

Managing the coast



Essex and South Suffolk Shoreline Management Plan

Non-technical summary of draft SMP – March 2010
Colne Point to Bradwell

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We have developed the Shoreline Management Plan (SMP) by following a set of principles agreed by all the organisations involved in the process. Some of these principles can be contradictory and this is one of the main challenges of shoreline management. It is unlikely, perhaps impossible, to fully achieve all the principles. So instead the SMP aims to provide the best achievable balance between the principles in the short, medium and long term. The short term refers to epoch 1, the medium term to epoch 2 and the long term to epoch 3. As a whole, this set of principles represents the balance of values to which the SMP aspires. The order of the principles does not indicate the order of importance.

- 1** To develop policies appropriate to the diverse character of the Essex and South Suffolk coast and the interaction between land and sea
- 2** To balance flood and erosion management with the assets and benefits that it protects
- 3** To seek opportunities for managing the shoreline through natural coastal processes and take full account of longshore and cross-shore impacts
- 4** To develop policies that are resilient against future changes and associated uncertainty
- 5** To provide time and information for communities, individuals and partner organisations to adapt to any anticipated coastal change
- 6** To support communities and sustainable development for the people living around the Essex and South Suffolk shoreline by managing the risk to community activities and infrastructure
- 7** To support and promote the social and economic values of the Essex and South Suffolk coast to wider society
- 8** To support conservation and enhancement of biodiversity and geodiversity
- 9** To contribute to maintaining and enhancing the evolving character of the coastal landscape
- 10** To support protection and promotion of the historic environment and its value for the heritage, culture and economy of the area
- 11** To support and enhance people's enjoyment of the coast by maintaining and enhancing access

Introduction

What this booklet tells you

This booklet tells you about the draft Shoreline Management Plan (SMP) for the coast and estuaries between Colne Point and Bradwell, and how you can comment on the draft policies.

This is one of three booklets about the draft Essex and South Suffolk Shoreline Management Plan: the other non-technical summaries cover the areas from Felixstowe Port to Colne Point; and from Bradwell to Southend-on-Sea. The final Essex and South Suffolk Shoreline Management Plan (SMP) will be a high-level policy document that has been agreed by all organisations involved in the management of coastal flood and erosion defences. This document is a non-technical summary of the full draft SMP. It presents the suggested long-term plan, based on a full appraisal of options against a wide range of criteria. Details of the timetable for producing the final plan appear on page 5.

This document aims to:

- inform, and get responses from, interested groups or individuals on our understanding of why and how coastal flooding and erosion might occur, and their effects on people, their use of the land and the environment
- obtain your views on the proposals for managing this section of the Essex and South Suffolk shoreline in the short, medium and long term.

In particular, we would like your comments on:

- the intent of management that we propose for each length of the coast
- the draft Strategic Environmental Assessment that we have prepared alongside the SMP. This is also out for consultation. It is included as Appendix L to the full draft SMP and can be found on the CD inside the back cover of this booklet.

Policy Definitions

Hold the Line (HtL)

Holding the defence line where it is now

Advance the Line (AtL)

Building new defences seaward of the existing defence line

Managed Realignment (MR)

Allowing or enabling the shoreline to move, with associated management to control or limit the effect on land use and environment. This can take various forms, all characterised by managing change, either technically, for land use or for the environment. For the Essex and South Suffolk SMP, two distinct types of Managed Realignment are relevant

No Active Intervention (NAI)

No further investment in coastal defences or operations

Public consultation

The Essex and South Suffolk SMP is out for public consultation from Monday 15 March to Friday 18 June 2010.

Both this summary document and the full draft SMP and appendices are available online at <https://consult.environment-agency.gov.uk/portal/re/flood/anglian/smp150310/consult>

They are also available for viewing at a number of local authority offices and the Environment Agency's offices within the plan area (addresses can be found at the back of this document). Copies can also be viewed in a number of libraries in the plan area (addresses given on page 35).

Further information about the public consultation can be obtained by emailing Essex_SMP@environment-agency.gov.uk, or by phoning the Environment Agency's National Customer Contact Centre on 08708 506 506* – Monday to Friday 8am to 6pm.

*Approximate call costs: 8p plus 6p per minute (standard landline). Please note charges will vary across telephone providers.

If you would like to comment on this consultation you can do so online at: <https://consult.environment-agency.gov.uk/portal/re/flood/anglian/smp150310/consult>

You will need to register before you can respond – this will only take a few moments.

Alternatively you can respond by:

- email: ian.bliss@environment-agency.gov.uk
- writing to: Ian Bliss, Essex and South Suffolk SMP consultation, Environment Agency, Icen House, Cobham Road, Ipswich IP3 9JD

by 4pm on Friday 18 June 2010.

What is a Shoreline Management Plan (SMP)?

A Shoreline Management Plan is a plan for managing flood and erosion risk for a particular stretch of shoreline over 100 years, looking at the short, medium and long term.

SMPs identify the best ways to manage coastal flood and erosion risk to people and the developed, historical and natural environment. They also identify opportunities where partners, stakeholders, communities and individuals can work together to manage and reduce flood and erosion risk. The objective of the SMP is a document that outlines the intent of management for the coast and estuaries of Essex and South Suffolk. The plan aims to achieve the best possible balance for all the features that have been identified as valuable by partners and stakeholders around the coast.

Approximately 10 years ago, the first suite of SMPs were completed for the entire length of the coastline of England and Wales. These SMPs are now being reviewed to take into account new information, data and legislation.

The draft plan describes the intent of shoreline management for the short term (up to 2025), the medium term (2026-2055) and the long term (2056-2105). These are referred to as epochs 1, 2 and 3 respectively. The intent for the medium and long term sets a vision for the future, but is based on our current knowledge and understanding. That is why SMPs are reviewed every five to 10 years.

The Environment Agency manages most of the flood defences between Colne Point and Bradwell. There are also a number of erosion defences managed by local authorities such as Tendring District Council. Isolated lengths of coast are managed by other stakeholders, for example the Ministry of Defence, ports, wildlife groups and private landowners.

In addition to these organisations, Natural England and English Heritage are involved to ensure that we are balancing the needs of the natural, historical and cultural environments around this coast. The coast, and the way it is managed, has strong interactions with a range of issues both landward and seaward of the defences. As a result it is imperative that these plans are developed in partnership and with input from coastal stakeholders and the public.

What is the draft SMP stage?

During this stage we prepare our draft plan and consult the public.

The draft SMP presents:

- an overview of the SMP area, looking at everything that matters for shoreline management. This includes technical elements such as the defences and the coastal processes. Equally important are the ‘softer’ elements: how do people use the land and the sea around the shoreline; what is the value of the area for wildlife and its heritage value; what is the role of the shoreline in the landscape; and how do all these aspects interact? We have translated this into the set of principles shown at the beginning of this document, which form the basis of the plan.
- an explanation of the role that shoreline management plays along each section of the coast. What would happen if we continue managing the defences as we do today, and what happens if we manage them differently? If we understand this, then we can identify the ‘big decisions’ that this SMP needs to make.
- an explanation of how we intend to manage the coastal defences in the short, medium and long term; what do we aim to achieve and what are the wider implications?

Timetable for Essex and South Suffolk SMP

SMP Stage	Details	Timing
Preparation of the draft plan	<ul style="list-style-type: none"> • Scoping • Assessments to support policy development • Policy development • Discussion with landowners who could be affected by policy changes 	June 2008 to February 2010
Public consultation	<ul style="list-style-type: none"> • Consult with people and organisations who have an interest 	15 March to 18 June 2010
Final SMP	<ul style="list-style-type: none"> • Review and incorporate consultation responses • Prepare Action Plan • Adoption and approval • Produce final SMP 	June to September 2010
Dissemination of final plan		September 2010 onwards
Monitor and review		Ongoing

Project area overview

The SMP area is located in the east of England and covers the South Suffolk and Essex coast from Felixstowe Port (in Suffolk) to Two Tree Island (in the Thames). This booklet is one of three non-technical summaries of the main SMP document and is designed to give you an overview of the plan. It covers the area from Colne Point to Bradwell; this includes the north and south banks of the River Blackwater up to the weirs at Beeleigh falls, Maldon, Mersea Island, and the River Colne up to the Colne barrier at Wivenhoe.

In total it includes over 80km of coast and estuary banks. Most of the coast has defence embankments that protect low-lying land against flooding, with the exception of the Mersea Island area and stretches in Maldon and Brightlingsea where there are low cliffs and the land is generally higher and defended against coastal erosion.

The Blackwater Estuary is the largest estuary in Essex north of the Thames and is one of the largest estuarine complexes in East Anglia. Both the Blackwater and Colne estuaries and the channels around Mersea Island are surrounded by low-lying land and are used for a wide range of activities. They also provide an important habitat for a range of birds, invertebrates and plants.

How the coast and the estuaries work

The coastal and estuarine processes in the area are complex and operate at various scales. At the largest scale, waves approaching the coast from the north-east, east and south-east move sediment around. This causes sediment to build-up at some locations, but sediment loss at others. The impact of the waves is strongly felt at the mouth of the estuaries, and the tidal flows also play a part in removal and redistribution of sediment.

Here we introduce and explain some of the key coastal and estuary processes in the Essex and South Suffolk SMP area. These have played an important role in developing the plan.

Intertidal areas: An estuary is the section of a river where it flows into the sea and is influenced by the tides. Estuary banks are typically wide, flat areas consisting of mud and silt that are sometimes dry, and sometimes under water. Similar areas are also found along parts of the open coast, for example in front of Dengie and Foulness. These are called 'intertidal areas' and are made up of mudflats and saltmarshes. The intertidal area is important because it stops waves reaching flood and erosion defences, and it is also a habitat for many rare plants and animals.

Coastal squeeze: Since the last Ice Age, around 12,000 years ago, the land in the east of England has been sinking slowly, while sea levels have generally been rising. This process is expected to continue and may be speeding up. The natural response of intertidal areas is to gradually move inland. Large areas of the estuaries and coastline in the Essex and South Suffolk SMP area are constrained by high ground and by man-made flood defences. This means that the saltmarshes and mudflats cannot move in a landward direction: they do lose area from their seaward edge, but they don't gain area on their landward edge. This is called 'coastal squeeze'. It puts pressure on the flood defences, which become more difficult to maintain, and it leads to loss of important habitats.

Estuary processes: At the outer and middle reaches of the estuaries erosion of the saltmarsh edge takes place. These sections are exposed to pressures from waves and tidal

flows. Some of the sediment eroded from the outer and middle reaches is transported by the tides into the inner estuary where siltation is taking place. As sea level rises and tidal flows speed up, there will be more erosion and coastal squeeze of saltmarsh in estuaries.

Where the estuary is constrained, the flood banks are under pressure. Widening the estuary on one bank loosens this constraint, so it will reduce the pressure on the opposite bank of the estuary.

On the other hand, widening the estuary in the upstream reaches can have a negative effect elsewhere in the estuary. It increases the tidal prism (the volume of water flowing in and out of the estuary with each tide). This means that more water has to pass through the outer reaches, and this can increase the pressure on the banks. As a result realignment will tend to be considered on the middle and outer reaches of estuaries.

Open coast processes: There are a number of exposed coastal frontages in the SMP area. These frontages experience the full force of waves from the North Sea with the strongest waves coming from the north-east. The wave energy moves sediment around the coast. Sediment tends to build up in certain areas where the wave and current energy is less. There can also be a loss of sediment where this energy is greater. This loss of sediment causes a loss of beaches, saltmarshes and mudflats and can cause undermining of coastal and flood defences.

Project area overview

We have divided the area into three Management Units (MU):

Management Unit D (Colne Estuary): this management unit extends from Point Clear on the east bank of the River Colne up to Colne Barrier, and back downstream along the north bank of Pyefleet channel, up to the Strood road crossing to Mersea Island. This management unit is a combination of an open coast and estuary frontage. The mouth of the River Colne is open coast and is exposed to waves, whereas the Colne Estuary itself and the channels are sheltered, but affected by the tides. In front of the defences there are saltmarshes and mudflats. Monitoring has shown that the total area of saltmarsh in the estuary is reducing, and that this process has recently been speeding up. In combination with channel movement this is putting pressure on the defences along the middle and lower Colne, Flag Creek and Pyefleet channel.

Management Unit E (Mersea Island): this management unit covers Mersea Island, which consists of London clay. The south-east side of the island is an open coast frontage. It has a low cliff and steep natural slope with two local areas of low-lying land. In front of the cliff and slope is a wide area of intertidal flats (Mersea flats) made of shingle, sand and mud. There are varying types of defences around the island, such as concrete sea walls, promenades, wave return walls and beach control structures such as timber and concrete groynes and breakwaters. These protect the isolated sections of low-lying land from flooding and the higher ground from erosion. Erosion is caused by wave and tidal energy. There is a general lack of sediment in the area, and this is made worse by the presence of coastal and flood defences. This puts pressure on the defences around much of the island.

Management Unit F (Blackwater Estuary): this management unit extends from Strood road crossing up the Blackwater to Maldon, and then back along the south bank to Bradwell Waterside. The Blackwater Estuary is one of the largest estuary complexes in East Anglia. This management unit is a combination of open coast and estuary. The mouth of the River Blackwater is open coast and is exposed to waves, whereas the Blackwater Estuary itself is sheltered but affected by the tides. In front of the defences there are saltmarshes and mudflats. Monitoring has shown that the total area of saltmarsh in the estuary is reducing, but the rate at which it is reducing has recently been slowing. This is because the estuary is less constrained than other estuaries along the Essex coastline and the four managed realignments undertaken at Northey, Orplands, Tollesbury and Abbots Hall have further loosened the constraint, relieving some of the pressure from the estuary on the shoreline.



Colne Point



West Mersea



Blackwater Estuary

Figure 1: Management Units for the Colne Estuary, Mersea Island and Blackwater Estuary frontages



Why it is a special place

The estuaries and their tidal dynamics determine the character of all three Management Units (Colne, Mersea Island and Blackwater). The estuary landscape sets the scene for a combination of river-based activities, agriculture in the low-lying defended areas and important habitats on both sides of the defences.

There are various settlements on or near the shoreline, with their communities, range of public services, infrastructure, historic buildings and archaeology. Large parts of the defended areas are important for agriculture. The rivers are used for both commercial and recreational activities. The intertidal area supports an important shellfisheries industry, particularly around Mersea Island, which is one of the few places left in the UK producing the native oyster. People come to the area for wildlife-related tourism – mainly birdwatching. They are also drawn to the area for the recreation opportunities it provides, such as outdoor pursuits, country parks, nature reserves and the Mersea vineyard. As a result there are a number of camping and caravanning sites. The area is also particularly important for the Ministry of Defence who use the low-lying marshes at Wick Marsh, Langenhoe Marsh and Fingringhoe Marsh as firing ranges. The nuclear power station at Bradwell is being decommissioned, but the site is a candidate for the development of a new nuclear plant.

At the same time, the Colne, Mersea Island and Blackwater have unique environments. The intertidal mudflats are home to a rich variety of animals and plants, which form a complex and unique system. A large number of invertebrates and shellfish live in the mudflats, and these provide food for geese, waders and ducks throughout the year. The saltmarshes, historic grazing marshes, sand and shingle spits, disused gravel pits and reedbeds also support a wide and diverse range of nationally scarce plants, flora, fauna, invertebrates and migratory and wintering birds. This environment is protected by a range of national and international designations. The foreshore areas in this frontage are also important for their geology, and the intertidal zone includes some of the most extensive prehistoric land surfaces to be found in the UK.

The role of shoreline management: finding the right balance

The draft SMP considers how the shoreline would respond to different management options and how these would affect the values and features that are characteristic for the Essex and South Suffolk SMP area, such as communities, agricultural land, tourism facilities and intertidal habitats.

We have assessed these impacts against a set of policy appraisal criteria and indicators. These criteria and indicators were developed for each Management Unit based on the principles for shoreline management in Essex and South Suffolk as on page 1 of this document and further explained in Appendix G (Draft Policy Appraisal of the full draft SMP). The text box below illustrates how we have done this.

Here we illustrate examples of the policy appraisal criteria, how they are linked to the general principles for shoreline management and how they have been assessed (indicators). Full details are provided in the main SMP document.

Principle: To balance flood and erosion management with the assets and benefits that it protects

Criteria: Level of flood and erosion risk to people and property

Indicator: Number of properties within the tidal floodzone or at risk from erosion compared to the current number

Principle: To provide time and information for communities, individuals and partner organisations to adapt to any anticipated coastal change

Criteria: Adequacy of time available for adaptation for communities, individuals and partner organisations

Indicator: Time (in epochs) available for each required process of adaptation, depending on the policy option

Principle: To support conservation and enhancement of biodiversity and geodiversity

Criteria: Impact on the achievement of management objectives for designated sites, keeping them in favourable condition

Indicator: Area of designated land lost/gained per epoch and scenario

The role of shoreline management: finding the right balance

Based on this, we have identified that the SMP has to deal with the following 'big decisions' for shoreline management:

- 1** For the coastal defences that protect seaside towns (such as West Mersea) against erosion, the question is how to sustain the vital role of the seafront for the character and economy of these towns. Holding the existing alignment protects existing features, but this can be difficult and it may have a negative effect on the beach and elsewhere along the shoreline.
- 2** For defences that protect any settlements or important infrastructure it is not realistic to stop defending against tidal flooding. For these defences, the 'big decision' is not whether, but how to achieve continued defence against flooding. The best solution could be to hold the existing line, but it could also be to move the defences landward.
- 3** For all other flood defences, the SMP has to ask the question whether continued defence is the best solution in the face of increasing pressures and the negative affects of coastal squeeze. Do the benefits that the defences bring outweigh their negative impacts and the effort and costs needed to sustain them?

These decisions have to take into account a range of factors:

- Some of the defences are under significant pressure. This can be from eroding channels, particularly where the estuaries' natural evolution has been constrained in the past by land reclamation.
- Loss of foreshore does not only threaten the flood defences, it can also threaten the environment by reducing the area and quality of intertidal habitats. Much of the intertidal area is protected by international designations and adds value to the local economy (even though it is very difficult to quantify this value). In many cases moving the defence landward could would create new intertidal areas to replace those under threat.
- Pressures can also come from waves. Wave action can lead to undermining of defences and there is a risk of overtopping of the defences as wave heights increase as a result on the effects of climate change.

The role of shoreline management: finding the right balance

- The defended areas are important, even if they don't include settlements or key infrastructure. They are valuable for agriculture, access to the shoreline, and heritage assets. They also contain important freshwater habitats, some of which have international designations and add value to the local economy (although this can be difficult to quantify). In some cases, functioning of freshwater habitats depends on the intertidal habitats, and vice versa.

Finally, the SMP looks at the long term, but we only have limited knowledge about what will happen in the future. This is the case for coastal processes, and also for the value that society will place on the different features of the area. The SMP needs to make sure that the plan is both robust yet flexible in the face of these uncertainties.

These factors have been taken into consideration during the development of the Shoreline Management Plan.

We have started by using these considerations to identify which of four policies could be realistic for each of the SMP's frontages. For some of the frontages this has led to the conclusion that there is only one realistic option; for other frontages this identified which options need appraisal. These options typically represent the various sides of interest and all include the need to allow time for adaptation to major changes.

Policy Definitions

Hold the Line (HtL)	Holding the defence line where it is now
Advance the Line (AtL)	Building new defences seaward of the existing defence line
Managed Realignment (MR)	Allowing or enabling the shoreline to move, with associated management to control or limit the effect on land use and environment. This can take various forms, all characterised by managing change, either technically, for land use or for the environment. For the Essex and South Suffolk SMP, two distinct types of Managed Realignment are relevant
No Active Intervention (NAI)	No further investment in coastal defences or operations

Summary of the draft plan: continuing to defend communities and giving more room to natural processes

The overall plan for managing the Essex and South Suffolk shoreline is:

- to keep protecting all dwellings and key infrastructure against flooding and erosion;
- to protect all other values of the defended land as much as possible and for as long as possible, but where this is not possible, to allow sufficient time to adapt;
- to work with landowners to realign vulnerable flood defences that are currently under pressure from natural coastal processes to a more landward alignment. This will create a more sustainable approach to managing flood risk and natural processes;
- to identify where important intertidal and freshwater habitats may be under pressure and to consider where they need to be located and managed for future generations;
- to continue to allow natural shoreline evolution where possible, but enable local and sensible intervention where needed.

For most of the currently defended coast and estuaries, the intention is to continue to hold the existing line of flood and coastal defences throughout the short, medium and long term.

However, for a number of frontages, the SMP process has identified that the defences are under pressure from eroding channels or from wave attack, typically in the middle and outer reaches of the estuaries and channels and the open coast frontage of Mersea Island. This pressure is likely to increase. For these frontages a change of policy is desirable, by realigning the defences to a more further inland would

Summary of the draft plan

make them more sustainable in the long term (while continuing to protect all dwellings and key infrastructure). There are also defences under pressure where realignment is not seen as a realistic option because of overriding constraints. This can be because current defence land use is too important and needs the existing alignments. There are also cases where the defence itself, or the area behind it, contains waste products likely to make realignment unviable. The SMP's Action Plan will include a study to assess the economic feasibility of realigning the sea banks and dealing with the contamination, for inclusion into the next SMP review.

There are also two frontages in the middle estuary of the Colne where managed realignment is the proposed option even if the defences are not necessarily under pressure. These are frontages where the defences don't protect any dwellings or significant infrastructure and so continued maintenance is not viable. Realignment is a more positive approach than abandoning the defences as it will create intertidal habitats and the associated socio-economic benefits. EU-funded research has concluded that managed realignment sites have wider benefits than simply habitat creation or serving flood risk management. The economic value of these wider benefits is still difficult to quantify.

This approach has identified a list of 31 policy development zones within the whole SMP area where the plan proposes managed realignment for flood defence frontages. In total, this is approximately 20 per cent of the total shoreline length in the SMP area, or 4.5 per cent of the area of the existing floodzone.

Of these, there are 12 in the area from Colne Point to Bradwell and only one is proposed in the short term (epoch 1). Eight are proposed for epoch 2 and three for epoch 3, and will be dependant on discussions with local landowners and will require further studies and public consultation.

The proposed timing of the realignments in the draft plan (short, medium or long term) aims to ensure that there is sufficient time for people, businesses and organisations to consider their options. It is important that there is time for adaptation to any change in the future, and that local people are involved in any new schemes to maximise the opportunities for reducing flood risk, enhance the environment and developing economic and social benefits through managed realignment schemes.

Summary of the draft plan

It should be noted that timing for realignment will be further considered during the public consultation phase, which will include key stakeholder involvement. This could mean that timing of realignment may be reconsidered and changed.

As stated before, where defences currently protect dwellings or key infrastructure, the location of the new alignments will ensure continued protection. The realignments will reduce flood risk by setting back vulnerable defences and, where appropriate, building new defences that may enhance the standard of flood protection to local communities. The design of the defences, beyond the SMP, will ensure an appropriate standard of protection.

Managed realignment works with natural processes to absorb large surge tide events and also create new intertidal habitats. The new realignments will affect the current land use as existing farming practices would not be possible at these locations. We are therefore working with the landowning community to establish how we can develop such projects. In addition some important freshwater habitats will also be affected and we will need to work closely with landowners and wildlife organisations to ensure new habitats can be created.

Where there are a number of frontages, typically where flood defences protect larger settlements, the intention of the SMP is to maintain or upgrade the standard of protection, including taking into account impacts of climate change. For the other frontages, the broad-scale analysis of the SMP is not sufficient to determine the appropriate standard of protection and in some instances more detailed analysis after the SMP will be required. The SMP's Action Plan, which will be drawn up following the consultation of the draft SMP, will identify the timing, roles and responsibilities for this.

There are a few frontages that are currently undefended (on the Blackwater and on Mersea Island) and the intent is to continue this approach throughout the short, medium and long term.

In general, it is important to note that developments in the medium and long term are difficult to predict. The SMP's Action Plan will identify the monitoring and research that is needed to inform the planned review of the SMP in five to 10 years' time.

Summary of the draft plan:

Where the Shoreline Management Plan proposes managed realignment of flood defences, the ambition of the partner authorities is to implement this policy with full landowner agreement. This also means that all landowners are allowed to hold their own defence line if they choose. New guidance has been developed at a national level (asset maintenance policy) and practical local guidance is available to landowners wishing to maintain their own defences within the plan frontage. Should everyone wish to hold the line, there will be consequences for the erosion and subsequent loss of local intertidal habitats through coastal squeeze. The Environment Agency is tasked with finding replacement habitat on behalf of landowners wishing to hold the line.

The Shoreline Management Plan will have to comply with the legal requirement from the Habitats regulations to mitigate or compensate for intertidal habitat loss caused by coastal squeeze (as discussed in the Appropriate Assessment, included as Appendix M in the full draft Essex and South Suffolk SMP).

In order for landowners, operating authorities or the Environment Agency to gain flood defence and coastal protection consents, some managed realignment of the coast is required to offset coastal squeeze.

As a result the partner authorities have worked – and will continue to work – with landowners to achieve the targets set by Habitats Regulations. However, this will be based on the willingness of landowners to enter managed realignment schemes. At this time we have identified the most vulnerable locations around the coast as potential managed realignment projects.

A situation could arise in the future where it is not possible to create sufficient intertidal habitat within the existing arrangements. The Essex and South Suffolk SMP identifies this as a potential risk that needs to be addressed at a national level through further engagement with landowners locally after finalisation of the SMP.

The Shoreline Management Plan in more detail

This section describes the draft plan in some more detail, using maps to illustrate what the shoreline would look like in the short, medium and long term. Please find all of the maps for the Management Units inserted at the back of the document.

Management Unit D: Colne Estuary

The intention of management for the Colne Estuary 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 the majority of the defended land, including all dwellings and key infrastructure at risk of flooding. This will be combined with a gradual increase of natural processes by realigning defences that are under pressure, and/or where the value of the protected features is unlikely to justify continued maintenance.

The frontages where the existing flood defences will continue to be held at their current alignment are Brightlingsea, south of Wivenhoe, Colne Barrier, Fingringhoe and Langenhoe, and Langenhoe Hall Marsh.

However, at St Osyth Creek, Flag Creek and West Marsh the defences are under pressure. 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, which will require moving some of the defences to a more sustainable sheltered position, possibly in the form of counterwalls. The realignments will come at the expense of Grade 3 and 4 agricultural land. They will affect partly-designated freshwater habitats, particularly at St Osyth, but they will also create new intertidal habitats. They could have a significant impact on the historic environment at St Osyth Creek and West Marsh, particularly along Flag Creek where the realignment area lies next to St Osyth Park and will require recording as part of implementation of the plan. There are footpaths on top of the banks at Point Clear and at West Marsh; these will need to be sustained, either through re-routing or building the means to cross the breaches. 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 affects 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 Shoreline Management Plan in more detail

At Wivenhoe and Inner Colne west bank (Policy Development Zone (PDZ) D6b on page 21 and D8a on page 22) the defences are not necessarily under pressure. However, as they don't protect any dwellings or significant infrastructure, it is unlikely that continued maintenance is justified. Note that the gravel pits on the west bank are reaching the end of their productive life. No Active Intervention is a fall-back position, but it would be preferable to take a proactive and managed approach in order to create intertidal habitats and the associated socio-economic benefits. It has to be noted that Managed Realignment would have a significant impact on the historic environment, particularly the well-preserved grazing marsh on the east bank. The banks that connect the Colne Barrier to high ground on both banks are part of PDZ D7 (on page 22), which has a Hold the Line policy.

The realignments are all proposed for epoch 2.

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

There are a number of short frontages where the current No Active Intervention approach will be continued; these are within the PDZs at St Osyth, Alresford and Fingringhoe.

The Shoreline Management Plan in more detail

Summary of Potential Policies

Draft policy	Now to 2025	2025 to 2055	2055 to 2105	What this means
D1a Stone Point				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.
D1b Point Clear to St Osyth Creek				
National SMP policy	Hold the Line	Managed Realignment	Hold the Line	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings, roads and caravan park. The currently undefended section will remain undefended.
D2 Along the southern bank of Flag Creek				
National SMP policy	Hold the Line	Managed Realignment	Hold the Line	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings and road.
D3 Flag Creek to northern bank to Brightlingsea				
National SMP policy	Hold the Line	Managed Realignment	Hold the Line	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings and road.
D4 Brightlingsea				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.
D5 Westmarsh Point to where the frontage meets the B1029				
National SMP policy	Hold the Line	Managed Realignment	Hold the Line	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings, the road and the freshwater habitats.
D6a South of Wivenhoe				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.
D6b B1029 to Wivenhoe				
National SMP policy	Hold the Line	Managed Realignment	Hold the Line	Managed realignment by breach of the existing defence, while continuing flood defence to the railway line.

The Shoreline Management Plan in more detail

Draft policy	Now to 2025	2025 to 2055	2055 to 2105	What this means
D7 Colne Barrier				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.
D8a Inner Colne west bank				
National SMP policy	Hold the Line	Managed Realignment	No Active Intervention	Managed realignment by breach of the existing defence. No defence needed after that.
D8b Fingringhoe and Langenhoe				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs. The currently undefended sections will remain undefended.
D8c Langenhoe Hall Marsh				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.

Management Unit E: Mersea Island

The overall intention for Mersea Island 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 defences that are under pressure.

Most of the existing flood and erosion defences will continue to be held at their current alignment. However, at the seaward frontage at East Mersea and the frontage landward of the Strood Channel the defences are under pressure. A landward realignment would create a more sustainable situation by reducing the pressure on defences and moving towards a more natural coast with increase of tidal prism and intertidal area. All dwellings and infrastructure would remain protected, which will require moving some of the defences to a more sustainable sheltered position, possibly in the form of counterwalls. The realignments will come at the expense of Grade 3 and 4 agricultural land. They will affect freshwater habitats (non-designated), but they will also create new intertidal habitats. They will have some impact on the historic environment, largely archaeological features, which will require recording as part of implementation of the plan. There are footpaths on top of all the sea banks to be breached; these will need to be sustained, either through re-routing or building the means to cross the breaches. The impact of the potential realignments on tourism and recreation (including sailing and the youth camp) and on oyster fisheries (particularly in the Strood Channel) is difficult to quantify, and realignments can have both negative and positive effects. 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.

Realignment is proposed for North Mersea (Strood Channel) and Mersea eastern landward frontage in epoch 2.

For West Mersea and North Mersea, the SMP's broad-scale economic analysis supports an intent to maintain or upgrade the standard of protection. For all the other defended frontages, detailed analysis beyond the SMP is needed to determine the appropriate standard of protection.

The current No Active Intervention approach will be continued for the undefended section of West Mersea (landwards of Cobmarsh Island).

The Shoreline Management Plan in more detail

Summary of Potential Policies

Draft policy	Now to 2025	2025 to 2055	2055 to 2105	What this means
E1 Landward Frontage				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings and roads.
E2 Seaward frontage between North Barn and West Mersea				
National SMP policy	Hold the Line	Managed Realignment	Hold the Line	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings, roads and sewage works.
E3 West Mersea				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs. The currently undefended sections will remain undefended. The standard of protection will be maintained or upgraded.
E4a North Mersea (Strood Channel)				
National SMP policy	Hold the Line	Managed Realignment	Hold the Line	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings and roads. The standard of protection will be maintained or upgraded.
E4b Pyefleet inner Channel				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.

Management Unit F: Blackwater Estuary

The overall intention for the Blackwater Estuary 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 defences that are under pressure.

The frontages where the existing flood defences will continue to be held at their current alignment include the Strood, Salcott Creek, sections of Tollesbury, Goldhanger, Heybridge, Maldon inner estuary, south Maldon, sections of Mayland Creek, St Lawrence and sections of Bradwell Creek. For Northey Island, the intent is to allow the private defence owner to hold the line or to pursue the limited realignment that they are considering.

However, at Salcott Channel, Steeple, St Lawrence and Tollesbury Wick Marshes the defences are under pressure. 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, which will require moving some of the defences to a more sustainable sheltered position, possibly in the form of counterwalls. The realignments will come at the expense of Grade 2, 3, 4 and 5 agricultural land as well as campsites and caravan parks. They will affect partly-designated freshwater habitats, including Old Hall Marshes and Tollesbury Wick, but they will also create new intertidal habitats. They could have significant impact on the historic environment, again particularly at Old Hall Marshes and Tollesbury Marshes, which are historic grazing marshes with landscape features and archaeological potential that will require recording as part of implementation of the plan. There are footpaths on top of the banks at most proposed sites; these will need to be sustained, either through re-routing or building the means to cross the breaches. The impact of the potential realignments on tourism and recreation, on oyster fisheries and on moorings and marinas is difficult to quantify, and realignments can have both negative and positive impacts.

The Shoreline Management Plan in more detail

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.

For St Lawrence to Bradwell-on-Sea, realignment is proposed in epoch 1. Realignment is proposed for Old Hall Marshes, Tollesbury Wick Marshes and Steeple in epoch 3.

There are seven frontages for which the SMP's broad-scale economic analysis supports an intent to maintain or upgrade the standard of protection. These are Goldhanger to Heybridge, Heybridge Basin, Maldon Inner estuary, South Maldon, Maylandsea, St Lawrence and St Lawrence to Bradwell-on-Sea. For all the other defended frontages, detailed analysis beyond the SMP is needed to determine the appropriate standard of protection.

The current No Active Intervention approach will be continued for the Abbots Hall area and for sections of Mayland Creek, Bradwell Creek and Wigborough

The St Lawrence to Bradwell-on-Sea frontage is currently proposed as a realignment site as an extension to the existing managed realignment at Orplands.

The Shoreline Management Plan in more detail

Summary of Potential Policies

Draft policy	Now to 2025	2025 to 2055	2055 to 2105	What this means
F1 Strood to Salcott-cum-Virley				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.
F2 Salcott Creek				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.
F3 South bank of the Salcott Channel to Tollesbury Fleet				
National SMP policy	Hold the Line	Hold the Line	Managed Realignment	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings, roads and sewage works.
F4 Tollesbury				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.
F5 Tollesbury Wick Marshes to Goldhanger				
National SMP policy	Hold the Line	Hold the Line	Managed Realignment	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings, roads and sewage works.
F6 Goldhanger to Heybridge				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.
F7 Heybridge Basin				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.
F8 Maldon Inner estuary				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.

The Shoreline Management Plan in more detail

Draft policy	Now to 2025	2025 to 2055	2055 to 2105	What this means
F9 South Maldon				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.
F9a Mundon Point				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held for epoch 1, after which withdrawal of maintenance will take place.
F9b Northey Island				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The private flood defence owner will be allowed to hold the line.
F10 Maylandsea				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.
F11a Mayland Creek west				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.
F11b Mayland Creek				
National SMP policy	No Active Intervention	No Active Intervention	No Active Intervention	No erosion expected, therefore no defences needed.
F11c Mayland Creek east				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs.
F12 Steeple				
National SMP policy	Hold the Line	Hold the Line	Managed Realignment	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings, roads and sewage works.

The Shoreline Management Plan in more detail

Draft policy	Now to 2025	2025 to 2055	2055 to 2105	What this means
F13 St Lawrence				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs. The standard of protection will be maintained or upgraded.
F14 St Lawrence to Bradwell-on-Sea				
National SMP policy	Managed Realignment	Hold the Line	Hold the Line	Managed realignment by breach of the existing defence while continuing flood defence to the dwellings, roads and Leisure Park. The standard of protection will be maintained or upgraded.
F15 Bradwell Creek				
National SMP policy	Hold the Line	Hold the Line	Hold the Line	The current line will be held throughout all epochs. The currently undefended section will remain undefended.

Next steps

We will assess all feedback to the draft SMP and take it into account as the plan is finalised, working with representatives and elected members from all partner authorities. The final SMP will then be submitted to all partner authorities for formal ratification or adoption. From that point on, the SMP will be the basis for the management of the shoreline, and a source of information for all organisations and people with an interest in the shoreline.

The final SMP will contain an Action Plan. This sets out what the Environment Agency, local authorities and all other partner organisations need to do to implement the plan. The actions will cover the development of flood and erosion defence strategies and schemes, typically led by the Environment Agency or coastal local authorities. But it will also include actions by local authorities, for example to incorporate the plan into the land-use planning system or to support adaptation of affected communities, businesses and organisations. There will also be an action for English Heritage and Natural England to advise and support the mitigation of historic and natural features where they affect shoreline management. There is a range of existing partnerships, such as for the management of the estuaries and coastal areas, which will also have an important role in the implementation of the SMP and its Action Plan.

The Action Plan will be 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 in five to 10 years' time.

Typical actions that we expect to include in the Action Plan are as follows:

- Next steps for implementation of short-term policies (especially where different from current policy): any further studies needed to confirm the policy; interaction with land-use planning; scheme development; working with landowners and other stakeholders.
- Specific need for study of refuse-filled walls or other contamination issues to determine feasibility of realignment.
- Monitoring and study to improve knowledge of estuary and coastal development to inform the next SMP policy development. This includes the development of intertidal habitats (quantity and quality).
- Actions with involvement from the planning authorities to prepare land-use adaptation needed as a result of proposed medium and long-term policies.
- The SMP identifies the need for a national approach to caravan parks behind coastal and estuary defences. The Action Plan needs to identify the steps needed to achieve this.
- The next SMP to review the plan in light of new knowledge and possibly new priorities.

Glossary

Adaptation

A change in the way that a feature, such as a community or a habitat, functions to fit a changed environment.

Advance the Line

Building new defences seaward of the existing defence line. This policy should be limited to those stretches of coastline where significant land reclamation is considered.

Area of Outstanding Natural Beauty (AONB)

A precious landscape whose distinctive character and natural beauty are so outstanding that it is in the nation's interest to safeguard it. AONBs were created by the legislation of the National Parks and Access to the Countryside Act of 1949.

Climate change

Long-term change in the patterns of average weather. Its relevance to shoreline management concerns its effect on sea levels, current patterns and storminess.

Coastal squeeze

The reduction in habitat area that can arise if the natural landward migration of a habitat (due to sea level rise) is prevented by the fixing of the high water mark, for example a sea wall.

Department for Food, Environment and Rural Affairs (Defra)

Government department responsible for flood management policy in England and Wales.

Epoch

This refers to a period of time. In the SMPs three epochs are defined – 0 to 20, 20 to 50 and 50 to 100 years from the present.

Erosion

The loss of land due to the effects of waves and, in the case of coastal cliffs, slope processes (such as high groundwater levels). This may include cliff instability, where coastal processes result in landslides or rock falls.

EU Habitats Directive

European legislation on the conservation of habitats.

Foreshore

Zone between the high water and low water marks.

Geomorphology/Morphology

The branch of physical geography/geology that deals with the form of the Earth, the general configuration of its surface, the distribution of the land, water, etc.

Heritage asset

A building, monument, site or landscape of historic, archaeological, architectural or artistic interest whether designated or not. Designated assets may be World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks or Gardens, Registered Battlefields and Conservation Areas.

Historic Environment

All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and deliberately planted or managed flora.

Hold the Line

Hold the existing defence line by maintaining or changing the standard of protection. This policy should cover those situations where work or operations are carried out in front of the existing defences (such as beach recharge, rebuilding the toe of a structure, building offshore breakwaters and so on) to improve or maintain the standard of protection provided by the existing defence line. Included in this policy should be other policies that involve operations to the back of existing defences (such as building secondary floodwalls) where they form an essential part of maintaining the current coastal defence system.

Hydrodynamic

The study of liquids in motion. In the context of the SMP: caused by water in motion.

Indicators

Used to support the appraisal of policies against criteria.

Integrated

An approach that tries to take all issues and interests into account. In taking this approach, managing one issue adds value to the way another is dealt with.

Listed building

A building or other structure officially designated as being of special architectural, historical or cultural significance.

Local Development Framework

A collection of local development documents that outlines how a local authority will manage planning in their area.

Longshore

Current moving parallel and close to the coastline.

Managed Realignment

Allowing or enabling the shoreline to move, with associated management to control or limit the effect on land use and environment. This can take various forms, depending on the nature of the shoreline and the intent of management to be achieved.

Mitigation

Practical measures taken to offset the impact of a policy on physical assets. The term mitigation has a specific meaning for particular types of physical asset:

Depending on wildlife, mitigation may be any process or activity designed to avoid, reduce or remedy adverse environmental impacts of the plan.

Depending on the historic environment, mitigation may be 'preservation by investigation' for archaeological features, or 'preservation by recording' followed by stage abandonment, demolition or re-location for listed buildings. There is no effective mitigation for the loss of historic landscapes.

Mudflat

Low-lying muddy land that is covered at high tide and exposed at low tide.

Natural processes

Those processes over which people have no significant control (such as wind and waves).

No Active Intervention

No investment in coastal defences or operations. It can apply to unprotected cliff frontages and to areas where investment cannot be justified, potentially resulting in natural or unmanaged realignment of the shoreline.

Policy

In this context, policy refers to the generic shoreline management options (No Active Intervention, Hold the Line, Managed Realignment and Advance the (existing) Line of Defence).

Policy Development Zone (PDZ)

A length of coastline defined to assess all issues and interactions to examine and develop management scenarios. These zones are only used to develop policy.

Principle

High-level statement agreed by partner authorities and used to develop the SMP.

Shoreline Management Plan (SMP)

A non-statutory plan that provides a large-scale assessment of the risks associated with coastal processes and presents a policy framework to reduce these risks to people and the developed, historic and natural environment in a sustainable manner over a 100-year time period.

Standard of Protection (SoP)

The level of protection that a flood or erosion defence provides. This is typically expressed as the frequency of the storm that the defence is expected to withstand. For example, a defence can have a standard of protection of 1 per cent per year. This means that it is expected to withstand a storm that has a 1 per cent probability of being exceeded in any given year. This is sometimes also referred to as the '1 in 100 year return period'.

Sustain

To undertake works to ensure that defences will be provided offering a similar standard of protection to that currently offered.

Tidal prism

The volume of water within an estuary between the level of high and low tide, typically taken for mean spring tides.

Tide

Periodic rising and falling of large bodies of water resulting from the gravitational attraction of the moon and sun acting on the rotating earth.

With Present Management

Policy scenario in which the present management of the whole shoreline is continued for the coming 100 years. Used in early stages of SMP development alongside a No Active Intervention scenario to analyse the role of shoreline management.

Libraries in Essex and South Suffolk

Bishops Park Library

Jaywick Lane
Clacton-on-Sea
CO16 8BE

Brightlingsea Library

New Street
Brightlingsea
Colchester
CO7 0BZ

Burnham-on-Crouch Library

103 Station Road
Burnham-on-Crouch
CM0 8HQ

Clacton Library

Station Road (opposite the Town Hall)
Clacton-on-Sea
CO15 1SF

Chelmsford Library

Market Road
Chelmsford
CM1 1LH

Felixstowe Library

Crescent Road
Felixstowe
IP11 7BY

Frinton Library

59 Old Road
Frinton-on-Sea
CO13 9DA

Great Wakering Library

16 High Street
Great Wakering
Southend-on-Sea
SS3 0EQ

Harwich Library

Upper Kingsway
Dovercourt
Harwich
CO12 3JT

Hockley Library

Southend Road
Hockley
SS5 4PZ

Holland Library

Public Hall Frinton Road
Holland-on-Sea
Clacton-on-Sea
CO15 5UR

Hullbridge Library

Ferry Road
Hullbridge
Hockley
SS5 6ET

Maldon Library

Carmelite House
White Horse Lane
Maldon
CM9 5FW

Manningtree Library

High Street
Manningtree
CO11 1AD

Rayleigh Library

132/4 High Street
Rayleigh
SS6 7BX

Rochford Library

8 Roche Close
Rochford
Essex
SS4 1PX

Southend Central Library

Victoria Avenue
Southend-on-Sea
Essex SS2 6EX

Walton Library

52 High Street
Walton-on-the-Naze
CO14 8AE

West Mersea Library

13 High Street
West Mersea
Colchester
CO5 8QA

Wivenhoe Library

104/6 High Street
Wivenhoe
CO7 9AB

Environment Agency and Council addresses

Babergh District Council

Corks Lane
Hadleigh
Ipswich
IP7 6SJ

Chelmsford Borough Council

Civic Centre
Duke Street
Chelmsford
CM1 1JE

Colchester Borough Council

Rowan House
33 Sheepen Road
Colchester
CO3 3WG

Environment Agency

Brook End Road
Chelmsford
CM2 6NZ

Environment Agency

Iceni House
Cobham Road
Ipswich
IP3 9JD

Environment Agency

Rivers House
Threshelfords Business Park
Inworth Road
Feering, Colchester
CO5 9SE

Ipswich Borough Council

Grafton House
15-17 Russell Road
Ipswich
IP1 2DE

Maldon District Council

Princes Road
Maldon
CM9 5DL

Rochford District Council

South Street
Rochford
SS4 1BW

Southend-on-Sea Borough Council

Civic Centre
Victoria Avenue
Southend-on-Sea
SS2 6ER

Suffolk Coastal District Council

Melton Hill
Woodbridge
IP12 1AU

Suffolk County Council

Endeavour House
8 Russell Road
Ipswich
IP1 2BX

Tendring District Council

Thorpe Road
Weeley
Clacton-on-Sea
CO16 9AJ

Tendring District Council

Town Hall
Station Road
Clacton-on-Sea
CO15 1SE

