reaches)	HtL		9	9	2	2		9	9	9		9			3	5			9	9	9	9	9	9	9	9

Policy Development Zone	Policy																							
		Policies appropriate to the diverse nature of Essex and South Suffolk Essex	Flood and erosion risk to people and property	Future opportunities	Use of natural processes	Positive and negative impact on other frontages	Cross-shore impact on near-shore activities	Time available for adaptation for communities, individuals and partner organisations	Infrastructure	Socio-economic activities	Public services	Communities	Deprived communities	Impact on socio-economic features of regional, national or international significance	Designated habitats and species	Biodiversity Action Plan (BAP) targets	Designated geological sites	Maintaining the evolving nature of the coastal landscape	Designated Heritage Assets	Significant undesignated heritage assets	Quality of Preservation	Archaeological Potential	Historic Landscape	Expected Scale of Mitigation
H8b (Canewdon)	MR2				9	7		8		1				9	9				1	2	1	2	1	8
H9 (Paglesham Creek)	NAI	8			9	9	9							9	9	9	8	9	9	9	9	9	9	
H10 (Wallasea)	MR2	Not appraised because the policy has been determined outside the SMP (by RSPB)																						
H11a (Paglesham Churchend)	MR2	8			9	7		8		1				9	9		8		2	2	1	2	2	8
H11b (Paglesham Eastend)	MR2				9	7		8		1				9	9				2	2	1	2	2	8
H12 (Stambridge)	HtL		9	9	5	5		9	9	9	9	9	9	5	5			9	9	9	9	9	9	9
H13 (Rochford)	HtL		9	9	5	5		9	9	9	9	9	9	5	5			9	9	9	9	9	9	9
H14 (Barling Marsh)	HtL		9	9	2	2		9	9	9				4	5			9	9	9	9	9	9	9

Policy Development Zone	Policy																															
		Policies appropriate to the diverse nature of Essex and South Suffolk Essex	Flood and erosion risk to people and property	Future opportunities	Use of natural processes	Positive and negative impact on other frontages	Cross-shore impact on near-shore activities	Time available for adaptation for communities, individuals and partner organisations	Infrastructure	Socio-economic activities	Public services	Communities	Deprived communities	Impact on socio-economic features of regional, national or international significance	Designated habitats and species	Biodiversity Action Plan (BAP) targets	Designated geological sites	Maintaining the evolving nature of the coastal landscape	Designated Heritage Assets	Significant undesignated heritage assets	Quality of Preservation	Archaeological Potential	Historic Landscape	Expected Scale of Mitigation	Impact on access to and along the coast							
H15 (Little Wakering)	HtL		9	9	8	8		9	9	9	9	9	9	5	5			9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
H16 (Great Wakering)	HtL		9	9	8	8		9	9	9	9	9	9	5	5			9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

Policy maps

Figure 4-29 Management Unit H, Present Day

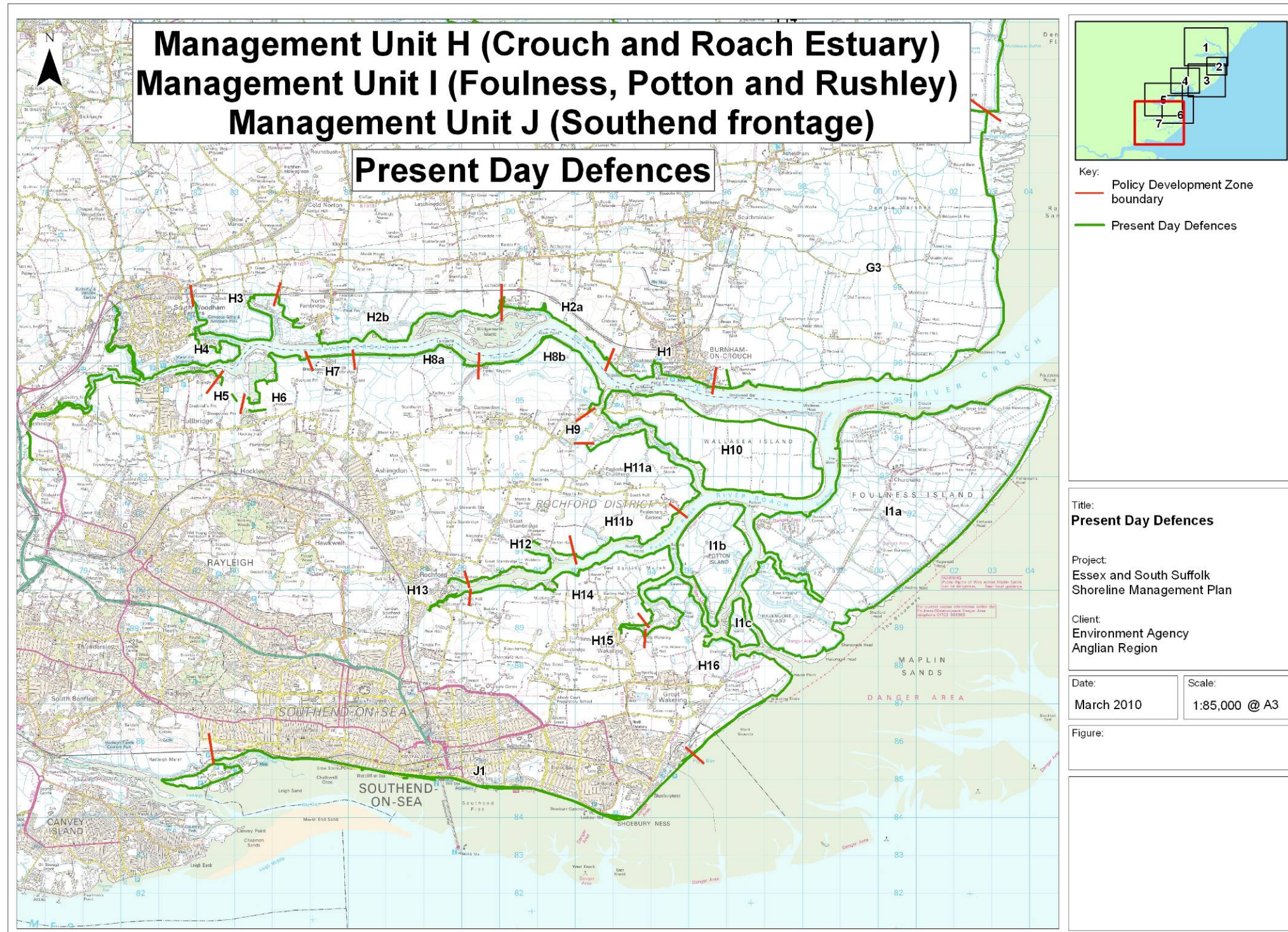


Figure 4-30 Management Unit H, epoch 1

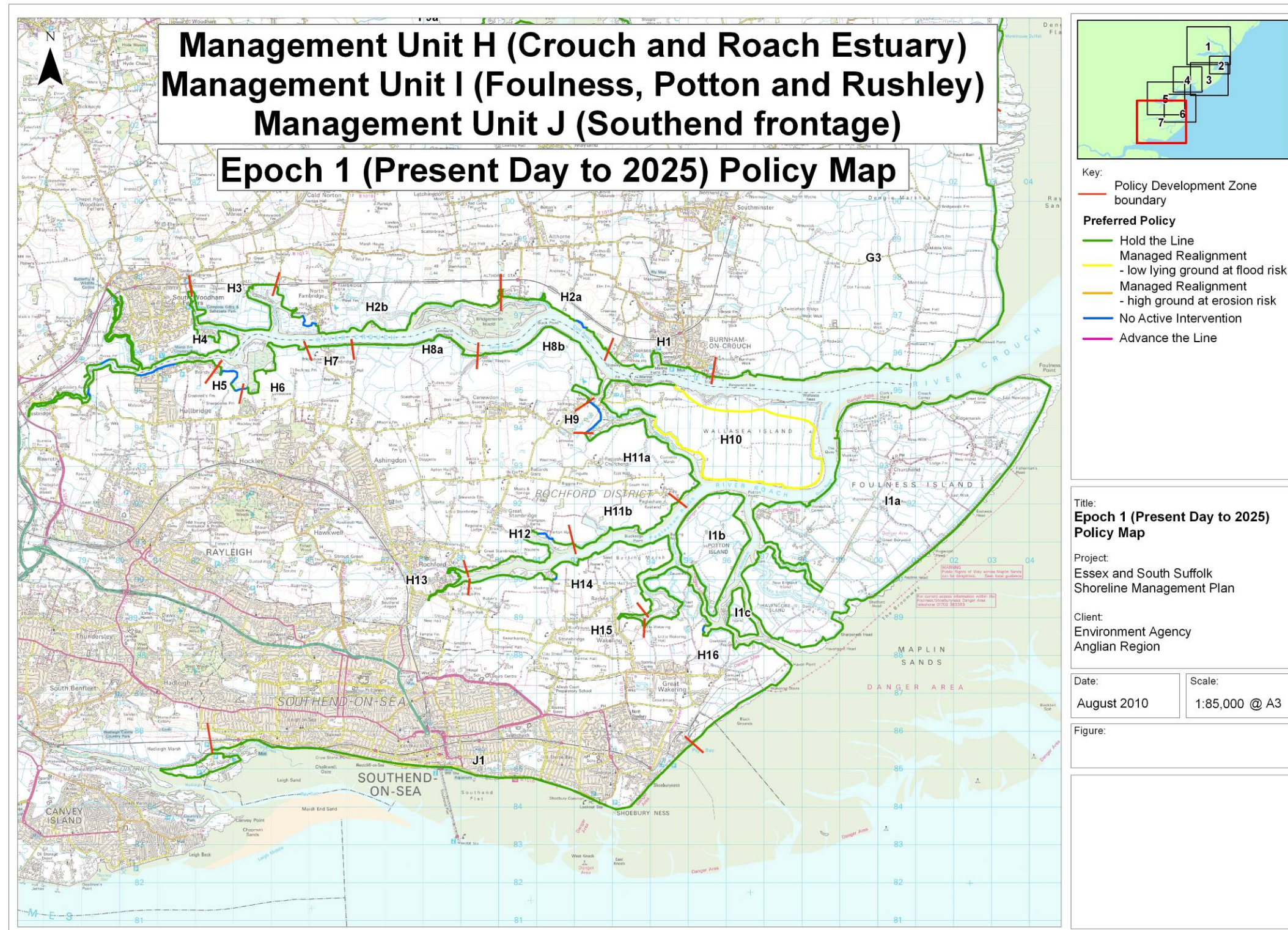


Figure 4-31 Management Unit H, epoch 2

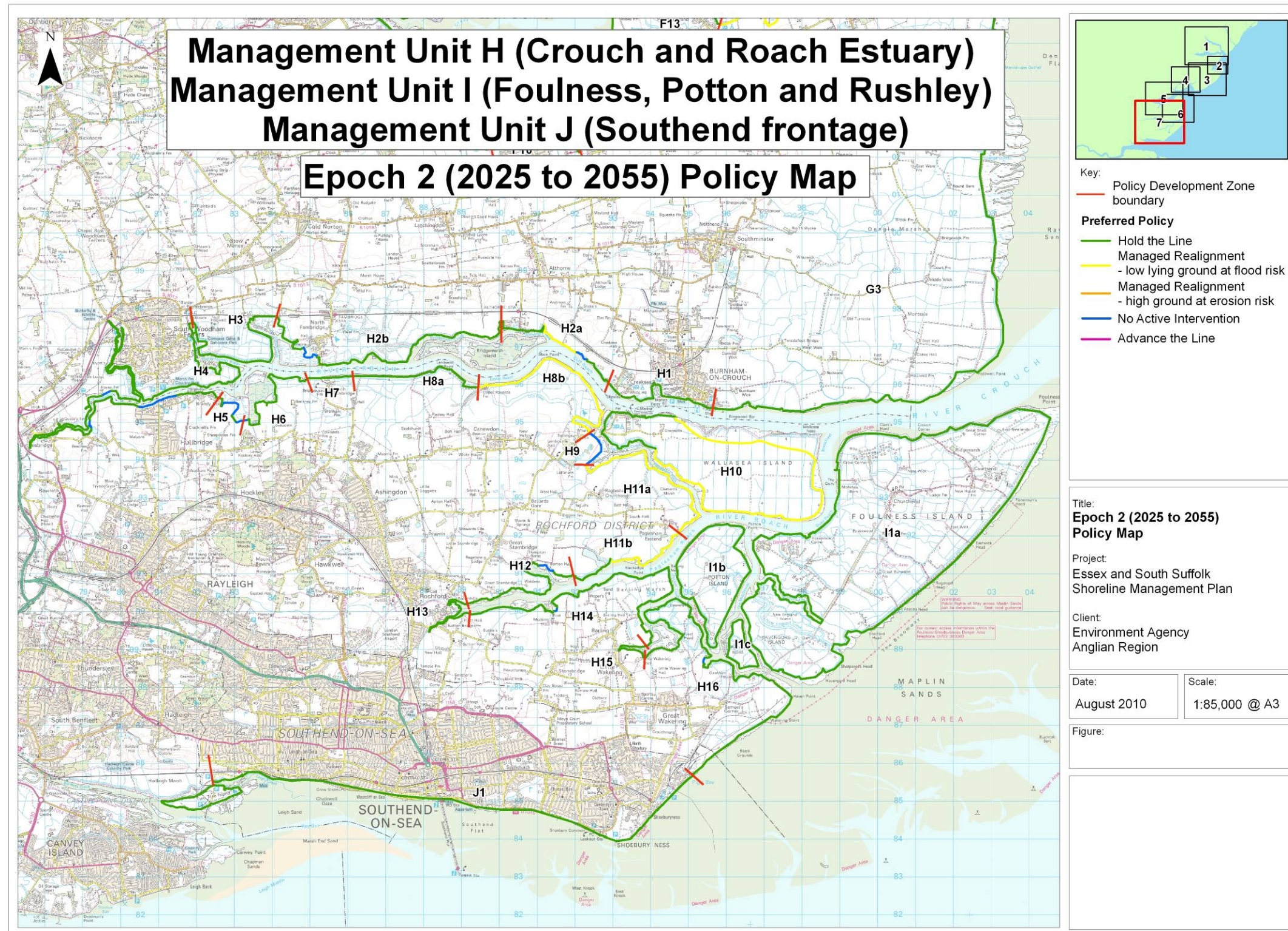
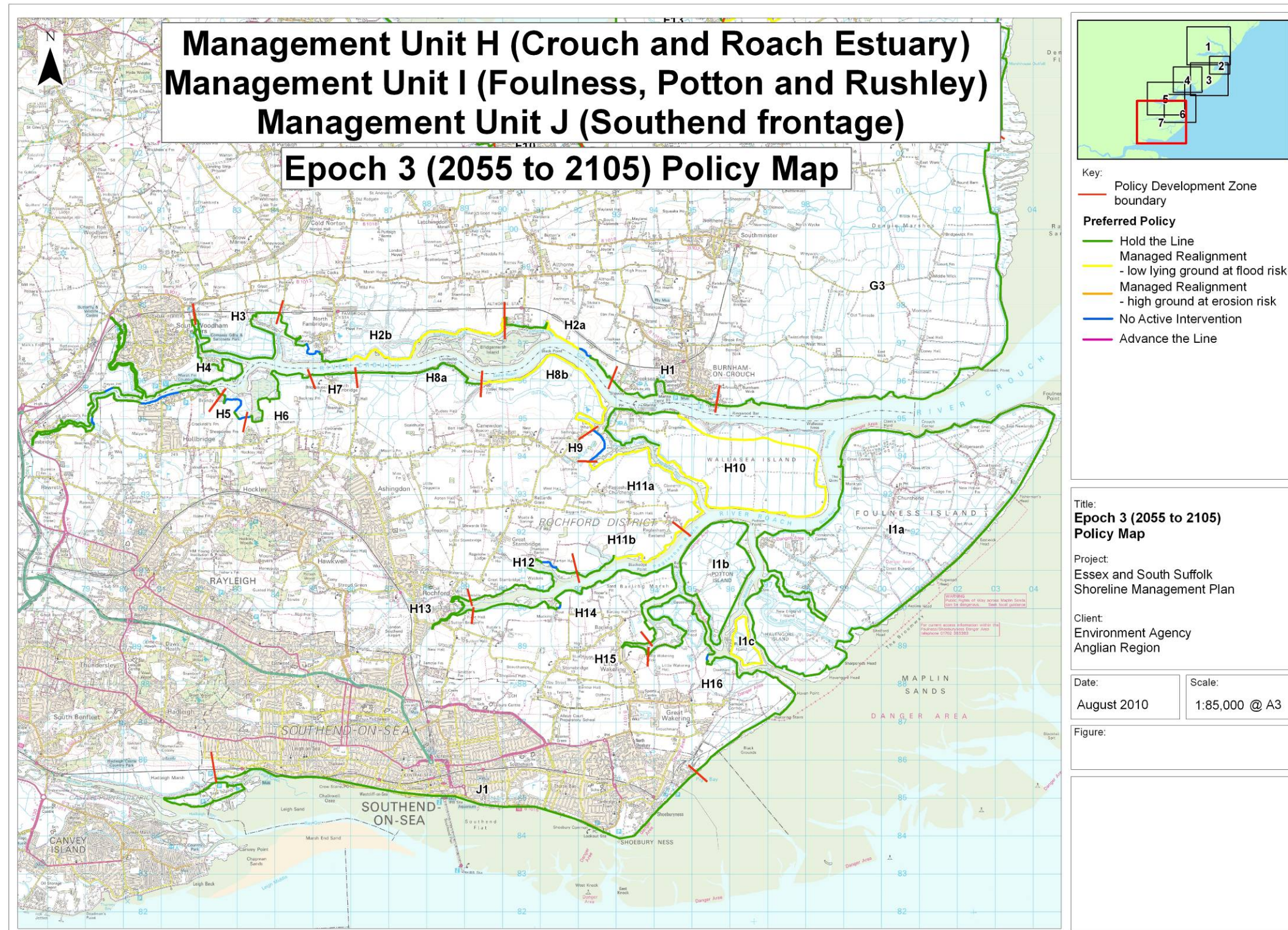


Figure 4-32 Management Unit H, epoch 3



4.10 Management Unit I – Foulness, Potton and Rushley Islands

Summary of the Plan: Recommendations and Justification

The overall intent of management for the islands is to sustain and support the viability of communities, tourism and commercial activities while creating new intertidal habitats and focusing flood risk management on frontages where it is most needed. The policy to achieve this intent is to maintain flood defence to Foulness and Potton Islands, including all dwellings and key infrastructure at risk of flooding, combined with a gradual increase of natural processes by realigning the defences of Rushley Island.

The defences on all three islands are under pressure and landward realignment could create a more sustainable shoreline management approach, but for Foulness and Potton this is not seen as a realistic option because of overriding constraints. For Foulness this concerns the current military land use of the island, which is of national importance. While noting that management of the defences at Foulness Island will remain challenging, and that holding the existing defence line restricts the natural evolution of the Roach estuary, the SMP's intent is to allow the Ministry of Defence to sustain its defences.

Potton Island is also in use by the MoD, but the main constraint for realignment is the possibility that the island may contain contaminated materials. The policy for Potton Island is to hold the existing alignment for all three epochs, but it needs to be noted that the management of the defences will remain challenging, and that holding the existing defence line restricts the natural evolution of the Roach estuary. The SMP's Action Plan includes a study to assess the economic feasibility of the removal of any contaminated materials from affected areas in the island and the opportunity for setting back the defences, particularly in the northern area of the island, to relieve pressures on the Roach, for input into the next SMP review. These constraints have contributed to decisions to propose realignments across the river in order to reduce the pressure on the shoreline (in this case at Paglesham, PDZ H11). If further study changes the decision for Potton Island, then this may change the proposed policy for PDZ H11.

The defences at Rushley Island (PDZ I1c) are also under pressure, but for this frontage the policy is managed realignment. Landward realignment at Rushley Island would create a more sustainable situation by reducing the pressure on the defences throughout the Roach and moving towards a more natural estuary and creek evolution with increase of tidal prism and intertidal area. The realignments would result in a loss of Grade 4 agricultural land plus associated farm buildings (but no dwellings). The realignment will affect (undesignated) freshwater habitats on the island, but will also create new intertidal habitats. There could be significant impact on heritage assets of the archaeological potential of the sites; this will require mitigation by design and recording as part of implementation of

the Plan. Currently there are no public footpaths or tourism and amenity facilities, but the realignment could have an impact on sailing; this is difficult to quantify, and realignments can have both positive and negative impacts. These impacts will be taken into account during project appraisal and scheme development, which will be carried out with full stakeholder involvement before any works start.

The plan needs to provide adequate time for adaptation and mitigation for people, businesses and organisations affected at Rushley.

For all defended frontages, detailed analysis beyond the SMP is needed to determine the appropriate standard of protection.

Summary of Potential Policies

Policy Development Zone		Policy Plan			
		Now - 2025	2025 - 2055	2055 - 2105	Explanation
I1a	Foulness	HtL	HtL	HtL	The current line will be held throughout all epochs. The defence is under pressure but there are overriding constraints for realignment.
I1b	Potton	HtL	HtL	HtL	The current line will be held throughout all epochs. The defence is under pressure but there are overriding constraints for realignment.
I1c	Rushley	HtL	HtL	MR2	The current line will be held in epoch 1 and 2. In epoch 3, Managed realignment by breach of the existing defence, followed by No Active Intervention.

Key:

HtL – Hold the Line

MR1 – Managed Realignment - Allow local and limited intervention











MR2 – Managed Realignment - Breach of frontline defence after building landward defence

NAI – No Active Intervention

Changes from Present Management

For all three epochs there is no change from the existing policy for Foulness (I1) and Potton (I2). Change from existing policies will take place for Rushley Island (I3), where Managed Realignment is proposed in epoch 3.

Policy Appraisal Results (key and explanation: see Table 4-1 on page 95)

Policy Development Zone	Policy																								
		Policies appropriate to the diverse nature of Essex and South Suffolk Essex	Flood and erosion risk to people and property	Future opportunities	Use of natural processes	Positive and negative impact on other frontages	Cross-shore impact on near-shore activities	Time available for adaptation for communities, individuals and partner organisations	Infrastructure	Socio-economic activities	Public services	Communities	Deprived communities	Impact on socio-economic features of regional, national or international significance	Designated habitats and species	Biodiversity Action Plan (BAP) targets	Designated geological sites	Maintaining the evolving nature of the coastal landscape	Designated Heritage Assets	Significant undesignated heritage assets	Quality of Preservation	Archaeological Potential	Historic Landscape	Expected Scale of Mitigation	Impact on access to and along the coast
I. Foulness																									
11a (Foulness Island)	HtL		9	9	5	5		9	9	9	9	9	9	5	5			9	9	9	9	9	9	9	9
11b (Potton Island)	HtL	8	9		2	2		9		9				4	5		8	9	9	9	9	9	9	9	9
11c (Rushley Island)	MR2				9	7		8		1				9	9				3	2	2	3	2	8	8

Policy maps

Figure 4-33 Management Unit I, Present Day

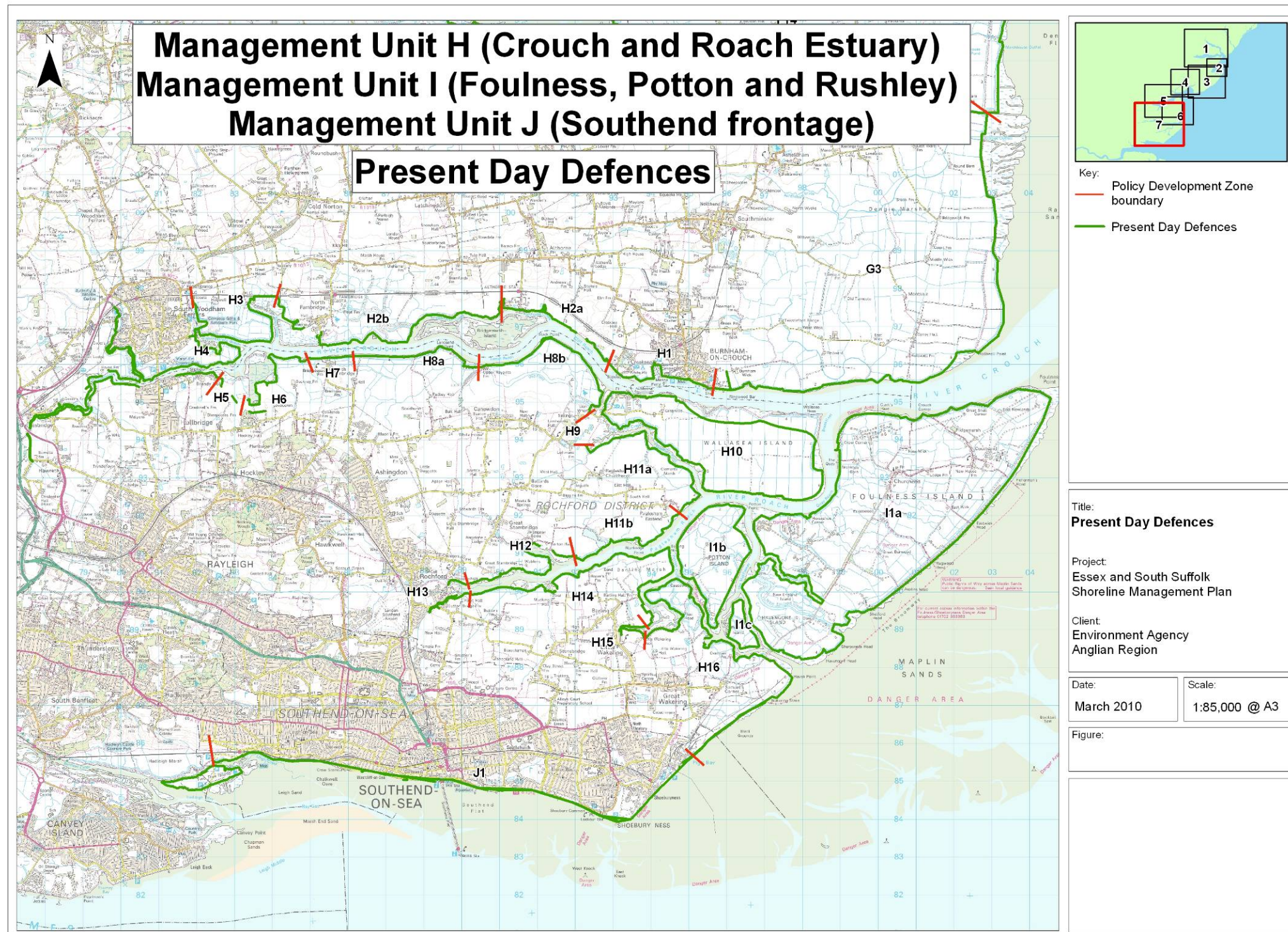


Figure 4-34 Management Unit I, epoch 1

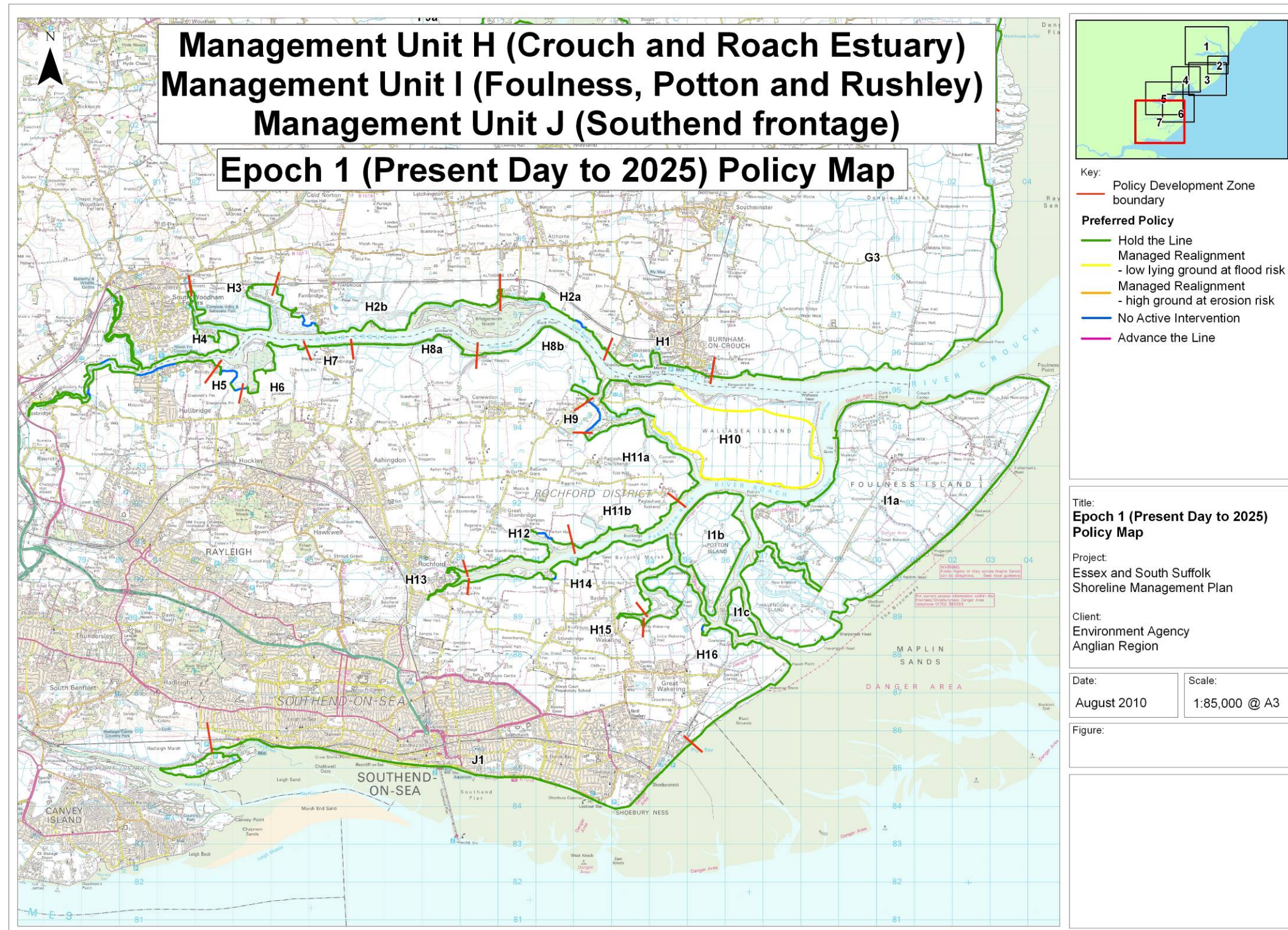


Figure 4-35 Management Unit I, epoch 2

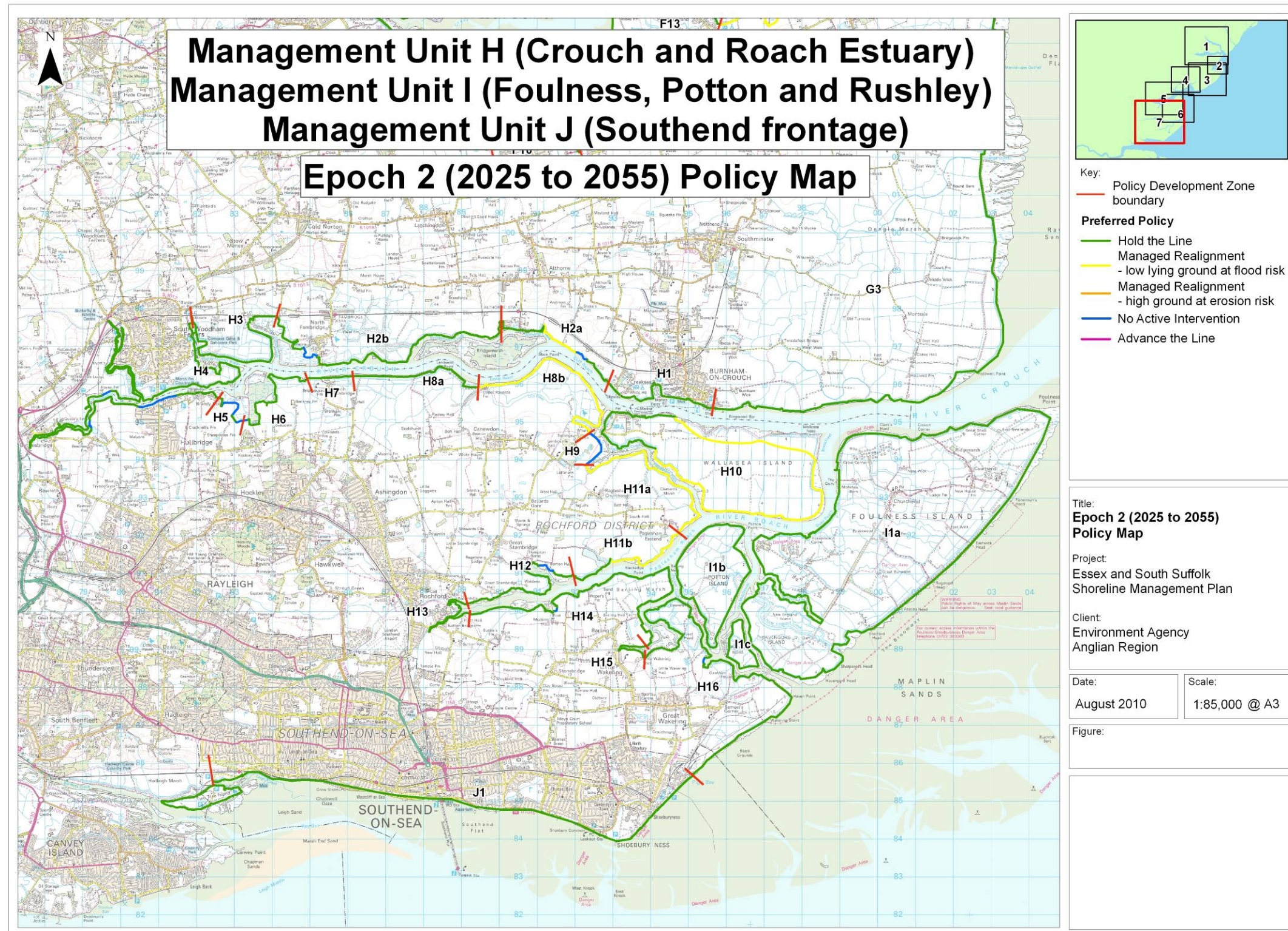
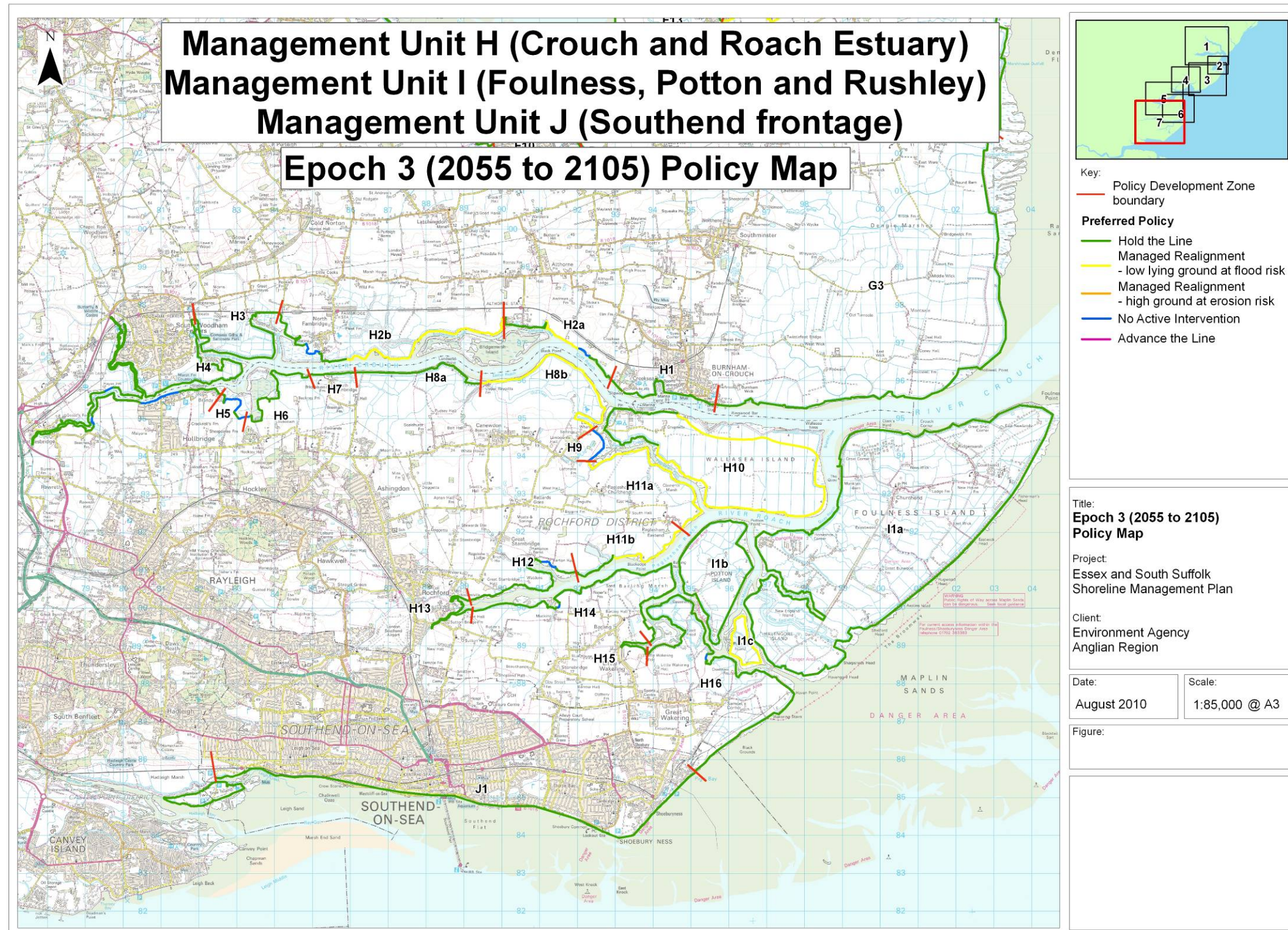


Figure 4-36 Management Unit I, epoch 3



4.11 Management Unit J – PDZ J – Southend on Sea

Summary of the Plan: Recommendations and Justification

The overall intent of management for Southend-on-Sea is to sustain and support the viability of the seaside towns and their communities, tourism and commercial activities. This means a continuation of the current management approach: holding the current alignment where there are defences. Although the defences are under pressure, holding the line is necessary to sustain the seafront which is essential to the viability of Southend-on-Sea as a seaside resort. This will however have impacts on intertidal habitat loss and therefore Southend Borough Council will also be required to mitigate for their coastal squeeze impacts. The 2010 Southend Coastal Strategy review currently underway will recommend the most viable coastal risk management options and identify any habitat replacement needs.

All dwellings and infrastructure would remain protected. The footpaths on top of the existing sea banks will be maintained. Heritage assets and landscape will remain protected and largely unchanged.

The SMP's policies are compatible with the policy proposed by the Thames Estuary 2100 strategy. This includes an intent to maintain the standard of protection, including taking into account impacts of climate change.

Summary of Specific Policies

Policy Development Zone		Policy Plan			Explanation
		Now - 2025	2025 - 2055	2055 - 2105	
J	Southend on Sea	HtL+	HtL+	HtL+	The current line will be held throughout all epochs. The standard of protection will be maintained.

Key:

HtL – Hold the Line

MR1 – Managed Realignment - Allow local and limited intervention

MR2 – Managed Realignment - Breach of frontline defence after building landward defence

NAI – No Active Intervention

Where a “+” is added to the policy label, this means that the Standard of protection will be maintained or upgraded

Changes from Present Management

For all three epochs there is no change from the existing policy.

Policy Maps

Figure 4-37 Management Unit J, Present Day

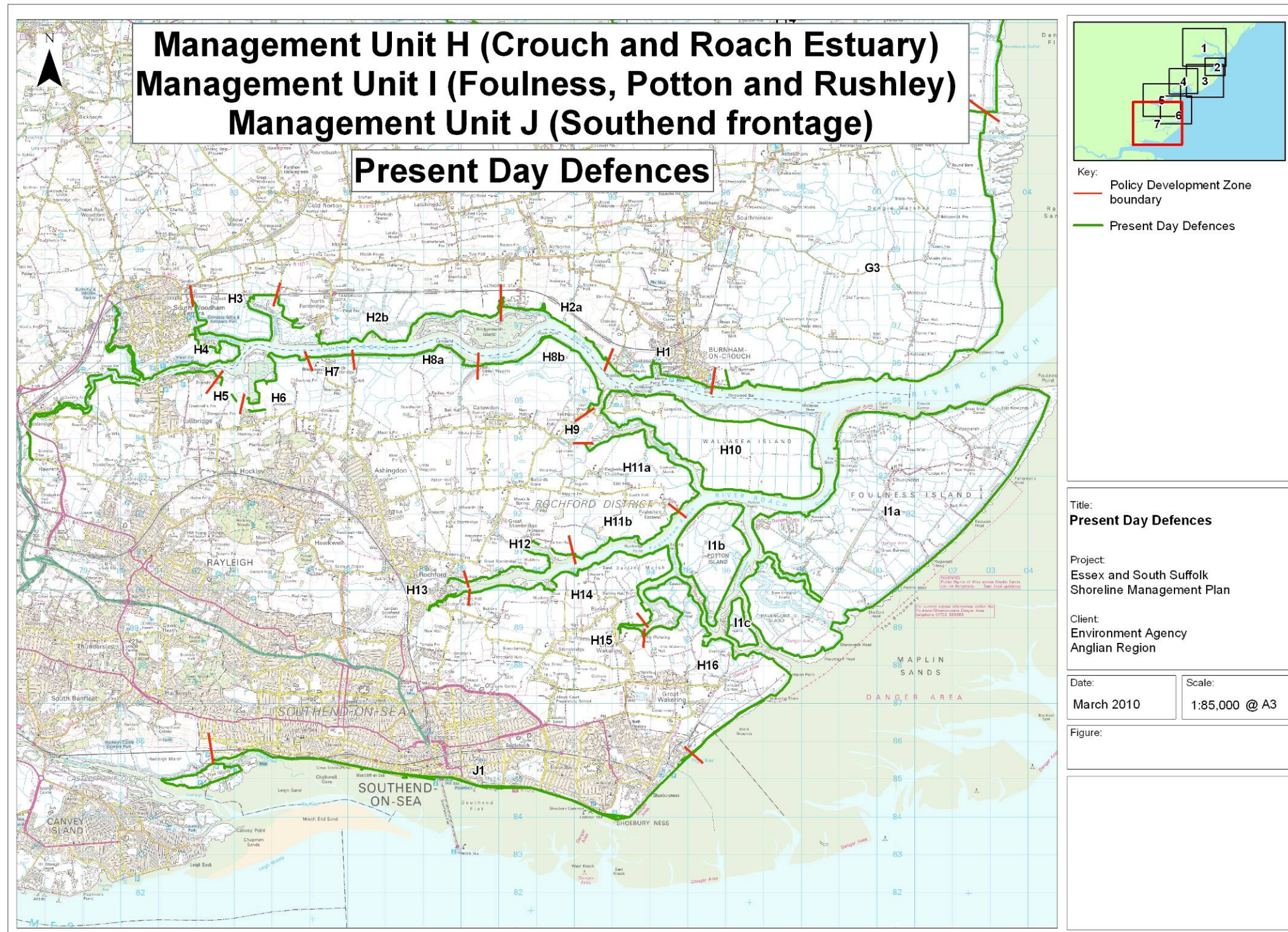


Figure 4-38 Management Unit J, epoch 1

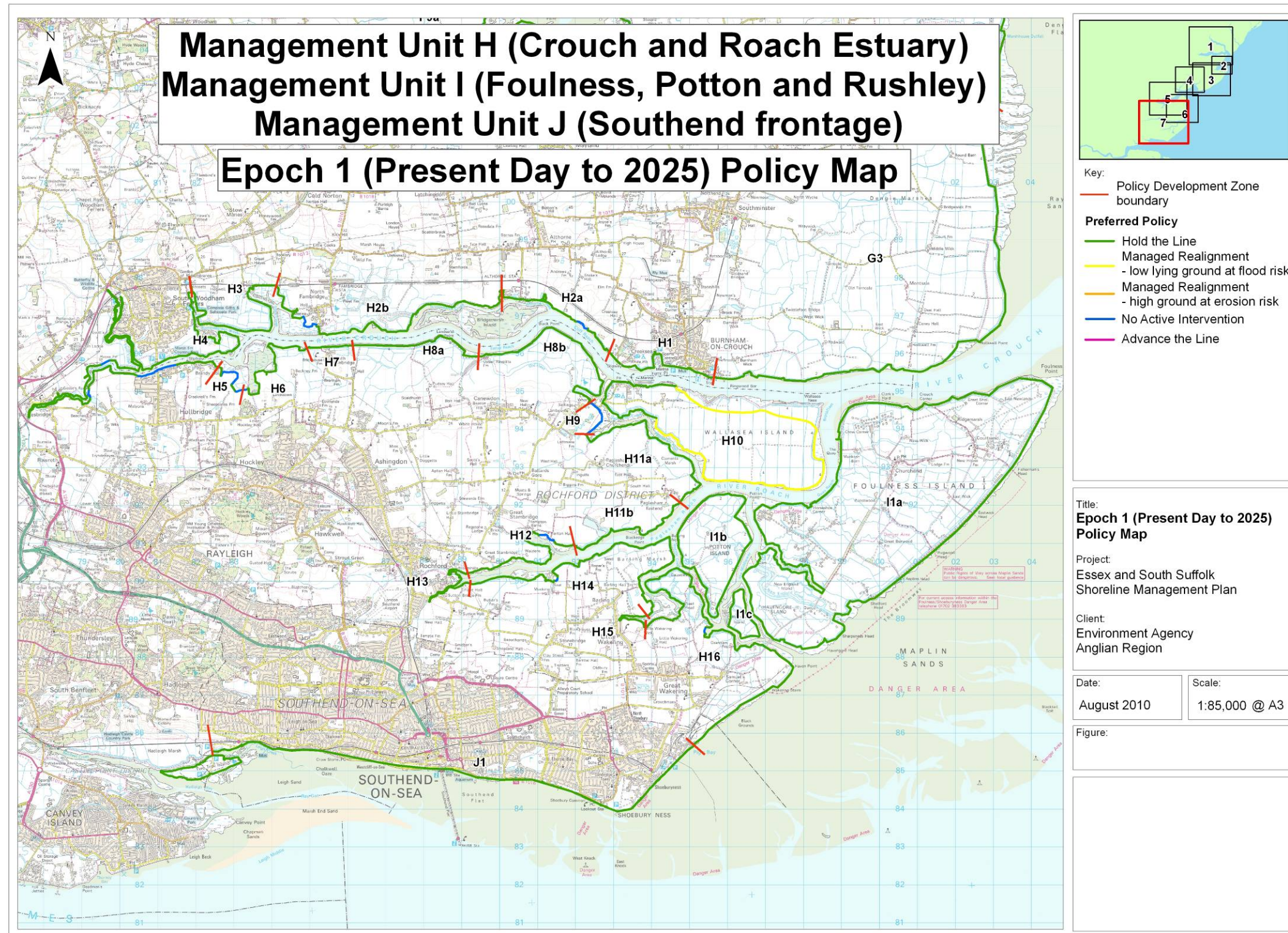


Figure 4-39 Management Unit J, epoch 2

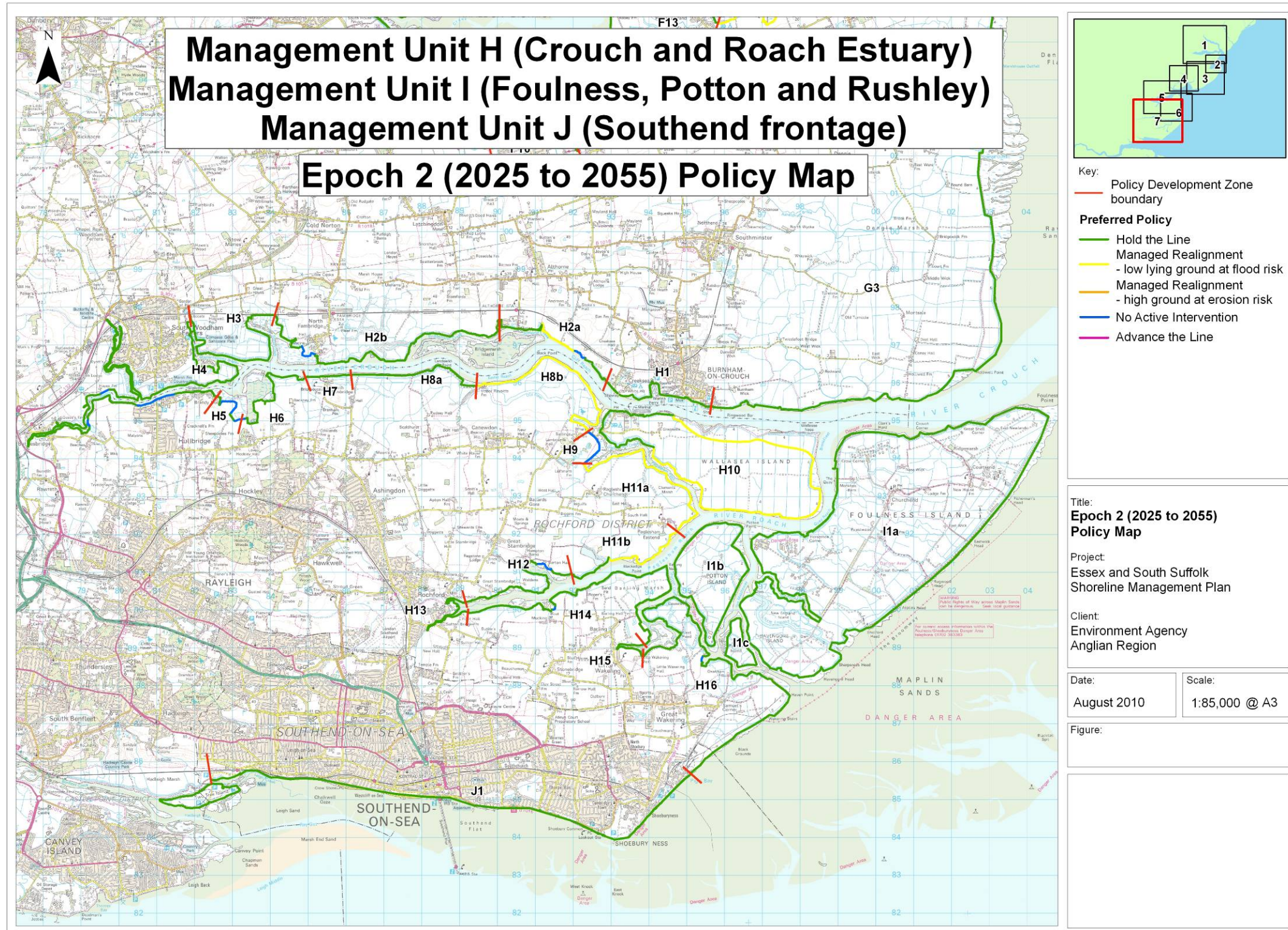
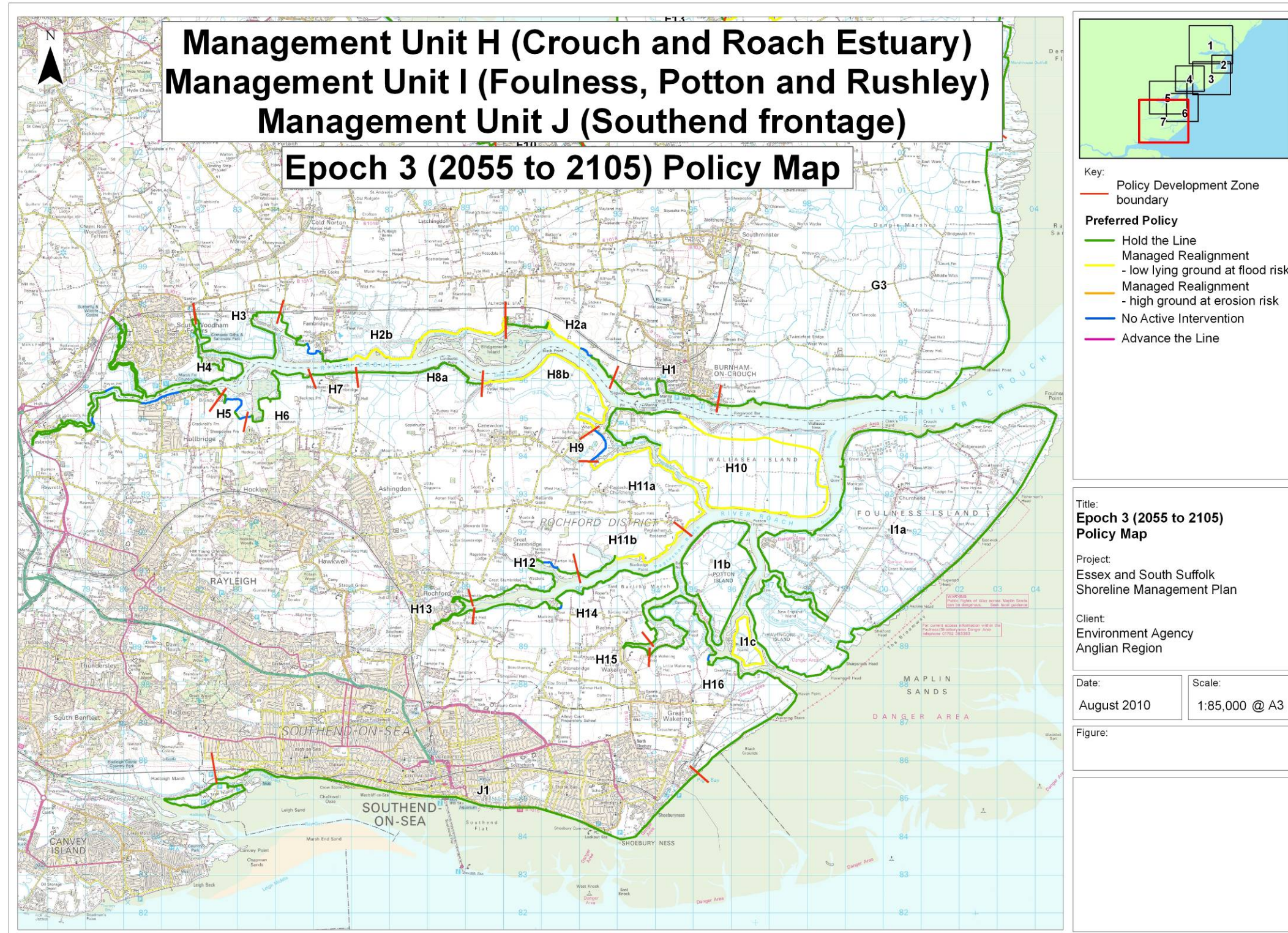


Figure 4-40 Management Unit J, epoch 3



5 Action Plan

This section includes the summary action plan for the Essex and South Suffolk SMP. This action plan is a very important element of the SMP, and particularly for the Essex and South Suffolk SMP. The plan has identified that there are a number of important uncertainties and that we need to improve our understanding to support firmer policy decisions in the next SMP and beyond.

The Action Plan summarises specific actions that are required to implement the Plan and the policies. This includes actions by the Environment Agency and local authorities to develop flood and erosion defence strategies and schemes, but it also includes actions involving the other bodies, for example where there are implications for land use planning or where there is a need for adaptation of communities, businesses and other organisations. The actions in this plan have been developed by the SMP partnership with input from over 200 key stakeholders and the public. The SMP partners, through discussion, have prioritised the most important actions needed to be carried forward to progress the SMP over the next 20 years and ensure any subsequent SMP review has the most relevant data and information to address any areas of uncertainty for subsequent SMP reviews.

There are a range of existing partnerships already involved with the management of the estuaries and coastline such as the Essex Coastal Renaissance Board, the Stour & Orwell Management Group, the Colne Estuary Partnership, the Essex Coastal Renaissance Board and the Suffolk Coast and Heaths AONB Partnership. These partnerships will also have an important role in the implementation of the SMP and its Action Plan. In addition these partnerships will have an important role in supporting local communities, businesses, asset owners and landowners in taking forward flood and coastal risk management, spatial and emergency planning and environmental management approaches at a local level. Implementing SMP policies will depend on funding being available. This is not only the case for building and maintaining flood defences, but also for all the other actions needed to implement the plan. This funding may be available from the national flood and coastal erosion risk management budget, but it could also come from other national sources or from local and/or third-party funding.

The SMP Partnership will actively seek opportunities for funding and partnership working that will support communities faced with coastal change and adaptation at key coastal locations.

The Action Plan aims to identify owners for the actions and ensure that actions are monitored for progress. The Action Plan is set up for use as a living document, to enable management of the actions in the period up to the next SMP review, which is expected within the next 10 years.

The table below is a summary of the Essex and South Suffolk SMP Action plan. The plan is in 2 sections – a set of strategic actions across the Essex and South Suffolk coastal frontage and then individual more detailed local actions for each of the coastal management units.

Strategic actions are not repeated under local actions to avoid duplication but many strategic actions will need local activities within the separate coastal management units to ensure delivery of the strategic aims of the plan. The complete version of the action plan has been developed in an Access database, for use as a living document in the coming years. For brevity, a number of abbreviations have been used – a full list of these is provided below;

ABP	Associated British Ports	MoD	Ministry of Defence
ACAG	Anglian Coastal Advisory Group	MMO	Marine Management Organisation
AONB	Area of Outstanding Natural Beauty	MR	Managed Realignment
BDC	Babergh District Council	NCERM	National Coastal Erosion Risk Mapping Project
CEP	Colne Estuary partnership	NE	Natural England
CI	Coastal Initiative (East of England CI led by GOEAST)	NFU	National Farmers Union
CLA	Country Land and Business Association	NT	National Trust
CLG	Department for Communities and Local Government	PDZ	Policy Development Zone
CBC	Colchester Borough Council	RDC	Rochford District Council
Defra	Defra Department for Food and Rural Affairs	RHCP	Regional Habitat Creation Programme
EA	Environment Agency	RFDC	Regional Flood Defence Committee
ECC	Essex County Council	RSPB	Royal Society for the Protection of Birds
ECRB	Essex Coastal Renaissance Board	S&OEMG	Stour and Orwell Estuary Management Group
EH	English Heritage	SBC	Southend Borough Council
EWT	Essex Wildlife Trust	SCC	Suffolk County Council
HHA	Harwich haven Authority	SCDC	Suffolk Coastal District Council
HLS	High Level Scheme (Natural England's rural payments scheme)	SCHU	Suffolk Coast and Heaths Unit
IBC	Ipswich Borough Council	SMP	Shoreline Management Plan
ICZM	Integrated Coastal Zone Management	SWT	Suffolk Wildlife Trust
LA	Local Authorities	TDC	Tendring District Council
MCC	Managing Coastal Change Project	WFD	Water Framework Directive
MDC	Maldon District Council	WT	Wildlife Trusts

Essex & South Suffolk SMP Action Plan
SMP-wide strategic actions

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Strategy	Develop a Essex Coastal Strategy to integrate SMP outcomes into wider planning, economic environmental and social work programmes.	EU project Suscod 2010-2013	Medium	ECC (EA and LA support)	Before next SMP review
	Develop a Suffolk Coastal Strategy to integrate SMP outcomes into wider planning, economic environmental and social work programmes.	Suffolk Futures (ICZM) and Stour and Orwell Management Plan	Medium	SCC with SCDC/BDC/IBC /EA/NE	Before next SMP review

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Asset management	Identify maintenance and improvement schemes for Hold the Line frontages and seek funding for viable schemes	Assets System Management Plans	Variable Per PDZ	EA, TDC, SBC, MoD	Variable per PDZ
	Develop good practice guidance for landowners regarding private maintenance of defences, application for consent.	MCC project + Suffolk Futures ICZM project	High	EA/ECC/MCC EA/SCC/SCDC AONB	Completed
	Desk-based Assessment to identify locations and cultural/ecological significance of coastal historic grazing marshes in South Suffolk and Essex.	English Heritage (National Heritage Protection Plan)	High	EH/NE/ECC/ SCC support AONB/WT's/ RSPB	Before next SMP review
	Investigation to establish the extent of contaminated defences/land and methods for future management Review of policies that concern waste filled sea walls and land following completion.	National EA R&D project. CIRIA project Local desk top study	High	ECC /EA (LA support) MoD	Before next SMP review

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Asset management	LA Studies that summarise the economic value of defences and what they protect (New information to be used to update policies)	LA information e.g. TDC Pathfinder	Medium	LA's	Before next SMP review
	Update and maintain flood defence asset database (NFCDD) and link with other operating authority/organisation databases.	NFCDD	Medium	EA with SBC, TDC MOD, Networkrail	Next SMP review
	Investigate the currently undefended areas of the coast at erosion risk where assets/properties are at risk and consider management options with asset owners	NCERM	Medium	(LA's) and EA	NCERM Before next SMP review (Shotley ASAP)

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Communication and Engagement	Review governance framework that ensures delivery of this SMP Action Plan through appropriate groups and networks. Monitor delivery and better integration of wide variety of coastal issues	EA, ECC, SCC ACAG, RFDC, ECRB S&O EMG Suscod	High	All	Upon SMP completion 2010/2011
	Develop a Communications Plan to disseminate the SMP including tools for dissemination	SMP Communication Plan	High	EA with SMP partners	Year 1
	Continue to communicate and raise awareness of flood and erosion risks with coastal communities through existing or improved networks	SMP dissemination Suscod NCERM Pathfinder	High	All partner organisations	Underway- links to NCERM
	Develop a communications plan to ensure active engagement of landowners in habitat creation linked to RHCP	MCC,HLS RHCP -Devereux, Hill House Farm	High	EA, MCC,FWAG, RSPB,WT's, NT's,MCC	ongoing

	Develop a communications plan to ensure active engagement of county-wide spatial and emergency planning officer groups	SMP dissemination Planning Liason Groups Emergency Planning Groups	High	EA, ECC, SCC	Year 1
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Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Emergency response	Develop flood risk guidance specifically for caravan owners, occupants and businesses to raise awareness of risk and emergency plans.	EA Guidance packs for Caravan sites and Communities	High	EA with LA support	ongoing
	Dissemination of flood risk guidance and monitoring that emergency plans are in place for all caravan parks and businesses	Through LA licensing agreements + Flood awareness campaigns	High	LA's with EA support	By year 10
	Ensure landowners have emergency plans in place of a flood event and know what they can do before, during and after a flood event	MCC and Emergency Planners	High	MCC ECC SCC and EA	Year 1 2011
	Ensure key/critical infrastructure owners have emergency plans in place	Multi Agency Flood Plan	High	SCC, ECC, LA's and EA	2015

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Flood warning and response	Maintain link between SMP outputs and Flood Incident Response team and emergency planners	SMP dissemination Multi Agency Flood Plans LSP/LEP's	High	EA, LA's and ECC/SCC	Year 1
	Proactive engagement with local communities and businesses to raise awareness about flood risk and warning linked to SMP dissemination	SMP dissemination	Medium	SMP Partners	Year 1
	Update flood warning systems to take account of changing SMP policies	EA	Medium	EA	Before next SMP review

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Interface with land management	Integrate SMP policies into Local Planning Documents and Frameworks including LDF's, Green Infrastructure plans, Open Space reviews and new Marine Plans	Coastal Management Strategy Planning document review process	High	LA's, ECC, SCC MMO	Before Next SMP Review Through LA Planning Document Timetable
	Encourage locally adaptive planning policies that are flexible for the local situation	Planning document review process and planning/licensing applications	High	LA's, ECC, SCC	Through LDF/ LA Planning and Licensing
	Develop planning policy locally for caravan parks within a national policy framework e.g. roll-back policy. This needs to include the issue of permanent residency.	LA's + Caravan Park owner and residents + EA TDC Coastal pathfinder	High	LA's (TDC)	Year 1-5
	Ensure SMP policies feed into Natural England's Coastal access routes for the coast	Natural England Coastal Access Walks	High	NE/EA	Through NE timetable

Provide guidance on liability for landowners who maintain defences with Country Rights Of Way and footpaths that are not designated.	LA's, ECC,SCC,MCC	High	LA's, ECC,SCC, MCC	2011/2012
Provide guidance to planners on liability for breached defences that affect public rights of way and footpaths that run along defences.	LA's, ECC,SCC	Medium	LA's, ECC,SCC	2020
Ensure integration of coastal planning policies with new Marine Management Areas.	Marine Spatial Plans	Medium	LA's	Through Planning process

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Adaptation	Share lessons learnt from the Coastal Change pathfinders and case studies to support coastal erosion communities	Defra and CI	High	East of England Coastal Initiative	Year 1 2011
	Provide advice for property owners in flood risk areas as to how they can adapt their homes and businesses	Defra and CLG	Medium	Defra and CLG. Local resilience forums	Ongoing
	Study to identify options and tools for adaptation available to farmers to help them adapt to change if faced with a different management policy.	EA, LA's, ECC, SCC MCC, ICZM	Medium	EA and LA's	2020

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Habitat creation and environmental mitigation	Delivery of intertidal habitat to ensure compliance with the Habitats Regs.	RHCP HLS	Imperative	EA RHCP with NE and landowner support	Functional before losses occur (see Index. .PDZ)
	Investigation of Freshwater habitat replacement opportunities through a local project linked to RHCP	RHCP HLS	Year 1 Imperative	EA RHCP, and local landowner engagement, NE, EWT, SWT, RSPB	2012
	Delivery of freshwater habitat to ensure compliance with Habitats Regs	RHCP HLS	Imperative	EA RHCP, and local landowner engagement, NE, EWT, SWT, RSPB, NT	Functional before losses occur (see Index. .PDZ)

	Delivery of freshwater habitat to ensure compliance with BAP and SSSI	RHCP HLS	High	EA RHCP, and local landowner engagement, NE, EWT, SWT, RSPB, NT	Functional before losses occur (see Index. .PDZ
	Undertake studies through proposed MR schemes there are no significant impacts on seaward activities such as oyster farms, navigation, fisheries, flow within channels and siltation.	EA and NE + LA's	Per PDZ	EA or NE?	Per PDZ

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Monitoring and Data	Establish a saltmarsh monitoring programme and create a 2010/2011 baseline for future work and discussions about coastal habitat loss. Include local involvement to agree an approach to give a shared confidence in the data.	Regional and local monitoring programmes (EA/NE) Port monitoring HHA	High	EA/NE MOD	Year 1
	Establish a partner/stakeholder group to steer saltmarsh monitoring and ensure transparency of results and promote joined up work programmes.	EA/NE,MCC/Network	High	EA lead with NE and HHA plus others	Year 1
	Beneficial use of Dredging Study to consider opportunities to use dredgings to recharge intertidal areas involving marina's, ports and landowners to establish source/reception possibilities.	New Project	High	EA with linked partners	Year 1-5

	Review and revise the Rapid Coastal Zone Assessment Surveys, particularly for Essex, and contribute to plans for any advance investigative work requirements at PDZ's with changing management policies.	EH,RCZA,ECC	High	EH Lead	Before next SMP review
	Improve understanding of coastal processes at local level – to include potential impacts of offshore/nearshore dredging, and potential impacts of wide-scale managed realignments on sediment budgets. Ensure modelling and monitoring of new schemes and strategies maximises opportunity for wider understanding.	New project RHCP models Marine Spatial Plans Coastal Strategies Estuary Modelling	Med/High	EA/MMO (NCPMS)	SMP review
	Monitoring of SSSI habitats	Condition Assessment		NE	ongoing
	Monitoring of SMP outcomes on protected Landscape areas e.g. AONB	AONB partnership	High	SCHU, NE	Ongoing

Action	Action description	Route for delivery	Priority	Responsibility (lead partner)	Delivery date
Funding and Investment	Develop more flexible funding options to promote uptake of managed realignment opportunities.	National Policy, MCC, Suffolk Coastal Futures (ICZM)	High	NE, EA, DEFRA, Landowners	Before next SMP review
	Develop broader economic evaluation tools that value the environment and amenity value of the coast.	National policy appraisal guidance, Ecosystems services Coastal Initiative	Medium/High	EA, SCC, ECC, NE	Before next SMP review
	Collaborative working to find alternative funding streams for coastal initiatives to support national FCRM funds in providing local solutions for adaptation.	All partner organisations Essex Coastal Renaissance Board	Medium	All partners	Before next SMP review
	Improve our understanding of coastal economics to inform decision-making and provide evidence for funding and partnership work.	Coastal Initiative Economics and Regeneration Study	Medium	Coastal Initiative	Ongoing-2011

Management Unit A: Stour and Orwell Estuaries

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Strategic	All	Embed SMP policies and actions into Estuary management plan approach.	Stour and Orwell Management Plan	High	SCHU Estuary Plan	S&O Estuary Management plan review
Scheme Work	PDZ A7b	Pin Mill – Combination of flood and erosion risk – local community adaptation and risk management options needed	Community project	High	BDC/EA/ SCC and lead partners	
	PDZ A8c	Shotley Gate – issue of community and properties at erosion risk – need for options appraisal and consideration of potential funding streams.	Community project	High	BDC and SCC	Underway

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Scheme Work	PDZ B2	Bathside Bay compensatory realignment site – develop project with port and landowners to establish whether wider realignment of the compartment could be an option through partnership.	EA RHCP	High	HHA/ABP/EA/N E and landowner	Bathside Bay dependant
	PDZ B6b	Development of a partial protection scheme for the Naze to tackle erosion risk at the Naze tower.	TDC	High	TDC/ ECC/ TDC Pathfinder/ Crag Walk project	Ongoing
	PDZ A6	The Strand at Wherstead - Joint approach to consider solutions and funding sources to manage – issue of main road currently undefended and at flood risk.		Med/High	SCC/ BDC and EA	By next SMP review
	PDZ A10b	Mistley – Issue of main road currently undefended and at flood risk. Joint approach to consider solutions and funding sources. Establish ownership.	To be explored	Low	ECC/ TDC and EA.	By next SMP review

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
	PDZ A2	Trimley Marshes – managed realignment epoch 2.	Local partnerships - Under discussion		Lead SWT and Bidwells. EA support	Epoch 2
	PDZ A3a	Loom Pit Lake managed realignment	Local partnerships/RHCP		EA/RHCP	Epoch 2
	PDZ A8b	Shotley Marshes – managed realignment	Local partnerships/RHCP		EA/RHCP	Epoch 2
Asset Management		Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA, local sources of funding		EA	Ongoing
Interface with planning and land management	PDZ A8c	Shotley Gate (linked action) – Investigate the need for the Stour & Orwell to be included under the Coastal Protection Act.	ACAG Coastal protection Act Review	High	SCC/ SCDC/ TDC/ Harwich Authority and EA ECC/ BDC/ IBC/ Haven and	By next SMP review

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Habitat Creation and Environmental management	PDZ A8a	Hill House Farm managed realignment epoch 1	RHCP	High	EA/RHCP	Underway Epoch 1

Management Unit B: Hamford Water

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Asset Management	All	Consider opportunities for use of dredged materials from the port and local marinas in improving/enhancing eroding intertidal areas. Linked to wider strategic review of potential sediment sources and receptor sites for dredged material.	Beneficial use study	High	EA/NE/HHA	Next SMP review
	PDZs B5, B6a and B6b	Continue discussion with Anglian Water to determine the future of the sewage works on The Naze.	EA and AW	High	EA (TDC)	Next SMP review
	All	Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA, local sources of funding		EA	Ongoing

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Interface with planning and land management	PDZ B5	Walton Backwaters – SMP policies and information need to underpin the regeneration opportunities in the new Walton Master Plan and opportunities to facilitate realignment and defence improvements around the back of the Naze should be linked to these proposals.	TDC Core Strategy and LDF review Walton master Plan	High	Lead TDC/EA and HWMC	Underway
Habitat Creation and Environmental management	PDZ B4a	Devereux Farm partial managed realignment. Further realignment required.	RHCP	High	EA	Underway
	PDZ B5	Walton Channel managed realignment. Make links to Walton regeneration projects to see if early studies can be shared.	RHCP/Walton Regeneration Project (TDC)		EA/TDC	Improve understanding by SMP review (Epoch 3)

Management Unit C: Tendring Peninsula

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Strategic	All	Progress coastal strategies for Tendring frontages and establish viable schemes	National FDGIA plus local funding e.g. regeneration funds NCPMS	High	TDC with EA	Underway for Clacton/Holland
	PDZ C2/C4	Studies to confirm HTL/MR dual policies for Epoch 3		Medium	TDC/EA	Next SMP review
Asset Management	All	Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA/ TDC/ local sources of funding		EA/TDC	Ongoing
Communication and Engagement	PDZ C4	As part of dual policy. Jaywick potential managed realignment in epoch 3 – develop a communication plan with partners to ensure joined-up approach to regeneration, flood risk and planning	TDC/EA/ECC Working Group linked to Essex Coastal Renaissance Board Coastnet project TDC Pathfinder	High	ECRB	Underway

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
	PDZ C2	Clacton/Holland Coastal Development communication plan Haven Strategy of	EA/TDC	High	EA/TDC	Underway
Interface with planning and land management		Establish the opportunities and benefits of economic growth and tourism, linked to changing SMP policies – i.e. Ecotourism, marinas linked to managed realignment policies.	TDC	High	ECRB– linked to Pathfinder project and Tendring Strategy	Underway
	PDZ C4	Ensure partnership working and a flexible approach to the planning policies for Jaywick – short-term planning guidance sought to avoid blight	TDC Core Strategy Review TDC/ECC Pathfinder work	High	TDC/ ECC/ ECRB	Year 1-5
Habitat Creation and Environmental	PDZ C1	Issue of managed realignment policy for Naze cliff properties	TDC	High	TDC	Crag Project underway

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
management	All	Develop adaptation strategy/tools for communities and businesses affected by changing coast	TDC – Defra Coastal Change Pathfinder	High	TDC	Underway 2011
	PDZ C2/C4	Potential habitat creation opportunities under dual policy epoch 3 to be explored	RHCP	Low	TDC/EA/RHCP	Epoch 3
Funding and Investment		Develop an over-arching funding strategy – investigation needed into wider funding opportunities and sources	TDC	High	ECRB to lead Pathfinder	Underway

Management Unit D: Colne Estuary

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Scheme Work	PDZ D1b	Point Clear managed realignment, epoch 2.	RHCP	High	EA	2020
	PDZ D2	Flag Creek managed realignment, epoch 3.	RHCP	Medium	EA	post 2020
	PDZ D3	Eastmarsh point managed realignment, epoch 3.	RHCP	Medium	EA	post 2020
	PDZ D5	Westmarsh Point managed realignment, epoch 2.	RHCP	High	EA	2020
	PDZ D6b	Wivenhoe Marshes managed realignment, epoch 2.	RHCP	High	EA	2020
	PDZ D8a	Inner Colne West Bank managed realignment, epoch 2. Currently operational quarry so links needed to establish operational life of business	EA/CBC	High	EA	2020
Asset Management	All	Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA, local sources of funding		EA	Ongoing
	PDZ D8a and D6b	Consider further economic appraisal for these frontages	EA	High	EA	Post 2020

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Communication and Engagement		Managed realignments in Colne – further discussion and engagement of local landowners, caravan parks and quarry's to develop options for managing their defences	EA and CBC	High	LA involvement needed (ECBC/ ECC and CEP)	Ongoing

Management Unit E: Mersea Island

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Scheme work	PDZ E2	Rewsalls Farm – managed realignment epoch 2.	RHCP	Medium	EA	Discussions underway Epoch 1
	PDZ E4a	Strood Channel - managed realignment epoch 2.	RHCP	Medium	EA	Epoch 2
Asset Management	All	Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA, local sources of funding	High	EA	Ongoing
Communication and Engagement		Managed realignments on Mersea island – further discussion and engagement of local landowners to develop options for managing their defences (EA and caravan business owners to lead)	EA and CBC	High	LA involvement needed (ECBC/ ECC)	Ongoing
	PDZ E2	Rewsalls – Early engagement with landowner at Rewsalls has raised need for project through RHCP/ASM to take forward an options appraisal – opportunities for improved recreational access for youth camp under consideration	EA	High	EA lead with landowner and ECC/ ECBC	2011/2012

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Monitoring and Data		Foreshore Recharge options for Cobmarsh/Packing marsh areas	Beneficial Use of Dredgings Study	High	EA/LA	Before SMP review
Non SMP issue	Boat wash Nr Strood	Boat wash issue- address erosion impacts of high speed boatwash on intertidal habitats and flood defences	CBC	Medium	ECBC /MDC	Before SMP review

Management Unit F: Blackwater Estuary

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Scheme Work	PDZ F3	Old Hall Marshes - managed realignment epoch 3.	RHCP		EA	Epoch 3
	PDZ F5	Tollesbury Wick Marshes - managed realignment epoch 3.	RHCP		EA	Epoch 3?
	PDZ F12	Canney House - managed realignment epoch 3.	RHCP		EA	Epoch 3?
	PDZ F14	St Lawrence Bay - managed realignment epoch 2.	RHCP		EA	Epoch 1 Studies Epoch 2 Delivery
	PDZ F14	Feasibility study for a counterwall within the floodcell to reduce flood risk to caravan site	EA/MDC/Park Resorts	Medium	EA/MDC	Epoch 1
Asset Management		Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA, local sources of funding		EA	Ongoing
Communication and Engagement	PDZs F12 and F14	Communication plan for Caravan park owners and residents in F12 and F14 due to MR policies.	EA and MDC	High	EA and MDC	Epoch 1

Management Unit G: Dengie Peninsula

Action	PDZ	Action description	Route for delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Asset Management		Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA, local sources of funding	High	EA	Ongoing
		Waste-filled walls investigation throughout Dengie –	Essex Waste and sea Defence Study National R&D and CIRIA links	High	ECC and EA	By next SMP review
		HtL policy will be challenging and landowners need to take a more active role in maintenance and improvements of defences	MCC	High	EA/MDC/NFU and CLA	Underway
Interface with planning and land management	PDZ G1	Potential development of power station at Bradwell – opportunities arising from development need to be capitalised on by LA's and ECC	MDC, ECC	Medium	EA/MDC/CBC/ECC	Subject to New nuclear build timetable
Adaptation		Issue of on-going freshwater drainage through Dengie as sea level rises and need to link SMP with CFMP in terms of future drainage/pumping etc.	Inland Strategic Overview Maintenance protocol and CFMP links	Medium	EA	By next SMP review

Management Unit H: Roach and Crouch Estuaries

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Scheme Work	PDZ H2a	Managed realignment epoch 2.	RHCP		EA	
	PDZ H2b	Managed realignment epoch 3.	RHCP		EA	
	PDZ H8b	Canewdon - managed realignment epoch 2.	RHCP		EA	
	PDZ H11a and H11b	Managed realignment epoch 2. This will require careful consideration of the options, including landowner involvement and ensuring continued protection of Paglesham Churchend and Paglesham Eastend	RHCP	Med/High	EA	
Asset Management	PDZs H1, H2, and H3	Network issues on north bank of Crouch – as railway line is in flood plain and could become secondary line of defence by default but not designed to be a flood bank. This needs investigation with EA/Network Rail regarding future management and potential capital investment	EA, Network Rail	High	EA/MDC/DC/ECC and Network Rail	

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Asset Management		Waste-filled walls investigation throughout Roach and Crouch Estuary– due to presence of waste material in vulnerable defences which is limiting flood defence management options and presents potential contamination issues in flood event (WFD). National policy under consideration – link to that is needed.	Waste & Flood Defences Study,EA, MDC, RDC	High	RDC/ MDC/ DC/ECC and EA	
	All	Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA, local sources of funding		EA	Ongoing
Non SMP issue	Boat wash Upper Crouch	Boat wash issue- address erosion impacts of high speed boatwash on intertidal habitats and flood defences	CBC	Medium	CBC /MDC	Before SMP review

Management Unit I: Foulness Peninsula

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Asset Management	All	Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA, local sources of funding		EA	Ongoing
Communication and Engagement	All	Improved communication and a framework for cooperative working with MOD at Foulness and Potton due to issue of standard of defences and need for MOD contributions to PSA targets for saltmarsh 2010 onwards.	Communication plan		ECC/EA/RDC	
Emergency response	All	Proactively engage with MOD and Defence estates to ensure they have appropriate community plans in place to deal with a flood event at Potton, Foulness and Shoebury Ness	Communication Plan Emergency Plan	High	ECC/ RDC and EA	Year 1
Habitat Creation and Environmental	All	HTL policies will require links RHCP	Coastal strategy	High	SBC/EA	Ongoing

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
management	PDZ I1c	Rushley Island – managed realignment epoch 2	RHCP		EA	Studies Epoch 1 Scheme Epoch 2

Management Unit J: Southend on Sea

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Strategy	PDZ J1	Progress local FCRM Strategy pending approval for capital works to frontage	National FDGIA Agreed	High	SBC and EA	Feb 2010
Asset Management	PDZ J1	Two Tree Island – Issue of contaminated land and erosion risk. Need for environmental improvements to ensure contaminated material is contained.	Waste and Defence Study	High	SBC/ECC/EA	2020/SMP3 Review
	All	Continue to manage defences in accordance with Hold the line policies where and when relevant.	EA, SBC, local sources of funding	High	EA/SBC	Ongoing
Scheme work		Great Wakering – develop a scheme to protect properties in Great Wakering area to a greater standard?		High	EA/MOD/SBC	Year 1-5
Interface with Planning and land Management	All	Link between SMP policies and spatial planning doc eg; LDF/Core strategy	SBC	High	SBC	LDF/Review

Action	PDZ	Action description	Route for Delivery	Priority	Responsibility (lead partner)	When by (subject to funding)
Habitat Creation and Environmental management	All	HTL policies will require links RHCP	Identify need in Southend Coastal strategy SBC/EA	High	SBC/EA	Ongoing