

# North Devon and Somerset Coastal Advisory Group (NDASCAG)

## Shoreline Management Plan SMP2 Hartland Point to Anchor Head

Draft Issues and Objectives  
January 2009

### **Proposed Appendix to the SMP2**

This report is a proposed appendix to the Final SMP2 document and has been issued in this format solely for the purpose of allowing review and comment.



## Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Approved by
1	0	Draft	16.01.09	RH

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## I Assessment of Issues and Objectives

### I.1 Introduction

In order to develop policies, there needs to be a clear understanding of the issues and objectives that will need to be addressed by future shoreline management. This report identifies the key issues and objectives for the coast between Hartland Point and Anchor Head. The Theme Review provided the environmental baseline of the Strategic Environment Assessment (SEA) and this report constitutes the objective setting stage of the SEA process. Together they form the SEA Scoping phase, which has been integrated into the Shoreline Management Plan (SMP) Process.

***This report has been issued as Draft as it has not undergone stakeholder engagement, where it is anticipated additional issues may be identified.***

***NB: The Theme Review is currently being revised following review and comment by the client steering group.***

#### I.1.1 Identification of features and issues

Features and related coastal erosion and flood risk issues were identified using the Theme Review; the Draft Baseline Processes Report (Halcrow, 2008), Environment Agency Flood Maps (for more information see [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)) and Ordnance Survey Maps. This draft report is for consultation with key stakeholders and the public to gather further information to consolidate the report. The table also includes a summary of key considerations for each section, which defines the key characteristics of an area and identifies potential areas of conflict, which will need to be considered when developing policies.

The coast has been split into 8 sections:

- Lundy Island
- Hartland point to Westward Ho!
- Westward Ho! to Saunton Down
- Saunton Down to Morte Point
- Morte Point to Minehead
- Minehead to Hinkley Point
- Hinkley Point to Brean Down
- Brean Down to Anchor head

#### I.1.2 Definition of objectives

The setting of objectives helps to ensure both clarity and consistency across the SMP area, it helps identify why a feature is important and any potential issues associated with coastal erosion and flooding.

An objective defines a target or goal that the SMP aspires to in delivering the plan. However, it is important to understand that quite commonly there are conflicting objectives for a particular stretch of coast. Therefore it is likely that not all objectives will be achieved by the SMP as the aim of the SMP is to seek to provide a balanced plan, which considers people, nature, landscape, historic and socio-economic realities.

Using the Defra Shoreline Management Plan Guidance (2006), Strategic Environmental Assessment (SEA) guidelines and through internal discussions, a list of objectives was developed and, using the issues identified appropriate objectives were identified for each feature. Those objectives which relate to statutory requirements are shown in bold text. The objectives identified for the SMP Area are identified within Table I below.

***NB: The objectives are currently being reviewed by the client steering group and will be finalised in due course.***

Objective	Features covered by the objective
To avoid loss of property due to erosion and/or manage risk of flooding to people and property	Houses Community
To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities	Key vulnerable community facilities (e.g. surgeries, hospitals, aged persons homes, schools, shops, churches, libraries etc) Key amenity facilities (e.g. public open space, car parks etc) Key recreational facilities (e.g. bathing beaches, swimming pools, country parks, public rights of way, castles and forts etc) Access to community/amenity facilities
To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities	Shops, offices, businesses, factories, warehouses, golf courses, areas identified for regeneration, commercial fishing grounds, caravan parks, stone and mineral extraction sites, military establishments and others areas of employment
To minimise the impact of policies on marine operations and activities	Ports and harbours, Boatyards Moorings, yacht and sailing clubs, lifeboats, ferry terminals Dredging activities, Coastguard, lifeboat and lifeguard. Access to the sea and navigation
To ensure critical road and rail linkages are maintained	A, B and minor roads (where linkage is a key issue) Railway lines and stations
To ensure critical services remain operational	Pumping stations, sewage works, wind turbines, landfills, power stations, sub-stations
<b>To allow natural processes and maintain visibility of geological exposures throughout geological Sites of Special Scientific Interest (SSSIs)</b>	Geological SSSI
<b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features</b>	UNESCO Biosphere Site, Special Protection Areas (SPA), Special Area of Conservation (SAC) and Ramsar Sites
<b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b>	SSSIs, National Nature Reserves (NNR), Marine Nature Reserves (MNR), Exmoor National Park
To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites	Local Nature Reserves (LNR) County Wildlife Sites (CWSs)
<b>To prevent pollution from contaminated sources</b>	Relict landfill sites, disused mines, potentially contaminated land, bathing water, surface and ground water
To avoid loss of scheduled and other nationally important cultural heritage sites	Scheduled Monuments Registered Parks and Gardens Listed Buildings

**Hartland Point to Anchor Head SMP2  
Issues and Objectives Table**

	<p>Protected Wrecks</p> <p>Non-designated archaeology that has been identified by archaeologists as nationally important</p>
<p>To avoid conflict with AONB Management Plan, Heritage Coast and Coastal Preservation Area Objectives</p>	<p>Areas of Outstanding Natural Beauty (AONB)</p> <p>Heritage Coasts</p> <p>Coastal Preservation Areas</p> <p>Coastal Zones</p>
<p>To avoid loss due to erosion of and/or manage risk of flooding to agricultural land</p>	<p>Grades 1 – 3 farmland</p>
<p><b>To achieve compliance with Water Framework Directive objectives</b></p>	<p>Relict landfill sites, potentially contaminated land, bathing water, surface and ground water</p>

## 1.2 Issues & Objectives Tables

LUNDY ISLAND (Section A)			
Location/ feature	Key issues	Objectives that apply	Key Considerations
Lundy Island	<ul style="list-style-type: none"> <li>Landing Beach is the only sea approach to the island; an important asset to sustain the boat trips between North Devon and Lundy.</li> <li>Access road between landing beach and the main village is the only route onto the island and is suffering erosion.</li> <li>Properties apart from lighthouse at North West Point and Surf Point tend to be located further inland on higher land. Lighthouses are important to sustain navigation through the Bristol Channel.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss due to erosion of key community, recreational and amenity facilities.</li> <li>To avoid loss due to erosion of commercial and economic assets and activities.</li> <li>To minimise the impact of policies on marine operations and activities.</li> </ul>	<p>Lundy Island is a popular tourist destination and this helps generate and sustain the Islands economy. The majority of properties used by islanders and tourists are in the mid-southern region of the island and are not at risk from erosion.</p> <p>The cliff geology which is comprised of granite means there is unlikely to be a net loss of land from the majority of the island over the next 100 years. Although key infrastructure is at risk from erosion at Landing Beach due to local geology in this area being slate and shale which is more susceptible to erosion. Lundy Island is a plateau of rock 100m high, and Landing Beach is the only safe sea approach to the island, with the linking access road providing the only access to the village. Defences at Landing Beach and along the access road will therefore need consideration. The defences may locally conflict with the sensitive landscape of the Lundy Heritage Coast and may potentially impact on the Lundy SSSI, SAC, Marine Nature Reserve and archaeology. Rising sea levels and hard defences may also squeeze the beach. Although the beaches elsewhere on the lee of the island should be retained.</p> <p>The lighthouses maybe at risk from sea level rise in the next 100 years and this may have</p>
Lundy Beaches	<ul style="list-style-type: none"> <li>The beaches are generally found on the lee side of the island supporting wildlife, including grey seals <i>Halichoerus grypus</i> and where accessible may be used by tourists.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss due to erosion of key community, recreational and amenity facilities.</li> <li>For nature conservation objectives see below.</li> </ul>	
Lundy SAC	<ul style="list-style-type: none"> <li>The internationally designated habitats include: the reef, sandbanks which are slightly covered by sea water all the time, and submerged/ partially submerged sea caves.</li> <li>Internationally designated species includes the grey seal.</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	
Lundy SSSI	<ul style="list-style-type: none"> <li>Designated for its important populations of breeding sea birds, notable plant species including the island's endemic Lundy Cabbage <i>Coincya wrightii</i> and grey seals.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	

<b>LUNDY ISLAND (Section A)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Lundy Marine Nature Reserve	<ul style="list-style-type: none"> <li>Designated to protect the rich marine ecology and provide an opportunity for research. Including England's first No take Zone where no fishing is permitted.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	<p>implications for navigation through the Bristol Channel, although modern technology may mitigate the significance of this impact.</p> <p>Internationally and nationally important habitats and species are supported on Lundy Island and the net area and distribution of these features may change in accordance with natural processes.</p>
UNESCO Biosphere Reserve	<ul style="list-style-type: none"> <li>Lundy Island is within the Transition Zone of the UNESCO Biosphere Reserve. The Reserve raises awareness of nature conservation and sustainable development in the area surrounding its core Conservation Area at Braunton Burrows.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	
Lundy Nature Conservation Zone & Lundy Woodland Trust Site	<ul style="list-style-type: none"> <li>Local non-statutory designations on the island.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
Lundy Heritage Coast & Coastal Preservation Area	<ul style="list-style-type: none"> <li>The area is designated for its rich landscape. The Heritage Coast and Coastal Preservation Area aims to conserve the best qualities of the landscape by helping to guide and manage change.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid conflict with Heritage Coast Management Plan Objectives.</li> </ul>	
Heritage features	<ul style="list-style-type: none"> <li>Two protected ship wrecks on the lee side of the island.</li> <li>13 Scheduled Monuments, many within proximity to the cliffs, and may be affected by erosion.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of scheduled and other nationally important cultural heritage sites.</li> </ul>	

<b>LUNDY ISLAND (Section A)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Agricultural land	<ul style="list-style-type: none"> <li>The majority of the island is farmed and although this is low grade farmland (grade 4 and 5) there is no alternative for the island; due to the geology of the island it is unlikely erosion will affect net area.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss due to erosion to agricultural land (Grade 3 and above).</li> </ul>	

<b>HARTLAND POINT TO WESTWARD HO! (Section B)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Infrastructure	<ul style="list-style-type: none"> <li>There is risk of occasional landslips removing up to 50m per event along parts of this section. Depending upon where such events occur, minor roads and car parks may be at risk.</li> <li>The South West Coast path hugs the coastline and depending on the proximity of the path to the cliffs there may be a risk of losing sections to erosion however the path should be able to be redirected as necessary.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion.</li> <li>To avoid loss due to erosion of, and manage risk of flooding to, key community, recreational and amenity facilities.</li> </ul>	This section of coast represents the southern extent of Barnstaple or Bideford Bay. The majority is cliffed, and at some points the cliffs are up to 150m high. To the west it is rural with farmland and woodland interspersed by a few small settlements at Clovelly, Buck's Mill and Peppercombe. In contrast the coastline east towards Westward Ho! is urban and low-lying and susceptible to flooding.
Clovelly	<ul style="list-style-type: none"> <li>A picturesque small settlement nestled within a small valley discharging to the sea, sustaining a healthy tourist industry. It has both residential and holiday properties, some properties are located right on the sea wall and may be at high risk from flooding.</li> <li>Clovelly has a beach fronting defences in the form of breakwaters, concrete groynes and a seawall. These are unlikely to impact on wider coastal processes as Hartland Point itself forms the most dominant control.</li> <li>Small historic harbour with fishing fleet</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion.</li> <li>To avoid loss due to erosion of, and manage risk of flooding to, key community, recreational and amenity facilities.</li> <li>To minimise the impact of policies on marine operations and activities.</li> </ul>	<p>South West Coast Path policy is to allow natural processes to occur and realign the path inland as necessary.</p> <p>This stretch of coast is largely undefended, where there are settlements fronting the sea at Clovelly, Buck's Mill and Westward Ho there are varying levels of sea defence.</p> <p>Sea level rise may result in steepening and narrowing of beaches which are valued by residents and tourists.</p> <p>This stretch of coast is nationally important</p>



HARTLAND POINT TO WESTWARD HO! (Section B)			
Location/ feature	Key issues	Objectives that apply	Key Considerations
Buck's Mill	<ul style="list-style-type: none"> <li>A picturesque small settlement nestled within a small valley discharging to the sea. Some properties are located near the sea frontage and may be at risk from flooding.</li> <li>Buck's Mill is defended by stone gabions and a sea wall. These are unlikely to impact on wider coastal processes as Hartland Point itself forms the most dominant control.</li> <li>There is access to the beach at Buck's Mill.</li> <li>The beach and bay at Buck's Mill provide fishing opportunities for mackerel and bass amongst other species.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>To minimise the impact of policies on marine operations and activities.</li> </ul>	<p>for its geology and geomorphology. It is important to be able to observe these natural processes which should be enabled as cliff recession is generally slow due to the cliff geology.</p> <p>The coast has designated habitats of local, national and international importance; these habitats are likely to experience erosion; although this is unlikely to affect the integrity of the sites.</p> <p>The beach at Westward Ho! may be subject to draw-down in front of the defences putting more pressure on this sea wall.</p>
Westward Ho!	<ul style="list-style-type: none"> <li>Residential area with property and community services protected by a sea wall but due to the low level of ground it is likely to be at risk from flooding.</li> <li>Traditional seaside resort with a range of visitor attractions, holiday properties and commercial facilities that are likely to be at risk of flooding.</li> <li>The 2-3 mile long sands are a blue flag beach (2008) and have associated good water quality status which is an important tourist attraction.</li> <li>South West Coast Path is protected by the sea wall as it passes through Westward Ho! and may be at risk of erosion and overtopping, especially as sea levels rise.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>To minimise the impact of policies on marine operations and activities.</li> <li><b>To achieve compliance with Water Framework Directive objectives.</b></li> </ul>	
Tintagel-Marsland-Clovelly Coast SAC	<ul style="list-style-type: none"> <li>The internationally designated habitats include: European dry heath; old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; and</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their</b></li> </ul>	

<b>HARTLAND POINT TO WESTWARD HO! (Section B)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	vegetated sea cliffs of the Atlantic and Baltic Coasts.	<b>interest features.</b>	
Marsland to Clovelly SSSI (geological, geomorphological and Biological interest)	<ul style="list-style-type: none"> <li>There are geological review sites at Hartland Point, and between Clovelly and Mouth Mill. These display unrivalled exposures of Upper carboniferous rocks through the Bude and Crackington formations. The coast is also important for its coastal geomorphology including features of hogs back cliffs and wave cut platforms. The cliffs also support a mosaic of habitats including grassland, heathland, woodland and parkland.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> <li><b>To allow natural processes and maintain visibility of geological exposures throughout geological SSSIs.</b></li> </ul>	
Mermaids Pool to Rowdens Gut Geological SSSI	<ul style="list-style-type: none"> <li>This geological review site is the only complete sequence available through the Bideford formation and is of considerable importance for its palaeoenvironmental and palaeogeographical study.</li> </ul>	<ul style="list-style-type: none"> <li><b>To allow natural processes and maintain visibility of geological exposures throughout geological SSSIs.</b></li> </ul>	
Hobby to Peppercombe SSSI	<ul style="list-style-type: none"> <li>Designated for its extensive oak <i>Quercus petraea</i> woodlands and sea cliffs composed of much folded carboniferous sandstones and shales of the Bude and Crackington Formations</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> <li><b>To allow natural processes and maintain visibility of geological exposures throughout geological SSSIs.</b></li> </ul>	
North Devon AONB; Hartland Heritage Coast; and Coastal Preservation Area	<ul style="list-style-type: none"> <li>The area is designated for its rich landscape which encompasses landscape, people and nature. The AONB and Heritage Coast aims to conserve the best qualities of the landscape by helping to guide and manage change.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid conflict with AONB Management Plan, Heritage Coast and Coastal Preservation Area objectives.</li> </ul>	

<b>HARTLAND POINT TO WESTWARD HO! (Section B)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Cultural Heritage	<ul style="list-style-type: none"> <li>• There are 3 Conservation Areas including Hartland, Clovelly and Buck's Mill. Clovelly and Buck's Mill which may be at risk of flooding.</li> <li>• There are 4 Scheduled Monuments including: Windbury Head Camp, a round barrow cemetery, Clovelly Dykes hillfort and earthworks at Buck's Mill. Windbury Head Camp is in close proximity to the cliff edge.</li> <li>• Numerous Grade II Listed Buildings and archaeological sites which are at risk of erosion.</li> </ul>	<ul style="list-style-type: none"> <li>• To avoid loss of scheduled and other nationally important cultural heritage sites.</li> </ul>	
Agriculture	<ul style="list-style-type: none"> <li>• Farmland stretches inland from the cliff top, therefore any erosion will affect the net area. The majority of land is medium to low grade (Grade 3 to 4).</li> </ul>	<ul style="list-style-type: none"> <li>• To avoid loss due to erosion of agricultural land (Grade 3 and above).</li> </ul>	

<b>WESTWARD HO! TO SAUNTON DOWN (Section C)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Westward Ho!/Northam Burrows	<ul style="list-style-type: none"> <li>• Northam Burrows Country Park and The Royal North Devon Golf Course resides on the spit at Westward Ho! Three car parks, minor roads and the South West Coast Path provide access to the area. This area is protected on the seaward side by the pebble ridge and the estuary side by rock armour. Sea level rise and erosion will affect the effectiveness of these defences.</li> <li>• The South West Coast Path and Tarka Trail following the estuary and coastline are likely to be subject to erosion and/or flooding, but</li> </ul>	<ul style="list-style-type: none"> <li>• To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> </ul>	<p>This section of coast encompasses the northern half of Barnstaple/Bideford Bay, incorporating the Taw-Torridge Estuary. This is a very sensitive ecological and landscape area with interesting coastal geomorphology (including a pebble ridge) as well as being a busy residential and commercial area.</p> <p>Potential areas of conflict include how the pebble ridge is managed: whether it is allowed to undergo natural processes or whether it will be maintained as a flood</p>

<b>WESTWARD HO! TO SAUNTON DOWN (Section C)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	should be able to be redirected as required.		defence. It currently protects the low-lying ground at Westward Ho!, Appledore, Northam and Bideford; a landfill site; a Country Park and Golf Course; and habitats of national importance.
Bideford/Instow	<ul style="list-style-type: none"> <li>Once the major port for the area, it is also an important residential area with opportunities for housing development. Between East-the-Water and west of Bideford, 1,411- 2,043 houses over the period 2001-2011 are planned. Due to sea level rise these may be at risk from flooding.</li> <li>Appledore is a commercial port/quay nearby. Instow is a small harbour on the Taw –Torrige estuary and supports the North Devon Yacht Club and has a local beach</li> <li>Provides a wide range of community services and tourist facilities including boat trips to Lundy.</li> <li>The Tarka Trail follows the River Torrige from source inland and could be at risk from flooding.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>To minimise the impact of policies on marine operations and activities.</li> </ul>	<p>The future evolution of the estuary mouth is difficult to predict, the southern section could experience either stability or erosion and breaching, depending on the response to sea level rise.</p> <p>The spits at the mouth of the estuary are considered to provide flood protection to the inner estuary including Instow and Fremington and therefore their management is a key consideration.</p> <p>The estuary has numerous types and varying levels of sea defence as well as areas of reclaimed land. All low-lying land around the estuary is at risk from flooding and this may conflict with areas of future development and infrastructure as well as guide areas of potential managed realignment.</p>
Braunton/Saunton	<ul style="list-style-type: none"> <li>The residential and tourist area of Braunton is set back behind the sand dunes. It is likely the dunes provide significant protection from flooding, although it may be susceptible to backdoor flooding from the Taw-Torrige Estuary. Approximately 185 new dwellings are allocated in the local plan for Braunton by 2011 and may be at risk of flooding.</li> <li>Popular beaches at Braunton and Saunton supporting many activities including bathing and surfing.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property and manage risk of flooding to people and property.</li> </ul>	<p>The Taw-Torrige estuary will be subject to sea level rise and that this is likely to occur quicker than muddy sediment can accrete. In addition, the estuary is a major sink for sand. Therefore, over time, the net area and distribution of internationally and nationally designated habitats may change. There is also potential for loss of freshwater/brackish habitats through flooding, although this creates an opportunity to create intertidal</p>
Barnstaple	<ul style="list-style-type: none"> <li>Historic market town with both residential and commercial properties. It has a range of</li> </ul>	<ul style="list-style-type: none"> <li>To avoid manage risk of flooding to people and property.</li> </ul>	

<b>WESTWARD HO! TO SAUNTON DOWN (Section C)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	<p>community services and tourist facilities including boat trips to Lundy.</p> <ul style="list-style-type: none"> <li>• There are approximately 7,200 new homes planned for Barnstaple (4,800 within the urban area, 2,400 outside the town) and 50 ha of employment land. These may be at risk of flooding where in proximity to the River Taw.</li> <li>• The Tarka Trail follows the River Taw from source inland and could be at risk from flooding.</li> </ul>	<ul style="list-style-type: none"> <li>• To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>• To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>• To minimise the impact of policies on marine operations and activities.</li> </ul>	<p>habitat.</p> <p>There is an opportunity to integrate the sustainable management of the coastline with the aims of the Biosphere Reserve.</p> <p>Braunton Burrows are expected to remain generally stable in the next century with accretion occurring. However this will be countered by increased erosion of the dune face as sea levels rise. A breach of the dunes is considered unlikely because of their sizeable extent.</p>
Northam Burrows Landfill site	<ul style="list-style-type: none"> <li>• Currently there are no direct pathways for people to be affected by this landfill site, However due to sea level rise and the decreasing level of protection provided by the pebble ridge it is likely to become more frequently flooded and more likely for contamination to percolate in low levels into the wider estuary.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>To achieve compliance with Water Framework Directive objectives.</b></li> <li>• <b>To prevent pollution from contaminated sources.</b></li> </ul>	<p>South West Coast Path policy is to allow natural processes to occur and realign the path inland as necessary. This is likely to also be applied to the Tarka Trail.</p>
Braunton Burrows UNESCO Biosphere Reserve Status	<ul style="list-style-type: none"> <li>• Braunton Burrows SAC is the core area for the Biosphere Reserve. There is a buffer zone encompassing the Taw–Torrige Estuary and a further transition zone which stretches out to Lundy Island. The Reserve seeks to sustain both people and nature.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	
Braunton Burrows SAC	<ul style="list-style-type: none"> <li>• Braunton Burrows is internationally designated for its fixed dunes with herbaceous vegetation (grey dunes), dunes with <i>Salix repens</i> ssp. <i>argenta</i> (<i>Salicornia arenaria</i>), humid dune slacks, mudflats and sandflats not covered by sea water at low tide, shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes).</li> </ul>	<ul style="list-style-type: none"> <li>• <b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	

<b>WESTWARD HO! TO SAUNTON DOWN (Section C)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	<ul style="list-style-type: none"> <li>It is likely over time that the net area and distribution of these habitats and the species supported will vary in accordance with natural processes.</li> </ul>		
Westward Ho! Cliffs SSSI	<ul style="list-style-type: none"> <li>Designated for its coastal geomorphology and quaternary deposits, including multiple shore platforms and a classic succession of raised beaches and head deposits.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> <li><b>To allow natural processes and maintain visibility of geological exposures throughout geological SSSIs.</b></li> </ul>	
Braunton Burrows SSSI and National Nature Reserve	<ul style="list-style-type: none"> <li>Braunton is one of the largest sand dunes in the UK with flooded slacks grassland and scrub behind a wide sandy foreshore.</li> <li>It is likely over time that the net area and distribution of these habitats and the species supported will vary in accordance with natural processes.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Northam Burrows SSSI	<ul style="list-style-type: none"> <li>Northam Burrows has a wide range of coastal habitats including supporting rare and local plants and overwintering birds. It includes the pebble ridge which is an important landform feature.</li> <li>It is likely over time that the net area and distribution of the intertidal habitats that are crucial to supporting the internationally and nationally important populations of migratory, breeding and overwintering birds will vary in accordance with the natural processes. The</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> <li><b>To allow natural processes and maintain visibility of geological exposures throughout geological SSSIs.</b></li> </ul>	

<b>WESTWARD HO! TO SAUNTON DOWN (Section C)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	pebble ridge will undergo further change if unmanaged, exposing freshwater habitats behind to flooding.		
Taw-Torridge Estuary SSSI	<ul style="list-style-type: none"> <li>• Designated for its tidal mudflats, sandbanks and saltmarshes and overwintering and migratory birds.</li> <li>• It is likely over time that the net area and distribution of the intertidal habitats that are crucial to supporting the internationally and nationally important populations of migratory, breeding and overwintering birds will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Braunton Swanpool SSSI	<ul style="list-style-type: none"> <li>• Designated for its reedbed and herb rich marshy grasslands.</li> <li>• The marsh behind the pebble ridge is susceptible to inundation as the ridge is decreasing in width and rolling back. Over time, although it is beneficial to create intertidal habitats, there will be a potential loss of designated freshwater plant species present in the marsh area.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Greenaways and Freshways Marshes SSSI	<ul style="list-style-type: none"> <li>• Designated for its herb rich marshy grasslands and rich water-plant communities.</li> <li>• The marsh behind the ridge is susceptible to inundation as the ridge is decreasing in width and rolling back. Over time although it is beneficial to create intertidal habitats, there will</li> </ul>	<ul style="list-style-type: none"> <li>• <b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	

<b>WESTWARD HO! TO SAUNTON DOWN (Section C)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	be a potential loss of freshwater plant species present in the marsh area.		
Fremington Quay Cliffs SSSI (Geological)	<ul style="list-style-type: none"> <li>The cliffs are designated for their exposure of uninterrupted marine sedimentation around Devonian-Carboniferous boundary.</li> </ul>	<ul style="list-style-type: none"> <li><b>To allow natural processes and maintain visibility of geological exposures throughout geological SSSIs.</b></li> </ul>	
Kenwith Valley Local Nature Reserve	<ul style="list-style-type: none"> <li>Non-statutorily designated for its lake, new woodlands and traditional grasslands.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
Fremington Local Nature Reserve	<ul style="list-style-type: none"> <li>Non-statutorily designated for its grassland site adjacent to the estuary and woodlands beside Griggs Field in Fremington.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
North Devon AONB, North Devon Heritage Coast and Coastal Preservation Area	<ul style="list-style-type: none"> <li>The area is designated for its rich landscape which encompasses landscape, people and nature. The AONB, Heritage Coast and Coastal Preservation Area aims to conserve the best qualities of the landscape by helping to guide and manage change.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid conflict with AONB Management Plan, Heritage Coast and Coastal Preservation Area Objectives.</li> </ul>	
County Wildlife Sites	<ul style="list-style-type: none"> <li>There are County Wildlife Sites located at South Yeo Fields, Allenstyle Wood, Mill Leat (Fremington), Saltpill duckpond and Horsey Island for their local nature conservation importance.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
Critical infrastructure	<ul style="list-style-type: none"> <li>Major road links including the A361 following the North bank of the River Taw, the A386 on the west bank of the River Torridge are on low-lying ground and may be at risk from flooding.</li> <li>The B3231 is on low-lying ground and may also</li> </ul>	<ul style="list-style-type: none"> <li>To ensure critical road and rail linkages are maintained.</li> </ul>	



<b>WESTWARD HO! TO SAUNTON DOWN (Section C)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	<p>be at risk from flooding.</p> <ul style="list-style-type: none"> <li>The Barnstaple to Exeter railway line, following the Taw Estuary, may be vulnerable to flooding.</li> </ul>		
Chivenor Military Camp/ Braunton Burrows	<ul style="list-style-type: none"> <li>A strategically important RAF base camp at Chivenor within Taw-Torridge Estuary may be at risk from flooding.</li> <li>The Ministry of Defence also lease and look after part of Braunton Burrows and are unlikely to be affected.</li> </ul>	<ul style="list-style-type: none"> <li>To minimise the impact of policies on military operations and activities.</li> </ul>	
Heritage features	<ul style="list-style-type: none"> <li>There are 14 Conservation Areas including: Bideford, Appledore, Northam, Westleigh, Instow, Fremington, Lake, Barnstaple, Landkey, Ashford, Marwood, Heaten Parchardon, Guineaford and Braunton. Where any parts of these are on low-lying land, they may be at risk from flooding.</li> <li>There are 6 Scheduled Monuments within the Study area including Barnstaple Castle, Godsbrough Castle Earthwork, Kenwith Castle, Lenwood Bowl Barrow, The Castle Knowle, Spreacombe Manor Well Chapel (Braunton). Where these are located on low-lying land, they may be at risk from flooding.</li> <li>There are three Registered Park and Gardens including: Saunton Court, Tapeley Park and Youlston Park. Saunton Court may be susceptible to erosion whilst Tapeley Park is at risk of flooding.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of scheduled and other nationally important cultural heritage sites.</li> </ul>	
Agricultural land	<ul style="list-style-type: none"> <li>The land classification varies from Grade 5 to Grade 2, although the lower grades tend to be</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss due to erosion of and/or manage risk of flooding to agricultural</li> </ul>	

**Hartland Point to Anchor Head SMP2  
Issues and Objectives Table**

<b>WESTWARD HO! TO SAUNTON DOWN (Section C)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	within the estuary itself or immediately adjacent to the estuary.	land (Grade 3 and above).	

<b>SAUNTON DOWN TO MORTE POINT (Section D)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Isolated cliff top properties, including a Farm, and several cliff top hotels at Woolcombe and Barricane beach	<ul style="list-style-type: none"> <li>There are several residential and business properties and the risk of erosion to these properties and land is dependent upon the local cliff geology.</li> <li>Minor roads providing access to properties may be at risk from erosion, depending upon local geology.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion.</li> <li>To ensure critical road linkages are maintained (as long as required).</li> </ul>	This section of coast forms the northern part of Bideford Bay. It contains the embayments of Croyde and Morte Bay which contain wide sandy beaches and dune systems. This is predominantly a cliffed section of coast with a small area of low-lying land along the coastal fringe at Woolcombe. With the exception of Putsborough sands, there are no coastal defences.
Tourist facilities	<ul style="list-style-type: none"> <li>The beaches at Rockham Bay, Croyde, Putsborough Woolcombe and Barricane Bay are of vital importance to the tourist industry of North Devon. Many cafes, camping parks, guesthouses, hotels and holiday parks are reliant upon the associated visiting population.</li> <li>The South West Coastal Path also runs along the most of this frontage and is at risk from erosion – but there is potential for this to be relocated.</li> <li>As this is an important tourist destination, access, parking and basic facilities are required at various locations along the coast, and if located near the cliff edge may be subject to erosion, but potentially these could be relocated if land was available.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> </ul>	It is also a very popular stretch of coast for visitors to enjoy the beaches.  This stretch of coast has numerous geological exposures of national interest. The headland cliffs of Baggy Point and Morte Point are hard and erosion resistant although cliff failure may occur in locations over time.  Sea level rise may result in shoreline retreat within the Bays, although the dunes at the back of Croyde Bay are sufficiently wide for erosion to not pose a threat to their integrity. Whilst at Putsborough, where the dunes are narrower, a net loss of dune width is likely to occur.
Saunton to Baggy Point	<ul style="list-style-type: none"> <li>Designated for its geological exposures (Lower</li> </ul>	<ul style="list-style-type: none"> <li>To allow natural processes and maintain</li> </ul>	South West Coast Path policy is to allow

<b>SAUNTON DOWN TO MORTE POINT (Section D)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Coast SSSI (geological)	Pilton Beds with fossils), geomorphology and botanical interest.	visibility of geological exposures throughout geological SSSIs.	natural processes to occur and realign the path inland as necessary.
Barricane beach SSSI (geological)	<ul style="list-style-type: none"> <li>Designated for the Upper Devonian (Frasnian – Fammenian) Morte Slates and are highly fossiliferous.</li> </ul>	<ul style="list-style-type: none"> <li><b>To allow natural processes and maintain visibility of geological exposures throughout geological SSSIs.</b></li> </ul>	
Mill Rock SSSI (geological)	<ul style="list-style-type: none"> <li>Designated for its well preserved fragments of Upper Devonian fish.</li> </ul>	<ul style="list-style-type: none"> <li><b>To allow natural processes and maintain visibility of geological exposures throughout geological SSSIs.</b></li> </ul>	
Morte Point SSSI (geological)	<ul style="list-style-type: none"> <li>Designated for its maritime heath, coastal cliffs and foreshore habitats.</li> </ul>	<ul style="list-style-type: none"> <li><b>To allow natural processes and maintain visibility of geological exposures throughout geological SSSIs.</b></li> </ul>	
Middleborough Hill and Woolacombe Down County Wildlife Sites	<ul style="list-style-type: none"> <li>There are two County Wildlife Sites including Middleborough Hill and Woolacombe Down, which may due to their location be vulnerable to erosion and flooding.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
North Devon AONB and North Devon Heritage Coast	<ul style="list-style-type: none"> <li>The area is designated for its rich landscape which encompasses landscape, people and nature. The AONB aims to conserve the best qualities of the landscape by helping to guide and manage change.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid conflict with AONB Management Plan, Heritage Coast and Coastal Preservation Area Objectives.</li> </ul>	
Heritage features	<ul style="list-style-type: none"> <li>Woolacombe is the only designated Conservation Area; areas adjacent to the cliffs may be vulnerable to erosion.</li> <li>There are a number of Listed Buildings and archaeological sites along this stretch of coastline, but no Scheduled Monuments. These</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of scheduled and other nationally important cultural heritage sites.</li> </ul>	

<b>SAUNTON DOWN TO MORTE POINT (Section D)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	are susceptible to flooding or erosion.		
Agricultural land	<ul style="list-style-type: none"> <li>Grade 3 farmland on Saunton Down and Baggy Point stretches inland from the cliff tops including some areas of Grade 2 land; therefore any erosion at these locations may affect the net area of this medium to high grade farmland.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss due to erosion of and/or manage risk of flooding to agricultural land (Grade 3 and above).</li> </ul>	

<b>MORTE POINT TO MINEHEAD (Section E)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Ilfracombe	<ul style="list-style-type: none"> <li>Small port/harbour with properties on the sea front that are at the greatest risk of flooding.</li> <li>Ilfracombe's picturesque qualities, wide range of services and activities provide an excellent tourist location, some of these facilities particularly those based on cliff tops may be at risk from erosion or flooding,</li> <li>Hele, Capstone, Wildermouth and Tunnels beach are nearby.</li> <li>Fishing fleet is based at Ilfracombe.</li> <li>420 new dwellings have been planned for Ilfracombe to be implemented by 2011.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>To minimise the impact of policies on marine operations and activities.</li> </ul>	<p>This section of coast is predominantly rural and undeveloped lying within Exmoor National Park. The population is concentrated amongst several small towns and villages including: Lee, Ilfracombe, Hele, Combe Martin, Lynton and Lynmouth, Porlock and Minehead. At these locations coastal defences generally take the form of seawalls and structures associated with harbour development. This section of coast has nationally important geological features Improvements to coastal defences may pose a threat to these features and may interfere with potential sediment transport pathways along the shoreline. This section of coast also has international and national nature conservation interest and key features over time will be subject to natural processes of erosion and flooding, but this should not affect the integrity of these sites.</p> <p>Although the coastline is hard rock there are</p>
Combe Martin	<ul style="list-style-type: none"> <li>Small coastal town nestled within a steep valley leading down to the sea with a beach frontage. Although there is a sea wall, some properties on the beach front are at risk from flooding.</li> <li>Popular tourist destination with many attractions and tourist associated businesses.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity</li> </ul>	

<b>MORTE POINT TO MINEHEAD (Section E)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
		<p>facilities.</p> <ul style="list-style-type: none"> <li>To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>To minimise the impact of policies on marine operations and activities.</li> </ul>	<p>local variations and several cliff top holiday parks and camp sites may be at risk from erosion.</p> <p>The management of Porlock is undertaken by the National Trust, who has a policy of allowing Porlock Ridge to rollback in response to sea level rise. The ridge is likely to rollback landwards and breach more frequently in response to sea level rise and future climate change. The management of the landfill site in this area is a consideration.</p>
Watermouth and Berrynabor	<ul style="list-style-type: none"> <li>Between Watermouth and Berrynabor there are several cliff top holiday parks and camping sites which maybe at risk from cliff erosion.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss due to erosion of commercial and economic assets and activities.</li> </ul>	<p>South West Coast Path policy is to allow natural processes to occur and realign the path inland as necessary.</p>
Lynton & Lynmouth	<ul style="list-style-type: none"> <li>Lynmouth is a small port with large marina offering a wide range of tourist activities and has tourism related infrastructure. A cliff railway runs between Lynmouth and Lynton for recreational use. The low-lying parts of Lynmouth are at risk from flooding.</li> <li>There are beaches at Woody Bay and Lynmouth which are important local attractions.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>To minimise the impact of policies on marine operations and activities.</li> </ul>	
Porlock, Porlock Weir, Porlockford, West Porlock and Bossington	<ul style="list-style-type: none"> <li>Low-lying ground at Porlock, Porlock Weir, Porlockford and Bossington is at risk from flooding.</li> <li>Landfill site at risk of flooding with potential to cause contamination</li> <li>Small harbour and beach at Porlock Weir</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity</li> </ul>	

<b>MORTE POINT TO MINEHEAD (Section E)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	(recommended by the Marine Conservation Society). The beach and wider bay is an important local attraction.	<p>facilities.</p> <ul style="list-style-type: none"> <li>To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li><b>To achieve compliance with Water Framework Directive objectives.</b></li> <li><b>To prevent pollution from contaminated sources.</b></li> </ul>	
Minehead (West of Harbour)	<ul style="list-style-type: none"> <li>The western side of Minehead towards Higher Town is on high ground and not at risk from flooding. (This is not the case to the east of Minehead - Section F).</li> <li>The A39 west of Minehead withstands flood risk. (This is not the case to the east of Minehead - Section F).</li> </ul>	<ul style="list-style-type: none"> <li>To manage risk of flooding to people and property.</li> <li>To ensure critical road and rail linkages are maintained.</li> </ul>	
South West Coast Path	<ul style="list-style-type: none"> <li>The South West Coast Path runs along this entire stretch of coastline and may be susceptible to erosion, although if this occurs it will be relocated inland. It is also likely to be flooded where it passes low-lying areas.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> </ul>	
Exmoor National Park	<ul style="list-style-type: none"> <li>The aim of the park is to conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park and promote opportunities for the understanding and enjoyment of the Park by the public.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
North Devon AONB and Exmoor Heritage Coast	<ul style="list-style-type: none"> <li>These areas are designated for their rich landscape which encompasses landscape, people and nature. The AONB and Heritage Coast aims to conserve the best qualities of the</li> </ul>	<ul style="list-style-type: none"> <li>To avoid conflict with AONB and Heritage Coast Management Plan Objectives.</li> </ul>	

<b>MORTE POINT TO MINEHEAD (Section E)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
	landscape by helping to guide and manage change.		
Exmoor Heath and Coast SAC	<ul style="list-style-type: none"> <li>Designated for its blanket bogs; alkaline fens; European dry heaths; Northern Atlantic wet heaths with <i>Erica tetralix</i>; old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i>; and vegetated sea cliffs.</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	
Exmoor Coastal Heaths SSSI	<ul style="list-style-type: none"> <li>Designated for its extensive heathland communities, woodland, scrub, acidic and maritime grassland and the important butterfly and bird species it supports.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Morte Point SSSI	<ul style="list-style-type: none"> <li>Designated for its maritime heath, coastal cliffs foreshore habitats and geological exposures of Upper Devonian Rocks.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Hele Samsons and Combe Martin Bay SSSI (Geological)	<ul style="list-style-type: none"> <li>Designated for its exposures of Middle Devonian Ilfracombe beds, consisting of sandstone, mudstone and occasional limestone with fossils.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Napps Cave SSSI	<ul style="list-style-type: none"> <li>This cave is designated due to its size and abundance of agonite crystals as well as its inhabitants of greater and lesser horseshoe bats.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
West Exmoor Coast and Woods SSSI	<ul style="list-style-type: none"> <li>Designated for its ancient sessile oak woodlands; maritime plant communities; rich bird population; and geological and geomorphological features of interest.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation</b></li> </ul>	

<b>MORTE POINT TO MINEHEAD (Section E)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
		<b>sites.</b>	
Porlock Ridge and Saltmarsh SSSI	<ul style="list-style-type: none"> <li>Designated for its saltmarsh, extensive shingle ridge which is undergoing geomorphological change and the overwintering and migratory birds. The marsh behind the ridge is susceptible to inundation as the ridge is decreasing in width and rolling back. Over time although it is beneficial to create intertidal habitats, there will be an adverse effect on freshwater plant species present in the marsh area.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
The Dunkery and Horner Wood NNR	<ul style="list-style-type: none"> <li>Designated for its ancient oak woodlands supporting noteworthy birds, bats and plants; and for its range of heathland habitats supporting noteworthy invertebrates, birds and plants.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Hilsborough LNR	<ul style="list-style-type: none"> <li>This LNR is located on high ground near Ilfracombe, but its net area and key features may be at risk from cliff erosion.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
County Wildlife Sites	<ul style="list-style-type: none"> <li>There are 49 County Wildlife Sites and one LNR within this section of coast; those located directly on the coastline may be at risk from erosion and areas that are low-lying are likely to be at risk from flooding.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
Regionally Important Geological Site (RIGS)	<ul style="list-style-type: none"> <li>There are 7 RIGS within this section of coast designated for their geological exposures or coastal geomorphology and due to increased sea levels are likely to change over time due to increased wave action causing erosion.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
North Devon AONB	<ul style="list-style-type: none"> <li>The area is designated for its rich landscape which encompasses landscape, people and</li> </ul>	<ul style="list-style-type: none"> <li>To avoid conflict with AONB</li> </ul>	



<b>MORTE POINT TO MINEHEAD (Section E)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
and Heritage Coast	nature. The AONB and Heritage Coast aims to conserve the best qualities of the landscape by helping to guide and manage change.	Management Plan Objectives.	
Heritage features	<ul style="list-style-type: none"> <li>• There are 12 Conservation Areas including: Morte Hoe, Lee, Ilfracombe Combe Martin, Berrynabor, Lynton, Lynmouth, Porlock, Lynch, Minehead Selworthy and Allerford. Low-lying heritage sites are likely to be at risk of flooding.</li> <li>• There are 17 Scheduled Monuments where these are located within low-lying areas they are at risk from flooding.</li> <li>• There is a number of Listed Buildings and archaeological sites along this stretch at risk from flooding.</li> <li>• This stretch of coast includes 5 Registered Parks and Gardens including St Audries, Arlington Court, Nettlecombe Court and Crowcombe Court. As these are on relatively high ground they are not susceptible to flooding.</li> </ul>	<ul style="list-style-type: none"> <li>• To avoid loss of scheduled and other nationally important cultural heritage sites.</li> </ul>	
Agricultural land	<ul style="list-style-type: none"> <li>• The land is generally low grade (4 to 5) and therefore is not considered for policy setting, although there is a small area west of Ilfracombe that is Grade 2 land which may be at risk from erosion to be considered.</li> </ul>	<ul style="list-style-type: none"> <li>• To avoid loss due to erosion of and/or manage risk of flooding to agricultural land (Grade 3 and above).</li> </ul>	

<b>MINEHEAD TO HINKLEY POINT (Section F)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Minehead (east of Harbour)	<ul style="list-style-type: none"> <li>• Eastern parts of the town, including the holiday park, are at risk of flooding. This is in part related to the risk of flooding from the low-lying land to the east of Minehead at Dunster.</li> <li>• Beach at Minehead Terminus is recommended by the Marine Conservation Society. Other beaches are located at: The Strand (Minehead), Watchet, Lilstock, Blue Anchor West and these are important attractions for residents and visitors.</li> <li>• Minehead and Watchet have harbour infrastructure, Watchet supports the Watchet Sailing and Yacht Club.</li> <li>• West Somerset railway is important infrastructure defended in part by a sea wall along Blue Anchor although it is susceptible to flooding where there is low-lying ground. Flooding is likely to affect several stations including: Dunster, Blue Anchor and Watchet.</li> <li>• The A39 is a major link road providing access to Minehead and along the north coast; and this is at risk from flooding in low-lying areas.</li> </ul>	<ul style="list-style-type: none"> <li>• To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>• To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>• To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>• To ensure critical road and rail linkages are maintained.</li> <li>• To minimise the impact of policies on marine operations and activities</li> </ul>	<p>Minehead to Hinkley Point includes Blue Anchor bay and the western fringe of Bridgwater Bay and the Severn Estuary. The coastline is undulating with both cliffed and low-lying sections.</p> <p>Most of this coastline is undefended, although several areas along this section have groynes and seawalls including: Minehead, Dunster, Blue Anchor, Watchet, Lilstock, Doniford and Hinkley Point. Other structures associated with harbour development also provide some defence. All interfere with potential sediment transport pathways along the shoreline.</p> <p>This section of coast has nationally important geological features therefore improvements to coastal defence may pose a threat to these features.</p> <p>Between Minehead and Blue Anchor are low-lying areas of former saltmarsh that have developed following enclosure by a gravel storm ridge. This ridge is eroding and rolling back and the low-lying land behind is susceptible to flooding, although this would be beneficial for habitat creation, this has to be considered alongside potential flood risk to the eastern side of Minehead. Between Warren Point and Dunster the ridge is backed by dunes that formed prior to the development of the pebble ridge and these are likely to prevent the complete breakdown</p>
Hinkley Point Power Station	<ul style="list-style-type: none"> <li>• There are two power stations at Hinkley Point (one is being decommissioned and the other is operational) and there are proposals for one or more new reactors. These power stations are an important strategic power supply and although this area is defended by a seawall and rock armour this area is susceptible to flooding with sea level rise.</li> </ul>	<ul style="list-style-type: none"> <li>• To ensure critical services remain operational.</li> </ul>	

<b>MINEHEAD TO HINKLEY POINT (Section F)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Severn Estuary Ramsar	<ul style="list-style-type: none"> <li>This designation includes the extensive variety of estuary habitats, communities and noteworthy populations of invertebrates, fish, over wintering and migratory birds.</li> <li>It is likely over time that the net area and distribution of these habitats and the species it supports will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated.</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	<p>of the ridge in this area if the ridge is breached.</p> <p>The beach at Minehead was recharged in 1998; it is more or less stable with a slight tendency towards erosion, whereas the beach at Blue Anchor is relatively stable. Any work on defences may affect natural sources of sediment supply to these beaches which are an important local attraction.</p> <p>There is likely to be narrowing of the intertidal zone as sea levels rise increasing the amount of energy reaching the defences.</p>
Severn Estuary SPA	<ul style="list-style-type: none"> <li>This designation includes the internationally and nationally important populations of breeding, migratory and overwintering waders and water fowl using the Severn estuary.</li> <li>It is likely over time that the net area and distribution of the intertidal habitats that are crucial to supporting the internationally and nationally important populations of migratory, breeding and overwintering birds will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated to ensure the important bird populations are supported.</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	<p>The eastern side towards Hinkley Point is a part of the Severn Estuary which is an internationally important nature conservation site, which will require consideration during any alterations to improve flood defence.</p> <p>Hinkley Point Power Station must be retained in situ for the life of the Strategy. This is likely to require further investment in coastal defences, which will impact on the geology and landscape of the shoreline. The site has been identified as a likely location new nuclear build.</p>
Severn Estuary cSAC	<ul style="list-style-type: none"> <li>Designated habitats include: estuaries; mudflats and sandflats not covered by seawater at low tide; Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>); sandbanks which are slightly covered by seawater all the time; and</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	

MINEHEAD TO HINKLEY POINT (Section F)			
Location/ feature	Key issues	Objectives that apply	Key Considerations
	<p>reefs.</p> <ul style="list-style-type: none"> <li>Designated species include: sea lamprey <i>Petromyzon marinus</i>; river lamprey <i>Lampetra fluviatilis</i> and Twaite shad <i>Alosa fallax</i>.</li> <li>It is likely over time that the net area and distribution of these habitats and the species it supports will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated.</li> </ul>		
Exmoor and Quantocks Oak Woods SAC	<ul style="list-style-type: none"> <li>Designated for old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; and alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicon albae</i>).</li> <li>Designated species includes: Barbastelle <i>Barbastella barbastella</i>, Bechstein's bat <i>Myotis bechsteinii</i> and otter <i>Lutra lutra</i></li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	
Dunster Park and Heathlands	<ul style="list-style-type: none"> <li>Designated for its lowland dry heath; dry lowland acid grassland; wood-pasture with veteran trees and black polar <i>Populus nigra</i>; and ancient semi-natural woodland; supporting invertebrates and birds.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Blue Anchor to Lilstock Coast SSSI	<ul style="list-style-type: none"> <li>Notable for its geology and geomorphology. Geologically it is one of the thickest successions of the Jurassic period and is probably the best in North West Europe.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Bridgwater Bay SSSI and NNR (biological and	<ul style="list-style-type: none"> <li>Designated for its succession of coastal habitats and the internationally and nationally important</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical</b></li> </ul>	

**MINEHEAD TO HINKLEY POINT (Section F)**

Location/ feature	Key issues	Objectives that apply	Key Considerations
geological)	numbers of over wintering, passage and migrant waders and waterfowl.	enhance the designated interest of nationally designated conservation sites.	
Quantocks SSSI	<ul style="list-style-type: none"> <li>Designated for its extensive dry dwarf shrub heath, wet dwarf shrub heath acidic flushes, ancient semi natural woodland and dense scrub.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</li> </ul>	
County Wildlife Sites	<ul style="list-style-type: none"> <li>There are 29 CWSSs, where located on low-lying ground they are susceptible to flooding</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
Quantocks Hills AONB	<ul style="list-style-type: none"> <li>The area is designated for its rich landscape which encompasses landscape, people and nature. The AONB aims to conserve the best qualities of the landscape by helping to guide and manage change.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid conflict with AONB Management Plan objectives.</li> </ul>	
Heritage Features	<ul style="list-style-type: none"> <li>There are 7 areas Conservation Areas including Minehead, Alcombe, Dunster, Old Cleeve, Watchet, Holford and Stogursey. Of which Watchet, Dunster and Minehead may be at risk of flooding.</li> <li>There are 16 Scheduled Monuments, some are located on relatively low-lying ground and are susceptible to flooding.</li> <li>There are three Registered Parks and Gardens including Dunster Castle, Halswell Park and Fairfield. These are located on relatively low-lying ground and are susceptible to flooding.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of scheduled and other nationally important cultural heritage sites.</li> </ul>	
Agricultural Land	<ul style="list-style-type: none"> <li>Predominantly Grade 3 agricultural land which</li> </ul>	<ul style="list-style-type: none"> <li>To manage risk of flooding to agricultural</li> </ul>	

**Hartland Point to Anchor Head SMP2  
Issues and Objectives Table**

<b>MINEHEAD TO HINKLEY POINT (Section F)</b>		
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>
	due to its low-lying nature is susceptible to flooding.	land (Grade 3 and above).
<b>Key Considerations</b>		

**HINKLEY POINT TO BREAN DOWN (Section G)**

<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Hinkley Point Power Station	<ul style="list-style-type: none"> <li>There are two power stations at Hinkley Point (one is being decommissioned and the other is operational) and there are proposals for one or more new reactors. These power stations are/will be an important strategic power supply and although this area is defended by a seawall and rock armour this area is susceptible to flooding with sea level rise.</li> </ul>	<ul style="list-style-type: none"> <li>To ensure critical services remain operational.</li> </ul>	<p>This section of coast between Hinkley Point and Brean Down represents the southern and northern limits of Bridgwater Bay, into which the River Parrett drains.</p> <p>Hinkley Point and Brean Down are geological hard points within an otherwise soft geological area and provide important controls upon the evolution of the bay.</p>
Landfill	<ul style="list-style-type: none"> <li>There are landfill sites at Hinkley Point that are susceptible to flooding this may lead to erosion.</li> </ul>	<ul style="list-style-type: none"> <li><b>To achieve compliance with Water Framework Directive objectives.</b></li> <li><b>To prevent pollution from contaminated sources.</b></li> </ul>	<p>This section of coast fronts the extensive low-lying area of the Somerset and Bleadon Levels is susceptible to flooding as sea levels rise. The flood extent could be as far eastwards as Street affecting critical infrastructure including the A38, A39 and M5.</p>
Burnham-on-Sea and Highbridge	<ul style="list-style-type: none"> <li>Burnham-on-Sea is a low-lying residential area and coastal resort fronting a beach, it attracts many visitors and although defended by a wave return wall seawall and gabions it is at risk from flooding.</li> <li>Burnham-on-Sea and Highbridge have plans to implement 2200 new dwellings by 2026.</li> <li>Section of the A38 and M5 are at risk of flooding if the defences fail along the coast.</li> <li>Highbridge and Burnham-on-Sea railway stations and the main railway line to Bristol are at risk of</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>To ensure critical road and rail linkages</li> </ul>	<p>The coast is defended at Burnham-on-Sea, Bridgwater (within the Parrett Estuary) and Hinkley Point. There is also a section of defence immediately south of Brean Down.</p> <p>Due to a lack sediment supply to gravel ridges between Stolford and Steart, flood protection has been enhanced with gabions at Wall Common. This maintenance is unsustainable in the long term and therefore a policy of Managed Realignment is currently being developed. Although there will be a</p>

**Hartland Point to Anchor Head SMP2  
Issues and Objectives Table**

**HINKLEY POINT TO BREAN DOWN (Section G)**

Location/ feature	Key issues	Objectives that apply	Key Considerations
	<ul style="list-style-type: none"> <li>flooding.</li> <li>Burnham-on-Sea has a motorboat and sailing club.</li> </ul>	<ul style="list-style-type: none"> <li>are maintained.</li> <li>To minimise the impact of policies on marine operations and activities</li> </ul>	<p>potential loss of freshwater/brackish habitats (e.g. coastal grazing marsh) through flooding, the creation of intertidal habitat compensates habitat being lost elsewhere due to coastal squeeze.</p>
<p>Stofford, Steart, Stockland Bristol, Huntspill, Carrington, Bridgwater, Berron, Brean and Lympsham</p>	<ul style="list-style-type: none"> <li>Low-lying settlements which are at risk of flooding.</li> <li>Sections of the A38, A39 and M5 may be at risk of flooding if the defences fail along the coast</li> <li>7,700 new homes are planned at Bridgwater (6,200 within the urban area, 1,500 north of the town) and 54 ha of employment land, which are at risk of flooding.</li> <li>Bridgwater is a port</li> <li>Brean is a long beach providing an attraction for tourists</li> <li>There are landfill sites at Brean, Burnham-on-Sea and Highbridge that are susceptible to flooding and possibly erosion where located on the coastline.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>To ensure critical road and rail linkages are maintained.</li> <li>To minimise the impact of policies on marine operations and activities</li> <li><b>To achieve compliance with Water Framework Directive objectives.</b></li> <li><b>To prevent pollution from contaminated sources.</b></li> </ul>	<p>The Bridgwater Bay and Severn Estuary areas form an internationally and nationally important nature conservation area. Bridgwater Bay is a sink for fine sediment and mud (Bridgwater Bay mudbelt) which together with saltmarsh form intertidal habitats supporting internationally important populations of birds. Where sea defence is maintained, this intertidal habitat is likely to be reduced in extent as a result of coastal squeeze caused by rising sea levels.</p> <p>The Parrett estuary is largely constrained along its length by defences, which protect against flooding. The mouth of the estuary has migrated northwards in recent centuries. The River Brue also discharges into the Parrett Estuary via the Huntspill River using a sluice control structure to control flood risk upstream. The future position of the mouth is uncertain but will be an important influence on the evolution of the adjacent shorelines.</p> <p>Presence of defences between Burnham-on-Sea and Brean has resulted in the lowering of the foreshore and prevents landward dune migration.</p>
<p>Parrett Trail</p>	<ul style="list-style-type: none"> <li>The River Parrett Trail runs from the mouth to the source of the River Parrett and is susceptible to flooding.</li> </ul>	<ul style="list-style-type: none"> <li>To manage risk of flooding to key community, recreational and amenity facilities.</li> </ul>	
<p>Severn Estuary Ramsar</p>	<ul style="list-style-type: none"> <li>This designation includes the extensive variety of estuary habitats, communities and</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and</b></li> </ul>	<p>North of the mouth of the Parrett Estuary is the cliffed headland of Brean Down. Onshore</p>

**HINKLEY POINT TO BREAN DOWN (Section G)**

Location/ feature	Key issues	Objectives that apply	Key Considerations
Severn Estuary SPA	<p>noteworthy populations of invertebrates, fish, over wintering and migratory birds.</p> <ul style="list-style-type: none"> <li>It is likely over time that the net area and distribution of these habitats and the species it supports will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated.</li> <li>This designation includes the internationally and nationally important populations of breeding, migratory and overwintering waders and water fowl using the Severn Estuary.</li> <li>It is likely over time that the net area and distribution of the intertidal habitats that are crucial to supporting the internationally and nationally important populations of migratory, breeding and overwintering birds will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated.</li> </ul>	<p><b>the favourable condition of their interest features.</b></p> <ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	<p>winds have resulted in the development of longitudinal dunes which are currently eroding and may breach in the next 100 years. These help protect the low-lying Somerset Levels. They are also susceptible to backdoor flooding from Weston Bay (Axe Estuary). The dunes are fronted by a sandy foreshore which seaward becomes the intertidal Berrow mudflats.</p> <p>All low-lying land around the Parrett Estuary is at risk from flooding and this may conflict with areas of future development and infrastructure. This will also cause overtopping of the Parrett Trail.</p>
Severn Estuary cSAC	<ul style="list-style-type: none"> <li>Designated habitats include: estuaries; mudflats and sandflats not covered by seawater at low tide; Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>); sandbanks which are slightly covered by seawater all the time; and reefs.</li> <li>Designated species include: sea lamprey <i>Petromyzon marinus</i>; river lamprey <i>Lampetra</i></li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	



**HINKLEY POINT TO BREAN DOWN (Section G)**

Location/ feature	Key issues	Objectives that apply	Key Considerations
	<p><i>fluviatilis</i> and Twaite shad <i>Alosa fallax</i>.</p> <ul style="list-style-type: none"> <li>It is likely over time that the net area and distribution of these habitats and the species it supports will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated.</li> </ul>		
Bridgwater Bay SSSI and NNR (Biological and geological)	<ul style="list-style-type: none"> <li>Designated for its succession of coastal habitats and the internationally and nationally important numbers of over wintering, passage and migrant waders and waterfowl.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Huntspill River NNR	<ul style="list-style-type: none"> <li>This river is wholly artificial and is designated for the river habitats and species it supports. Temporary flooding of Freshwater/brackish habitats is unlikely to affect the integrity of the site.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Brean Down SSSI (biological and geological)	<ul style="list-style-type: none"> <li>This peninsula is designated for its Carboniferous limestone and maritime vegetation.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Berrow Dunes SSSI	<ul style="list-style-type: none"> <li>Designated for its wide range of coastal habitats including saltmarsh, fore, grey and yellow dunes, stable grassland and dune slacks, scrub and a freshwater lagoon. The freshwater lagoon may be susceptible to flooding as sea levels rise.</li> </ul>	<ul style="list-style-type: none"> <li><b>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</b></li> </ul>	
Berrow Dunes Local Nature Reserve	<ul style="list-style-type: none"> <li>Designated for its sand dune systems and wide variety of coastal habitats which support a</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the</li> </ul>	

<b>HINKLEY POINT TO BREAN DOWN (Section G)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
County Wildlife Sites	<p>diverse range of flora and fauna. Located within the Berron Dunes SSSI</p> <ul style="list-style-type: none"> <li>There are 10 CWSSs including: Wall Common West, subsite outside Bridgewater Bay NNR, River Brue, Apex Gardens, Brambles Road Ponds and Rhyme, St Christopher's playing ground, Brean Dunes, Ditch near Uphill, Bridgewater Road Verge, and Uphill Cliffs SSSI/LNR and adjacent land. Some low-lying sites may be at risk of flooding or from erosion if located on the coastline. There is potential loss of freshwater/brackish habitats (e.g. coastal grazing marsh) by following a policy of managed realignment although this creates opportunities for intertidal habitat creation.</li> </ul>	<p>designated interest of locally designated conservation sites.</p> <ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>	
Beach	<ul style="list-style-type: none"> <li>Beaches located at Brean, Brean Farm and beaches around Burnham-on-Sea Jetty and Burnham-on-Sea Yacht Club which form important local attractions.</li> </ul>	<ul style="list-style-type: none"> <li>To manage risk of flooding to key community, recreational and amenity facilities.</li> </ul>	
Heritage features	<ul style="list-style-type: none"> <li>Conservation Areas are located at Bridgewater and Burnham-on-Sea and are susceptible to flooding.</li> <li>Several Grade II Listed Buildings in Burnham-on-Sea that are susceptible to flooding.</li> <li>There are 6 Scheduled Monuments including a settlement, Wick Barrow Mound, Cynwit Castle, motte with two baileys, Alkstone lake settlement site, Brent Knoll. All are susceptible to flooding apart from Brent Knoll which is located on high ground.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of scheduled and other nationally important cultural heritage sites.</li> </ul>	

<b>HINKLEY POINT TO BREAN DOWN (Section G)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Agricultural Land	<ul style="list-style-type: none"> <li>Set back from the coastline is Grade 3-5 agricultural land. Due to the low-lying nature of this predominantly grazing marsh it is susceptible to flooding. Managed realignment between Stolford and Steart may cause a permanent net loss of grazing marsh.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss due to erosion of and/or manage risk of flooding to agricultural land (Grade 3 and above).</li> </ul>	

<b>BREAN DOWN TO ANCHOR HEAD (Section H)</b>			
<b>Location/ feature</b>	<b>Key issues</b>	<b>Objectives that apply</b>	<b>Key Considerations</b>
Weston-Super-Mare	<ul style="list-style-type: none"> <li>Low-lying residential area and coastal resort offering a wide range of tourist activities and has extensive tourism related infrastructure, although it is defended by a sea wall it is at risk of flooding.</li> <li>Multiple activities available on the wide sandy beaches at Sand Bay (recommended by Marine Conservation Society) and Weston Bay which are important local attractions.</li> <li>Small harbour at Knightstone in Weston-Super-Mare and there is a Weston Yacht Club</li> <li>There are 12,000 new homes planned for Weston-Super-Mare (3,000 within the urban area, 9,000 south- east of the town) and 34 ha of employment land which are at risk of flooding.</li> <li>The A370 is at risk of flooding.</li> <li>Weston-Super-Mare railway station and the main railway line to Bristol are at risk of</li> </ul>	<ul style="list-style-type: none"> <li>To avoid loss of property due to erosion and/or manage risk of flooding to people and property.</li> <li>To avoid loss due to erosion of and manage risk of flooding to key community, recreational and amenity facilities.</li> <li>To avoid loss due to erosion of and manage risk of flooding to industrial, commercial and economic assets and activities.</li> <li>To ensure critical road and rail linkages are maintained.</li> <li>To minimise the impact of policies on marine operations and activities</li> </ul>	<p>This section of coast encompasses the embayment of Weston Bay between the two resistant headlands of Brean Down and Anchor Head. It fronts a large lowland area which forms part of Severn Levels. The River Axe discharges into the Southern part of the bay.</p> <p>The beach at Weston Bay is an important local attraction to this seaside destination and annual recycling of the sand occurs from south to north. A recent review of data suggests the beach is relatively stable.</p> <p>Although Weston-Super-Mare is defended by a seawall that is in the process of being upgraded, this section fronts an extensive low-lying area (Severn Levels) susceptible to flooding as sea levels rise. The flood extent could be as far eastwards as Congresbury affecting critical infrastructure including the A39, M5 and the main railway line to Bristol.</p> <p>Around Anchor Head a seawall provides</p>

**BREAN DOWN TO ANCHOR HEAD (Section H)**

Location/ feature	Key issues	Objectives that apply	Key Considerations
Severn Estuary Ramsar	<p>flooding.</p> <ul style="list-style-type: none"> <li>This designation includes the extensive variety of estuary habitats, communities and noteworthy populations of invertebrates, fish, over wintering and migratory birds.</li> <li>It is likely over time that the net area and distribution of these habitats and the species it supports will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated.</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	<p>protection against localised cliff erosion.</p> <p>There are few defences along the southern part of the bay where a large dune system protects the low-lying area from flooding. Uphill and the Axe Estuary up to its tidal limit are defended and have constrained the landward migration of the dunes.</p> <p>Improving sea defences to protect low-lying ground may cause further narrowing and steepening of beach levels and could limit supply of sediment to the dune area making it difficult to sustain defences at Uphill (unless sufficient beach recharge occurs in the northern part of the bay).</p>
Severn Estuary SPA (River Axe, estuary is part of this)	<ul style="list-style-type: none"> <li>This designation includes the internationally and nationally important populations of breeding, migratory and overwintering waders and water fowl using the Severn estuary.</li> <li>It is likely over time that the net area and distribution of the intertidal habitats that are crucial to supporting the internationally and nationally important populations of migratory, breeding and overwintering birds will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated to ensure the important bird populations are supported.</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	<p>The Severn Estuary is an internationally and nationally important nature conservation area. Where sea defence is maintained, this intertidal habitat is likely to be reduced in extent as a result of coastal squeeze caused by rising sea levels.</p> <p>Erosion of Brean Down could link Weston and Bridgwater Bays leaving Brean Down as an Island and resulting in the relocation of the Axe Estuary mouth.</p> <p>All low-lying land around the Axe estuary is at risk from flooding and this may conflict with areas of future development and infrastructure proposed for Weston-Super-Mare. This will also cause overtopping of the West Mendip Way.</p>
Severn Estuary candidate SAC (cSAC)	<ul style="list-style-type: none"> <li>Designation habitats include: estuaries; mudflats and sandflats not covered by seawater at low tide; Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>); and sandbanks which</li> </ul>	<ul style="list-style-type: none"> <li><b>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</b></li> </ul>	<p>The Seven Tidal Power Scheme across the</p>

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	<p>are slightly covered by seawater all the time; reefs</p> <ul style="list-style-type: none"> <li>Designated species include: sea lamprey <i>Petromyzon marinus</i>; river lamprey <i>Lampetra fluviatilis</i> and Twaite shad <i>Alosa fallax</i>.</li> <li>It is likely over time that the net area and distribution of these habitats and the species it supports will vary in accordance with the natural processes. Where coastal squeeze occurs (sea level rise against sea defences) there is likely to be a net decrease in intertidal habitat which will have to be compensated.</li> </ul>		Severn Estuary has identified several options including locations between Weston-Super-Mare and Cardiff.
Mendip Limestone Grasslands SAC	<ul style="list-style-type: none"> <li>Designated for its <i>Tilio-Acerion</i> forests of slopes, screes and ravines, caves not open to the public, European dry heaths, semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>).</li> <li>Designated species include the greater horseshoe bat <i>Rhinolophus ferrumequinum</i>.</li> </ul>	<ul style="list-style-type: none"> <li>To maintain the integrity of internationally designated sites and the favourable condition of their interest features.</li> </ul>	
Severn Estuary SSSI	<ul style="list-style-type: none"> <li>The estuary is designated for its wide range of coastal habitats and is one of the largest and most important estuaries in Britain. Its unique funnel shape makes it rare in Britain and Worldwide. It supports important populations of invertebrates, fish and birdlife.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</li> </ul>	
Brean Down SSSI (biological and geological)	<ul style="list-style-type: none"> <li>This peninsula is designated for its carboniferous limestone and maritime vegetation.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</li> </ul>	

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Uphill SSSI	<ul style="list-style-type: none"> <li>Designated for its species rich chalk grassland supporting many invertebrates particularly butterflies. Also forms part of Mendip Limestone Grasslands SAC.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</li> </ul>
Walborough SSSI	<ul style="list-style-type: none"> <li>Exceptionally rich flora including a number of nationally rare species.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated conservation sites.</li> </ul>
Uphill LNR	<ul style="list-style-type: none"> <li>Species rich chalk grassland supporting many invertebrates particularly butterflies.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>
Walborough Common LNR	<ul style="list-style-type: none"> <li>Exceptionally rich flora including a number of nationally rare species of plants and butterflies.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>
County Wildlife Sites	<ul style="list-style-type: none"> <li>There are 5 CWS including: Seven Estuary (Axe Estuary to Weston Golf Course); Weston Golf Course and fields below Uphill; Uphill Great Rhyme; Ellenborough Park; Spring Cove Cliffs</li> </ul>	<ul style="list-style-type: none"> <li>To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites.</li> </ul>
Mendip Hills AONB	<ul style="list-style-type: none"> <li>The area is designated for its rich landscape which encompasses landscape, people and nature. The AONB aims to conserve the best qualities of the landscape by helping to guide and manage change.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid conflict with AONB Management Plan Objectives.</li> </ul>
West Mendip Way	<ul style="list-style-type: none"> <li>Starts at Uphill on the coast and leads inland to Wells and is susceptible to flooding in the low-lying areas.</li> </ul>	<ul style="list-style-type: none"> <li>To manage risk of flooding to key community, recreational and amenity facilities.</li> </ul>

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Heritage features	<ul style="list-style-type: none"> <li>• Weston-Super-Mare is a designated Conservation Area susceptible to flooding;</li> <li>• There are 7 Scheduled Monuments, where located on low-lying ground they are at risk from erosion</li> <li>• There are numerous Grade II Listed Buildings and sites of archaeological importance that are susceptible to flooding</li> </ul>	<ul style="list-style-type: none"> <li>• To avoid loss of scheduled and other nationally important cultural heritage sites.</li> </ul>	
Agricultural Land	<ul style="list-style-type: none"> <li>• Set back from Weston-Super-Mare is Grade 3-4 agricultural land. Due to the low-lying nature of this area, it is susceptible to flooding.</li> </ul>	<ul style="list-style-type: none"> <li>• To avoid loss due to erosion of and/or manage risk of flooding to agricultural land (Grade 3 and above).</li> </ul>	