

3 Wembury Point to Devil's Point (policy units 6c27 to 6c30)

This stretch of coastline encompasses the large urban settlement of Plymouth, the protection of which is a key policy driver. An additional consideration in this section is the need to protect areas of active/former landfill and potentially contaminated land from increasing rates of erosion and flooding. As such, the policy for the majority of this section is to continue to 'Hold the Line'.

The cliffs along the eastern side of Plymouth Sound are of outstanding landscape and geological value and a policy of 'No Active Intervention' in this area would ensure that these features remain in the future.

2 Tamar Estuary (policy units 6c31 to 6c40)

The Tamar Estuary contains both a number of developed areas as well as large areas of natural, undefended estuary. Policies aim to hold the existing defences where they occur, and undertake no intervention in the undefended areas of the estuary.

In areas where there is potential for 'Managed Realignment', opportunities for the expansion of existing wetland areas can be explored through targeting environmental schemes such as stewardship. There are also opportunities for new areas of wetland habitat creation through the design of appropriate managed realignment schemes. Within these areas, the aim of managed realignment is to both create habitat and reduce flood risk in other parts of the estuary. As such, areas where there are existing defences would be maintained under this policy. However, it is not envisaged that new defences will be constructed in currently undefended areas under this policy.

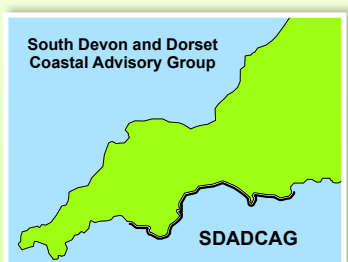


1 Mount Edgcumbe to Rame Head (policy units 6c41 to 6c45)

This coastline is mainly characterised by undefended, hard rock cliffs, which experience very slow retreat rates, although locally cliff falls can occur which cause a few metres of erosion. Sediment linkages are weak and therefore impacts of defences tend to be confined locally. For most of the frontage the selected policy is to continue to allow natural retreat of the shoreline, which, due to the low rate of retreat, is unlikely to result in significant loss of assets.

At Kingsand and Cawsand, the selected policy is to minimise the risk of flooding and erosion to the town assets, through maintaining and improving the existing defences. The cliffs that enclose these beaches are very resistant to erosion. Coastal squeeze would therefore be expected to occur whether these areas were defended or not.

South Devon & Dorset Shoreline Management Plan Review



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Summary



Our Changing Coastline

The coastline is undergoing constant change from the effects of waves and tidal currents and the changing climate. The amount of physical change depends upon the degree of exposure of each length of coast and the underlying geology. These changes usually take place over long historical periods and examples include the ongoing erosion of cliffs between Lyme Regis and Charmouth.

Another influence on the development of the coastline has been human intervention throughout the ages, particularly in attempts to stop the effect of erosion or flooding at particular locations. In many cases this has taken place without any acknowledgement of the consequences of carrying out these works on other locations up and down the coast.

Whilst these changes continue to take place, social, economic and environmental pressures are increasing in the coastal zone. People enjoy living by and visiting the coast and the pressure for more housing is ever present. As international trade increases, so does the demand for port space and associated coastal-based industry. Such development often places stress on natural coastal habitats that are unique and of national and international importance.

Durlston Head to Rame Head

The coastline covered by this plan has a rich diversity in its physical form, human usage and natural environment. This includes one of the largest active landslip areas in Europe between Lyme Regis and Charmouth, large urban centres such as Plymouth and Torbay, and many areas designated and protected for their heritage, landscape, geological and biological value. This combination of assets creates a coastline of great amenity value, and a tourism economy of regional importance.



What is the Shoreline Management Plan?

A Shoreline Management Plan (SMP) provides an objective, large-scale assessment of the risks to people and the developed, historic and natural environment, resulting from the evolution of the coast. It goes on to present a policy framework that addresses these risks in a way that does not tie future generations to costly and unsustainable activities. In the setting of policy, it attempts to balance all of the (sometimes conflicting) interests at the coast in a sustainable manner.

The SMP is a non-statutory policy document for the planning and management of coastal defences. It takes account of other existing planning initiatives and legislative requirements, and is intended to inform wider strategic planning. It does not set policy for anything other than coastal defence management. As such, it does not set policies for the management of issues such as land drainage, though along parts of this coast this is a significant problem that is acknowledged within the plan.

Coastal Defence Planning

It is important to differentiate between the three tiers of coastal defence management in England and Wales, and their discrete roles to address flood and erosion risks:

- SMP** Identifies general policies and general implementation requirements.
- Coastal Defence Planning** Identifies nature and timing of works to be undertaken.
- Scheme** Design and construction of capital works and maintenance on a single frontage.



Sustainable Management

One of the main objectives in developing a Shoreline Management Plan is the identification of sustainable long term management policies for the coast. Defra's SMP guidance defines sustainable long term management policies as "those which take account of the relationships with other defences, developments and processes, and which avoid, as far as possible, committing future generations to inflexible and expensive options for defence" (Defra, 2006).

Given sea level rise predictions, this would generally best be achieved through the creation of a naturally functioning coast; allowing it to move landwards or seawards at rates dictated by the natural processes of waves and tides. Along this SMP frontage, there are large areas of natural, undefended coastline and the policy selection in these areas has been driven by sustaining this situation.

Many areas along the South Devon and Dorset coastline have a long history of coastal defence intervention to reduce the risk of flooding and erosion. This means that the shoreline today is, in places, in an 'unnatural' form and position, one that would not necessarily revert to 'naturally functioning' if simply allowed to develop unmanaged. It is likely that the removal of defences along parts of the SMP frontage would result in the breakdown of beaches, with little or no protection of the land behind from erosion and flooding.

The consequences of this, given the extent of development along parts of the coast, would be catastrophic, as thousands of homes and businesses lie within the potential risk areas.

As such, it is the social and economic sustainability of the SMP area which has driven policy selection for the majority of the developed areas of this frontage. However, policies leading to a more 'natural' shoreline in the long-term have been identified where feasible.

The SMP Review

Recognising the need for review of the original SMP policies, the South Devon and Dorset Coastal Advisory Group commissioned consulting engineers Halcrow Group Ltd (Halcrow) to review the two original SMPs, which for the purpose of this review have been combined into one single SMP. The review was commissioned to take account of:

- Latest coastal studies and monitoring information;
- Issues identified by most recent defence planning;
- Changes in legislation (e.g. European Union Habitats Directive);
- Changes in national flood and coastal defence planning policy requirements (e.g. the need to consider a timeframe of at least 100 years rather than the original 50 years).

This summary presents an overview of the policies that have been formally adopted. Full details of policies for individual sections of coast are provided in the main SMP document. It should be noted that, although these policies have been formally adopted, this does not guarantee funding will be provided to implement policies in the future.

The Policy Appraisal Process

The 100 year appraisal timeframe, identified above, is significant as it forces us to look beyond the anticipated life of all coastal defence structures and into a period when climate change will have a significant impact on coastal management. This is an important change from the original SMP.

The coastal process appraisal determines the way in which natural forces will shape the shoreline (taking account of climate change and sea level rise). It begins by looking at a 'no active intervention' scenario to identify what could happen to the coastline over the next 100 years if all defences were allowed to deteriorate and fail.

By considering this scenario, the assets potentially affected by coastal erosion and flooding can be identified and objectives associated with their future management defined, e.g. protection of properties and environmental enhancement. These objectives are, in part, defined through the involvement of those with an interest in the coast (the Stakeholders).

The achievement of objectives under different policy approaches is then used to determine the recommended policies for the next 100 years. In this way, policy is set with full acknowledgement of its potential impact on the environmental, financial and social assets along the coast.



An overview of the recommended policies for each section of coast (i.e. each Policy Scenario Area) is presented on the reverse of this leaflet, with full appraisals for the smaller Policy Units within each area presented in the main SMP document (on deposit with Coastal Advisory Group members (see page 6 for further information)).

Policy Options

The 4 shoreline management policies considered are those defined by the Department for Environment, Food and Rural Affairs (Defra, formerly MAFF). Defra provides guidance and grant aid to local authorities for the preparation of SMPs. These policies are:

- Hold the Line** maintain or upgrade the level of protection provided by existing coastal defences.
- Advance the Line** build new defences seaward of the existing defence line.
- Managed Realignment** allow retreat of the shoreline inland, with management to control or limit that movement.
- No Active Intervention** a decision not to invest in providing or maintaining defences.



The South Devon and Dorset Coastal Advisory Group

The South Devon and Dorset Coastal Advisory Group (SDADCAG) includes the 11 local authorities that lie within the boundaries of the SMP, the Environment Agency and other key bodies. These include Natural England, Devon County Council, Dorset County Council, English Heritage, The National Trust and Network Rail. The local authorities and Environment Agency have responsibility for protecting the coastline and estuaries.

The local authorities mainly deal with defences that protect the coast from erosion by the sea. The Environment Agency deals with flood risk management and has a strategic overview for all aspects of flood and coastal erosion risk management.

Defra require production of SMPs for sustainable coastal defence management. The development of this Plan has been led by the SDADCAG, with guidance and funding provided by Defra.

Background to the South Devon and Dorset SMP

In 1998, the original Shoreline Management Plans for the coastline from Durlston Head to Portland Bill, and Portland Bill to Rame Head, were completed and adopted. These identified coastal defence management policies based upon original guidance from MAFF for a 50-year period.

Since completion of these SMPs, a number of studies and schemes have been developed based upon the policies it recommended. The outcomes of these studies have been used to inform the development of this SMP review.

Stakeholder Engagement

The greater involvement of Stakeholders in the appraisal process is one of the key changes from the first SMP. The main changes have been in the formation of a Client Steering Group (CSG) and consultation with Stakeholders and Elected officials at key stages of the development of the SMP to input information to the process, and review and comment on outputs as the study progressed. This involvement has therefore provided representation of the interests of landowners and residents such that the views of those whom SMP policies will affect have been taken into account during its development, ensuring that all relevant issues are considered, and all interests represented.

The CSG comprises representatives from some of the local authorities, the Environment Agency, Natural England, the National Trust, the World Heritage Site management team, and Devon County Council, with a remit to agree the various stages of the SMP as it progresses. This group has met throughout the Plan development, agreeing to the outputs once they have been discussed with stakeholders.



Further Information

SMP documents are available to view and download on the South Devon and Dorset Coastal Advisory Group's website: www.sdadcag.org.

Full copies of the Shoreline Management Plan and Supporting Appendices, as well as this summary, are also available at the following locations:

- Purbeck District Council, Westport House, Wareham.
- Weymouth & Portland Borough Council, North Quay, Weymouth.
- West Dorset District Council, Stratton House, Dorchester.
- Dorset County Council, County Hall, Dorchester.
- East Devon District Council, Council Offices, Sidmouth.
- Exeter City Council, Civic Centre, Exeter.
- Devon County Council, County Hall, Exeter.
- Teignbridge District Council, Forde House, Newton Abbot.
- Torbay Council, Town Hall, Torquay.
- South Hams District Council, Follaton House, Totnes.
- Plymouth City Council, Civic Centre, Plymouth.
- West Devon Borough Council, Kilworthy Park, Tavistock.
- Cornwall Council, County Hall, Truro.
- Dorset, Devon and Cornwall County Libraries.
- Universities of Bournemouth, Exeter & Plymouth Libraries.

Any new information and/or data will be uploaded onto the website as it becomes available. Should this affect the current policies, notification will be stipulated.

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The Shoreline Management Policies

The following text summarises the justification for and the impacts of the 100-year management recommendations defined for each policy scenario area in the SMP. It is essential that this is read in conjunction with the main SMP documents, which provide more detailed information for each individual policy unit.

17 Durlston Head to White Nothe (policy units 5g01 to 5g08)

This area is characterised by rocky cliffed shorelines, which are designated for their outstanding landscape and geological value, much of the coast is currently undefended and erosion risks are generally low due to the resistant nature of the cliffs. The policy is therefore to continue to minimise intervention along this coast. At Kimmeridge Bay and Lulworth Cove, existing defences could be retained, potentially in a realigned position and subject to private funding, in order to retain visitor access points and facilities.

16 White Nothe to Redcliff Point (policy units 5g09 to 5g11)

This is a mainly cliffed section of coast dominated by clay-rich cliffs, which experience episodic landslide events, causing tens of metres of retreat as a result of a single event. In places there is a risk of relict landslide complexes becoming reactivated, which makes management of this coastline more difficult. The coast is largely undefended, apart from a short stretch of defence in Ringstead Bay. The continuation of the natural erosion process is essential to the integrity of the World Heritage and SSSI status of the cliffs.

The long-term aim is to return this coastline to its natural state. This will have an impact on a number of cliff top assets. It is therefore recognised that there needs to be a transition period to enable measures to be put in place to manage this change in management. Under the long-term policy there will be potential loss of cliff top properties along the coastal stretch due to erosion. Holiday developments in Ringstead Bay will also be affected.

15 Redcliff Point to Portland Bill (policy units 5g12 to 5g23)

This is one of the more heavily developed stretches of coastline within the SMP area, incorporating the key service and tourism centre of Weymouth and the Isle of Portland. The area also has a number of nature designations for both geological and biological reasons. The Isle of Portland and the Portland Harbour breakwaters are also key controls on future evolution as they provide shelter from the dominant south-westerly waves. This whole stretch of coast is therefore heavily dependent on any changes to the breakwaters. Policies developed in this area have assumed that the breakwaters will remain and be maintained.

A key driver of policy in this area is the continued protection of commercial and social assets, which requires the continued defence of the shoreline for much of this area. This will, however, result in coastal squeeze of intertidal habitats against fixed sea defences.

At Bowlaze Cove and Preston Beach, the long-term vision is to provide more sustainable defences through realignment of existing defences. This will require measures to be in place to manage this transition in policy. Intervention along the north-west shore of Portland Harbour, where it is economically viable to do so, would prevent localised cliff recession. However, it is unlikely to be possible to intervene along all parts of this section

