North Devon and Somerset Coastal Advisory Group (NDASCAG)

Shoreline Management Plan SMP2
Hartland Point to Anchor Head

Appendix D – SEA Environmental Baseline Report (Theme Review)



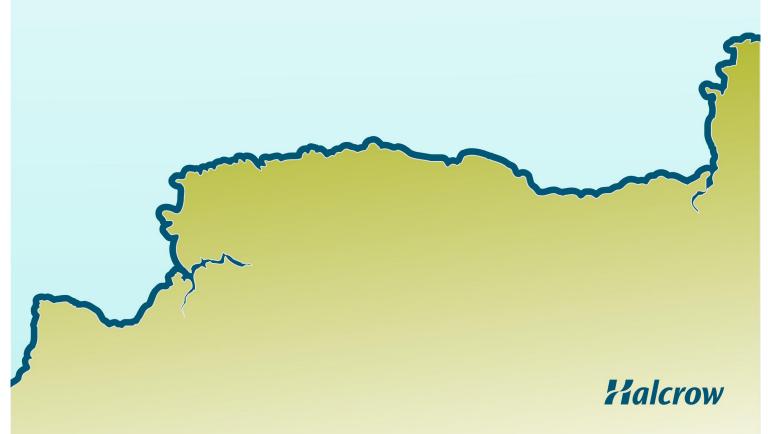












The Supporting Appendices

These appendices and the accompanying documents provide all of the information required to support the Shoreline Management Plan. This is to ensure that there is clarity in the decision-making process and that the rationale behind the policies being promoted is both transparent and auditable. The appendices are:

A: SMP Development	This reports the history of development of the SMP, describing more fully the plan and policy decision-making process.
B: Stakeholder Engagement	All communications from the stakeholder process are provided here, together with information arising from the consultation process.
C: Baseline Process Understanding	Includes baseline process report, defence assessment, NAI and WPM assessments and summarises data used in assessments.
D: SEA Environmental Baseline Report (Theme Review)	This report identifies and evaluates the environmental features (human, natural, historical and landscape).
E: Issues & Objectives Evaluation	Provides information on the issues and objectives identified as part of the Plan development, including appraisal of their importance.
F: Initial Policy Appraisal & Scenario Development	Presents the consideration of generic policy options for each frontage, identifying possible acceptable policies, and their combination into 'scenarios' for testing. Also presents the appraisal of impacts upon shoreline evolution and the appraisal of objective achievement.
G: Preferred Policy Scenario Testing	Presents the policy assessment and appraisal of objective achievement towards definition of the Preferred Plan (as presented in the Shoreline Management Plan document).
H: Economic Appraisal and Sensitivity Testing	Presents the economic analysis undertaken in support of the Preferred Plan.
I: Strategic Environmental Assessment (SEA) Report	Presents the various items undertaken in developing the Plan that specifically relate to the requirements of the EU Council Directive 2001/42/EC (the Strategic Environmental Assessment Directive), such that all of this information is readily accessible in one document.
J: Appropriate Assessment Report	Presents the Appropriate Assessment of SMP policies upon European designated sites (SPAs and SACs) as well as Ramsar sites, where policies might have a likely significant effect upon these sites. This is carried out in accordance with the Conservation (Natural Habitats, &c.) Regulations 1994 (the Habitats Regulations).
K: Water Framework Development Report	Presents assessment of potential impacts of SMP policies upon coastal and estuarine water bodies, in accordance with the requirements of EU Council Directive 2000/60/EC (the Water Framework Directive).
L: Metadatabase and Bibliographic database	All supporting information used to develop the SMP is referenced for future examination and retrieval.
M: Action Plan Summary Table	Presents the Action Plan items included in Section 6 of the main SMP document (The Plan) in tabular format for ease of monitoring and reporting action plan progress.

Within each appendix cross-referencing highlights the documents where related appraisals are presented. The broad relationships between the appendices are illustrated below.

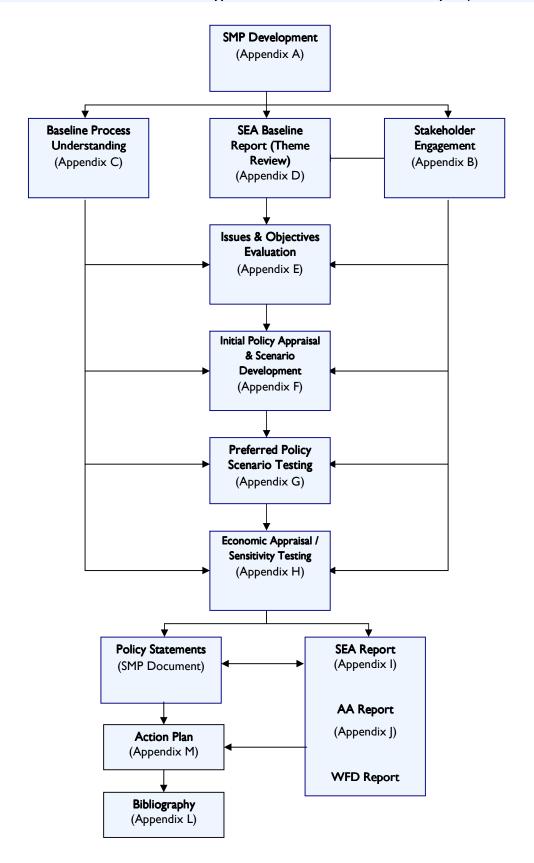


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D.I Introduction

This Appendix contains the Theme Review, which identifies key environmental features along the coast and why these features are important to stakeholders (i.e. the benefits that the feature provides). Information from this review will be used as a basis for developing policy options and assessing the impacts and suitability of these options. This information also serves as the environmental baseline of the Strategic Environment Assessment Scoping Report.

To initiate the assessment of the features and their benefits present along the shoreline, the Theme Review identifies the key characteristics and importance of features for the Natural Environment, Landscape Character, Historic Environment and Current and Future Land Use. These are preceded by an overview of the coastline, subdivided into 8 sections.

The inland boundary of the SMP has been taken to be I km inland of the coastline or as appropriate between Hartland Point and Anchor Head. Environmental features and assets lying wholly or partly within this area have been included in this Theme Review.

In developing this Theme Review, The Bridgwater Bay to Bideford Bay Shoreline Management Plan (North Devon & Somerset Coastal Group, 1998) has been reviewed as a starting point.



D.2 Description of Coastline

D.2.1 Section A: Lundy

Lundy is located in the Bristol Channel, mid way between South Wales and North Devon, sited approximately 18km off Hartland Point. The island is a horizontal plateau of granite 5km long by 1km wide, surrounded by 15km of coastline of steep slopes and cliffs rising approximately 110m from the sea.

The western cliffs are very exposed and therefore sparsely vegetated; this habitat supports a variety of breeding sea birds. The eastern cliffs are more sheltered and vegetated; supporting the Lundy cabbage, a protected species endemic to Lundy. The land and waters of Lundy are ecologically rich and contain sites of national and international importance including a Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC). It is also has a Marine Nature Reserve with an established zoning system including Britain's first ever 'no take' zone, this is a Marine Protected Area where there is no fishing or collection of wildlife. The Braunton Burrows UNESCO Biosphere's transition zone also stretches out to Lundy.

People have lived on Lundy since prehistoric times providing an abundance of archaeological history throughout the ages, much unrecorded. Lundy has thirteen Scheduled Monuments and two nationally protected ship wrecks.

Agriculture is the dominant land use of the island and Lundy is a popular visitor destination throughout the year, which supports the Island's economy.

D.2.2 Section B: Hartland Point to Westward Ho!

This section of coast represents the southern half of Barnstaple or Bideford Bay, starting at the prominent headland of Hartland Point and finishing 20km northeast at Westward Ho!, mid way along the Barnstaple or Bideford Bay.

Hartland Point is renowned for its spectacular red cliffs made predominantly from Devonian Old Red Sandstone, remnants of the desert climate in the Permian period (Exmoor and the Quantock Hills Natural Areas, 1997). The cliff tops from Hartland Point to Clovelly support a mosaic of habitats and together with the geology of this stretch form part of the wider Marsland to Clovelly Coast SSSI and Tintagel- Marsland-Clovelly Coast SAC. Further along the coast adjacent to Bideford between Mermaids Pool and Rowdens Gut is the only complete sequence of the Bideford Formation, this notable geology is a designated SSSI. This section also forms part of the wider UNESCO Biosphere buffer and transition zone.

This picturesque coastline attracts many visitors and has national status as the North Devon Area of Outstanding Natural Beauty (AONB) and Hartland Heritage Coast.

Hartland, Clovelly and Buck's Mills are Conservation Areas and there are Scheduled Monuments sparsely spread along the coast including hill forts and earthworks.

Land use inland of the wooded cliffs and maritime heathland is predominantly agricultural with fields bounded by hedgerows. Culm grassland is present forming pastures and moors of unimproved rushy grassland and poorly draining soils. This coastline is accessible by the South West Coast Path.

D.2.3 Section C: Westward Ho! to Saunton Down

This section of coast is approximately 10 miles long encompassing the northern half of Barnstaple/Bideford Bay, incorporating the Taw and Torridge Estuary. Westward Ho! Coastal Resort is located at the southernmost point of the estuary with Saunton Down headland forming the northern-most point.

This area has a wide range of habitats influenced by the coastal geomorphology and contains a number of nationally and internationally important designated sites. Northam Burrows SSSI is a dune system protected by a pebble ridge located within the southern extent of the estuary. Braunton Burrows is a SSSI, SAC and UNESCO International Biosphere Reserve forming the northern extent of the estuary and is the largest dune system in the UK. Set back from the dunes are the Braunton Swanpool and the Greenaways and Freshway Marshes, both designated SSSIs. Braunton Burrows UNESCO Biosphere Reserve's core is based upon Braunton Burrows SAC, beyond this core the buffer zone stretches between Westward Ho! and Croyde encompassing the Taw-Torridge Estuary up to Barnstaple and Bideford.



The Estuary has two main tributaries: the River Taw and River Torridge. The Taw and Torridge estuary's intertidal habitats are a designated SSSI. The River Torridge runs in a southerly direction parallel to the coast and has the port town of Bideford established along both banks 5km upstream from its mouth. The River Taw runs in an easterly direction perpendicular to the coast and has a small tributary, the River Caen joining it at Braunton and an earth heritage SSSI at Fremington Quays. It meanders inland and the historic market town of Barnstaple is located on both sides of the river 5km from the mouth.

The estuary's far reaching views are underpinned by its national status as the North Devon AONB and North Devon Heritage Coast.

There are fourteen Conservation Areas located along the banks of the Taw/Torridge Estuary and five Scheduled Monuments within this section of coast.

The South West Coast Path running along the North Devon coast becomes the Tarka Trail between Saunton and Northam. The Tarka Trail follows the Taw and Torridge Rivers, providing a path from the coast into the mainland via a river. A railway runs from Barnstaple to Exeter along the southern bank of the River Taw within the SMP study area.

D.2.4 Section D: Saunton Down to Morte Point

This short section of coastline is approximately 10km and can be characterised by headlands at Saunton Down, Baggy Point and Morte Point encompassing wide sheltered bays of sandy beaches and dune systems.

There are four SSSIs notable for their geology and nature conservation value including Saunton to Baggy Point Coast, Barricane beach, Mill Rock and Morte Point. This section also forms part of the wider UNESCO Biosphere transition zone.

This impressive landscape is within the nationally important North AONB and Heritage Coast.

Woolacombe, Croyde and Georgham are Conservation Areas within this section of coast and there are numerous archaeological sites within the study area but no Scheduled Monuments.

This stretch of coast is a major attraction to bathers and surfers from within the South West and nationally. A series of holiday parks and camping sites are located on farmland along the coast benefiting the local village economies of Woolacombe, Croyde and Braunton. The South West Coast path hugs the peninsula providing access to the coast.

D.2.5 Section E: Morte Point to Minehead

This section of coastline starts at the prominent Morte Point and stretches approximately 50km east to Minehead and is therefore varied in its composition. It includes several large bays including Combe Martin, Lynmouth and Porlock and several large points, the most prominent of which is found at Foreland, there are also numerous smaller bays and rocky headlands.

Exmoor Coastal Heaths are a designated SSSI and SAC. This coastline is rich in geological and ecological features and contains five designated SSSIs including Morte Point, Hele Samsons and Combe Martin Bays, Napps cave, West Exmoor Coast and Woods, and Porlock Ridge and Saltmarsh. The coast between Morte Point and Lynton also forms part of the wider UNESCO Biosphere transition zone.

This stunning stretch of coastline includes the nationally designated Exmoor National Park, North Devon AONB and Heritage Coast; it also has twelve Conservation Areas and numerous Scheduled Monuments.

This rural peninsula has numerous small settlements, characterised by steep river valleys leading to historic fishing or trading ports including Ilfracombe, Combe Martin, Lynton, Lynmouth, Porlock and Minehead. This coastline is accessible by the South West Coast Path.

D.2.6 Section F: Minehead to Hinkley Point

This section of coastline runs from Minehead in an easterly direction for 25km to Hinkley Point.

A section of the coastline from Blue Anchor to Lilstock is notable for its geology and geomorphology and is designated is a SSSI; it contains one of the thickest successions of the Jurassic period and is probably the best in North West Europe.



The Quantock Hills rise steeply from the coast and have national nature conservation and geological interest, designated as a SSSI and SAC. This distinctive and attractive landscape is recognised by its designation as an AONB.

There are five Conservation Areas within this stretch of coast. Dunster Castle is a nationally important Scheduled Monument, one of many Scheduled Monuments within the area.

Minehead is a popular holiday resort with its sandy beaches, holiday park and local attractions and is a Conservation Area. Minehead seafront forms the beginning/end of the South West Coast Path which continues along the South West Peninsula to Dorset. The West Somerset Railway serves this area following the coastline of Blue Anchor Bay for 12km, it is in close proximity to the shoreline at Watchet and Doniford before heading inland to Taunton.

The coastline beyond Minehead is largely rural, east of St Audries Bay are hamlets and farms looking out onto Bridgwater Bay. Hinkley Point is the location for a Nuclear Power Station of strategic importance to the National Grid.

D.2.7 Section G: Hinkley Point to Brean Down

Hinkley Point and Brean Down represent the southern and northern limits of Bridgwater Bay, into which the River Parrett drains. The River Brue also discharges into the Parrett Estuary via the Huntspill River using a sluice control structure to control flood risk upstream. This section of coast fronts the extensive low lying area of the Somerset and Bleadon Levels and is susceptible to flooding as sea levels rise.

The southern shore of Bridgwater Bay is rural, with a couple of hamlets at Stolford and Steart. The eastern shore of the Bay comprises the coastal towns of Burnham-on-Sea and Highbridge, beyond which are sand dunes at Berrow and Brean, with the popular holiday park at Brean. Other population centres along the banks of the River Parrett are Combwich, Dunball Wharf and Bridgwater.

Bridgwater Bay is ecologically important for its succession of intertidal habitats and contains two national and three international designations including a National Nature Reserve, SSSI, Special Protection Area, Special Area of Conservation and Ramsar Site. This interest is because Bridgwater Bay forms part of the wider Severn Estuary which is of international importance for its wetlands, waders and waterfowl. Inland, the River Parrett meanders between the Stert and Berrow flats. The Berrow Dunes formed are of national conservation importance and designated as a SSSI. The Huntspill River is a man-made channel joining the Parrett Estuary to the Somerset Levels and Moors SSSI and SPA; providing an important wildlife corridor for migrating waterfowl and waders and is designated as a National Nature Reserve.

There are 2 Conservation Areas within this section of coast at Bridgwater and Burnham-on-Sea, but no landscape designations. There are several Scheduled Monuments including Brean Down headland and Brent Knoll; and numerous archaeological sites exist in the Parrett Estuary.

The Parrett Trail follows the western bank of the River Parrett inland towards Bridgwater. There are sandy beaches in front of the steart peninsula and on the eastern side of the Bay underpinning the resort function of Burnham-on-Sea and the holiday parks, caravan and camping sites at Brean and Berrow.

D.2.8 Section H: Brean Down to Anchor Head

This short section of coast starts at Brean Down, and sweeps 7km northeast to Anchor Head where Birnbeck Island lies a hundred meters from the coast. It encompasses Weston Bay and the estuary mouth to the River Axe.

The River Axe forms part of the Severn Estuary SSSI, SPA, SAC and Ramsar site and Mendip Limestone grasslands SAC. Brean Down is a peninsula of carboniferous limestone of geological and biological national importance and is a designated SSSI. There is also a Local Nature Reserve at Uphill.

The prominent limestone hills of the Mendip Hills Area of Outstanding Natural Beauty form a backdrop to Weston-Super-Mare with access into the Bleadon Hills.

There is one Scheduled Monument near the River Axe.



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Weston-Super-Mare is a traditional seaside resort and designated Conservation Area forming a townscape to the northern mouth of the Axe up to and beyond Anchor Head. It is fronted by wide sandy beaches and is a popular tourist destination with many traditional seaside attractions.



D.3 Biodiversity, flora and fauna

D.3.1 General

As part of developing shoreline management policies it is important to understand the relationship between areas of nature and geological conservation value and coastal processes, and to understand how coastal management under the Shoreline Management Plan can alter coastal processes and impact on the natural environment. For example, where intertidal habitat joins sea defences, as sea levels rise the intertidal habitat will be squeezed resulting in a net loss of intertidal habitat known as 'coastal squeeze'. SPAs, SACs and Ramsars on the coast are expected to undergo this process in the long term and the Severn Estuary CHaMP (2006) attempts to quantify the predicted loss of intertidal habitat within these designations over the next 20, 50 and 100 years. The SMP will seek to compensate this loss of intertidal habitat from these designations through identifying coastal sections for potential managed realignment and creation of intertidal habitat, thus avoiding or mitigating these losses and helping the UK Government meet its obligations under the Conservation (Natural Habitats, & c.) Regulations, 1994 and Defra to meet its high level 4 Biodiversity Action Plan targets.

This section reviews the status of the 'natural' features present on the shoreline between Hartland Point and Anchor Head and includes areas designated for their international and national conservation importance.

Maps illustrating the different environment designations found within the SMP area are shown on Figures 1.0 to 1.8 in Annex D.1.

D.3.2 Nature Conservation

D.3.2.1 Overview

Natural England has divided England into Natural Areas; these are locally distinctive areas which can be characterised by their nature conservation interest and landscape character. They encompass and recognise all the habitats, not just those that are designated (for designations see Section D.3.2.2 below). The SMP study area includes parts of the following Natural Areas:

- Culm
- Exmoor and Quantock Hills
- Vale of Taunton and Quantock Fringes
- Somerset Levels and Moors
- Bridgwater Bay
- Severn Estuary
- Lands End to Minehead Maritime
- Mendip Hills

The Natural Area Profiles together identify the following range of habitats within the SMP study area:

- Western oak woodland
- Parkland
- Culm grassland
- Sea cliffs and slopes
- Sea cliffs and inland rock exposures
- Mudflats, saltmarsh and grazing marsh
- Estuarine habitat
- Sand dunes and shingle banks
- Coastal shingle
- Rivers and streams
- Sea bed
- Open Sea
- Intertidal sediments and beaches
- Farmland
- Vegetated shingle structures



- · Coastal grazing marsh
- Calcareous grassland
- · Heathland and lowland dry acid or calcareous grassland
- Reedbeds
- Saline lagoons

D.3.2.2 Nature Conservation Designations

The ecological and geological importance of the shoreline is recognised in a number of other national and international designations. There are 8 internationally designated sites wholly or partly within the SMP study area. These sites are listed in Table 3.1 and recognised by the following statutory and non statutory designations:

(i) International Designations (statutory)

International statutory designations include Special Protection Areas (SPA) designated under the EC Birds Directive 1979 (79/409/EEC) and Special Areas of Conservation (SAC) designated under the EC Habitats Directive, 1992 (92/43/EEC). These European designations are transposed into UK law by the Conservation (Natural Habitats, & c.) Regulations, 1994. Ramsar Sites are designated under the Convention on Wetlands of International Importance, signed at Ramsar in 1971. International designations in the SMP area are shown in Table 3.1. Further details of SPAs, Ramsar Sites and SACs are given in Annex D.2.

(ii) International Designations (non-statutory)

Britain's first internationally recognised UNESCO (United Nations Educational, Scientific and Cultural Organisation) Biosphere Reserve is located in North Devon. It is centred on Braunton Burrows at the mouth of the Taw and Torridge Estuary. The Biosphere Reserve aims to balance the conservation of biodiversity with sustainable use, demonstrating sustainable development on a regional scale using the Ecosystem Approach. This involves using the entire Taw and Torridge river catchment and the seas around North Devon and Lundy appropriately. The Reserve is made of three tiers: a Core Area, a Buffer Zone and a Transitional Area. Although the UK is a signatory to UNESCO, the biosphere reserve is not a statutory designation in UK law therefore its Core Area has to be based on sites already designated such as Braunton Burrows Special Area of Conservation and the Taw and Torridge Estuary SSSI and this offers legal protection.



Table 3.1 International Conservation Designations

Designation	Location	Coastal Section
Special Protection Area (SPA) and Ramsar Site	Severn Estuary	F,G, H
Special Area of Conservation (SAC)	Lundy SAC	A
	Tintagel-Marsland-Clovelly Coast SAC	В
	Braunton Burrows SAC	С
	Exmoor Heaths SAC	E
	Mendip Limestone Grasslands SAC	Н
	Severn Estuary SAC	F,G,H
UNESCO International Biosphere Reserve Area	Core (centred on Braunton Burrows)	С
	Buffer Zone (Covering Westward Ho! to Croyde and the Taw-Torridge Estuary up to Barnstaple and Bideford).	
	Transition Zone (Covering Welcombe mouth to Lynton)	A, B, C, D, E

(iii) National Designations

National designations include Sites of Special Scientific Interest (SSSIs), notified under the Wildlife and Countryside Act 1981 and regulated under the Countryside and Rights of Way Act 2000, and National Nature Reserves (NNRs), which are notified and regulated under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 and Country Parks designated under the Countryside Act 1968 and Marine Nature Reserves (MNRs), notified and regulated under the Wildlife and Countryside Act 1981.

The national designations in the SMP area are shown in Table 3.2 and comprise 56 SSSIs and four NNRs. Further details are provided in Annex D.3.

The condition of SSSIs in England is assessed by Natural England using categories agreed through the Joint Nature Conservation Committee. When the SSSI is being adequately conserved and is meeting its 'conservation objectives' it is reported to be in 'favourable condition', although there may still be scope for enhancement. Natural England has a Government Public Service Agreement (PSA) target to have 95% of the SSSI area in favourable or recovering condition by 2010.

Table 3.2 National Conservation Designations

Designation	Biological/ Geological	Area (ha)	Coastal Sections
National Park			L
Exmoor	B/G	693.0	Е
Country Park			
Northam Burrows	B/G	259.22	F
Marine Nature Reserve with Marine Protected Area (No Take Zone)		
Lundy	В	3038.21	Α



Designation	Biological/ Geological	Area (ha)	Coastal Sections
Sensitive Marine Area			
Lundy	B/G	Not available	Α
Site of Special Scientific Interest (SSSI)			1
Lundy	B/G	1760.9	Α
Marsland to Clovelly Coast	B/G	951.74	В
Mermaids Pool to Rowden Gut	G	156.54	В
Hobby to Peppercombe	В	240.6	В
Braunton Burrows	B/G	1356.7	С
Greenaways and Freshmarsh, Braunton	В	13.5	С
Braunton Swanpool	В	11.7	С
Taw -Torridge Estuary	B/G	1336.5	С
Northam Burrows	B/G	422.5	С
Fremington Quay Cliffs	B/G	10.6	С
Westward Ho! Cliffs	G	33.4	С
Saunton to Baggy Point Coast	B/G	152.8	D
Barricane beach	G	8.23	D
Mill Rock	G	0.16	D
Morte Point	В	99.0	E
Hele, Samson's and Combe Martin Bays	G	22.21	Е
Napps Cave	B/G	11.7	
Exmoor Coastal Heaths	В	1758.3	E
West Exmoor Coast and Woods	B/G	709.6	E
Porlock Ridge and saltmarsh	B/G	186.29	Е
Blue anchor to Lilstock coast	G	742.8	F
Dunster Park and Heathlands	В	466	F
The Quantocks	В	2506.9	F
Bridgwater Bay	B/G	3574. l	G
Berrow Dunes	В	200.0	G
Brean Down	B/G	65.I	G
Uphill Cliff	В	19.8	G
Severn Estuary	В	15950.0	G/H
National Nature Reserve	,		
Braunton Burrows			
The Dunkery and Horner Wood	В	1604.43	Е
Bridgwater Bay	В	334.6	G
Huntspill	В	207.0	G

(iv) Local Biodiversity

There are a range of statutory and non-statutory local conservation sites of locally important biodiversity including:

Local Nature Reserves

Local Nature Reserves are a statutory designation made under Section 21 of the National Parks and Access to the Countryside Act in 1949 by principal local authorities. There are 7 Statutory Local Nature Reserves (LNRs), present within the SMP area, and are listed in Table 3.3 below.

County Wildlife Sites and Local Wildlife Sites

There are 103 County Wildlife Sites (CWS) and 4 Local Wildlife Sites (LWS) within the SMP area, both are listed in Annex 4; although CWS and LWS are non-statutory they are given weight through the local planning system.



Table 3.3 Local Nature Reserves

Local Nature Reserve	Coastal Section
Fremington	С
Berrow Dunes	G
Uphill	G/H
Walborough Common	Н
Weston Woods	Н
Hilsborough	Е
Kenwith Valley	С

Other Reserves

Other non-statutory nature reserves are cited for Lundy Island and are listed in Table 3.4.

Table 3.4 Non-statutory Nature Reserves

Nature Reserve	Coastal Section
Lundy Nature Conservation Zone	Α
Lundy Woodland Trust Site	Α
The Donkey Field (Woodland Trust Site) between Uphill and Weston Super Mare	Н

(v) Biodiversity Action Plans (BAPs)

The UK Government published its *Biodiversity: UK Action Plan* in 1994, in response to Article 6A of the Convention on Biological Diversity. In order to help meet the targets identified in this plan and to protect and enhance flora and fauna, a series of local Biodiversity Action Plans (BAPs) have been developed, which identify local contributions to achieving UK targets as well as local priorities for habitats and species. Those relevant to the SMP area include the South West BAP, Devon BAP, Somerset BAP, North Devon Local BAP, North Somerset Local BAP, West Somerset Local BAP Exmoor Local BAP, Quantock Hills Local BAP and Mendips Local BAP. The BAP habitats and species associated with the SMP study area are listed in Annex D.5.



D.4 Geology and soils

The earth science interest of the coastline is reflected in the designation of 17 SSSIs wholly or partly for their geological interest within the SMP area (Table 3.2, with further information in Annex D.3). There are also seven non-statutory Regionally Important Geological & Geomorphologically Sites (RIGS) within 0.5km of the coast, shown in Table 4.1.

The Counties of Devon and Somerset are over 400 million years old and contain rocks that belong to the Devonian, Carboniferous, Permian, Triassic, Jurrasic, Cretaceous, Tertiary and Quaternary periods. The globally recognised Devonian period, was named after the county of Devon. North Devon and Somerset comprises shallow water muds, shales, sandstones and occasional limestones. These rocks have experienced extreme environmental conditions from complete maritime conditions in the Devonian and carboniferous period, to arid deserts of the Permian and Triassic, returning to a marine environment in the Jurrasic and cretaceous period, and then the retreat of seas from the Tertiary to present (for more information see http://www.naturalengland.org.uk). Exmoor the Quantocks and the Mendips hills were formed by a general uplift of the continent in the Permian and Triassic Period. The carboniferous limestone of the Mendips is very fosilliferous.

The geomorphology of the area is varied and includes pebble ridges at Northam Burrows and Steart, numerous sand dunes including one of the largest in the UK at Braunton; and mudflats and salt marshes along the coast.

Table 4.1 Regionally Important Geological and Geomorphological Sites (RIGS)

File code	Name	Description	Area (Ha)	Coastal Section
SS84/500	Hurlstone Point Headland and cliff exposure	Stratigraphical - Devonian Hangman Grits, sedimentological - cross bedded sandstones, structural - tension gashes and mineralisation	2.06	E
SS84/529	Porlock Weir to Bossington Beach	Arcuate shingle beach and ridge with cliffs; interests: geomorphological - coastal processes, stratigraphical - Quaternary to Recent Head deposits, sedimentological and submerged forest.	105.79	E
SS84/531	Culbone Rocks Coastal Cliffs	Stratigraphical - Devonian Hangman Grits, (Hangman Sandstone Group, Trentishoe Formation), sedimentological.	0.14	Е
SS84/548	Yellow Stone Cliff	Coastal cliffs; interests: stratigraphical - Devonian Hangman Grits, sedimentological - landform features.	6.01	E
SS94/504	Holloway Street Cutting	Triassic marginal facies showing crossbedded red sandstones and interbedded breccias of local Devonian origin	0.13	Е
SS94/509	Culver Cliffs	Coastal cliffs; interests: stratigraphical Devonian Hangman Grits (Hangman Sandstone Group, Trentishoe Formation), sedimentological - cross bedded sandstone.	1.36	E



$\label{eq:hard-point} \mbox{Hartland Point to Anchor Head SMP2} \\ \mbox{Appendix D} - \mbox{SEA Environmental Baseline Report (Theme Review)}$

SS94/542	Greenaleigh	Coastal cliff exposures; interests:	19.34	E
	Point and	stratigraphical - Devonian Hangman		
	Smugglers	Grits (Hangman Sandstone Group,		
	Cove	Trentishoe Formation) and		
		Pleistocene to Recent Head deposits,		
		sedimentological, structural,		
		geomorphological.		



D.5 Air and Climatic factors

The south of England experiences relatively warm dry summers and recently there has been increasing concern that climate change is accelerating towards higher temperatures. The majority of Scientists now accept that global warming is taking place, with global mean air temperatures having increased by 0.3 to 0.6°C during the 20th century.

Global warming is predicted to increase pressure on coastal defences in the SMP area due to the melting of glaciers, rising of sea levels and the thermal expansion of the world's oceans (Table 5.1 shows the Defra recommended allowances for net sea level rise in this region of the UK, these are to be updated in 2010). Consequently, conflicts between coastal defence and conserving the natural character of the coastline are likely to increase in the SMP area.

Table 5.1 Defra's Recommended Allowance for Sea Level rise (Defra 2006)

Region	Assumed Vertical	Net Sea Leve	let Sea Level rise (mm/yr)			Previous
	Land Movement	1990 – 2025	2025 – 2055	Allowances		
	(mm/yr)					
South West and	-0.5	3.5	8.0	11.5	14.5	5 mm/yr constant
Wales						



D.6 Landscape Character and Visual Amenity

D.6.1 General

Coastal defence provision (and therefore SMP policy) may have an impact on the landscape of an area. The significance of this will depend upon the type of defence and the importance placed upon a particular landscape. The visual appearance of the natural and built landscape is an important factor in determining its appeal to residents and visitors.

This section reviews the status of the existing landscape character of the shoreline between Hartland Point and Anchor Head.

Maps illustrating the different landscape designations within the SMP area are shown on Figure 2 Annex D.1.

D.6.2 Landscape and Visual Amenity

D.6.2.1 Overview

The study area includes Exmoor National Park, three Areas of Outstanding Natural Beauty (AONB) including North Devon, The Quantocks and Mendips Hills as well as Exmoor National Park and three Heritage coasts, all underlining the natural beauty of the area. Key characteristics of these sites are provided in Table 6.1.

Table 6.1 Landscape Designations within the SMP Area

Site Name	Key Characteristics	Coastal Sections
National Park		<u> </u>
Exmoor	Exmoor is characterized by its gently rolling hills often crowned with heather moorland dipping into deep wooded valleys or combes as they are known locally, carved by Exmoor's many rivers and tributaries. Exmoor's northern edge is defined by its dramatic high coastal cliffs.	E
Areas of Outstanding Na	atural Beauty (AONB)	
North Devon	Rugged cliffs, wave cut platforms, wide sandy bays and sand dunes, steep sided wooded combes and wooded cliff edges	A-E
Quantock Hills	A narrow gently curving ridge standing out above the agricultural plain with views that stretch over 9 counties.	F
Mendip Hills	Silver grey crags, gorges, dry valleys and rock outcrops of limestone.	Н
Heritage Coasts		
Lundy	Lundy Island is a granite plateau 5km wide and 1km long with 15 km of steep cliffs and slopes providing dramatic cliff top views with an ocean backdrop	A
Hartland	Sheer cliffs and reefs with waterfalls tumbling from hanging valleys with views reaching to Lundy Island.	В
Exmoor	England's highest coastline with unique rounded 'hogs-back' cliffs forming the outstanding landscape	E
	Steep wooded 'combes' cut down to the shore where oak woods have grown down the cliffs. Woodland and shorelife coexist on the pebble foreshores	
Coastal Preservation Are	ea	
Lundy & North Devon	Designated by Torridge District Council this CPA stretches from beyond Hartland Point to Westward Ho!	A-C



Natural England has divided England into a series of 'Landscape Character Areas', describing the ecological, geomorphological and cultural features and characteristics that contribute to a particular landscape. Within the SMP area there are six 'Landscape Character Areas', as described in Table 6.2. Within the landscape character areas there are both important natural resources and habitats, but also areas of human habitation that could potentially be affected by changes in coastal management.

Table 6.2 Key characteristics of landscape character areas in the SMP Area

Landscape Character Area	Key Characteristics	Coastal Sections
159: Lundy	Small, isolated island with distinctive landform.	A
137. Lulidy	Prominent landmark when viewed from the mainland.	^
	Flat plateau with steeply-sloping sides and vertical cliffs.	
	Bleak, open and windswept heathland, grazed by sheep and goats.	
	Cliffs and adjacent steep slopes with patchy scrub and maritime grassland.	
	The windward west coast is more rugged, steep and largely bare of	
	vegetation.	
	Small settlement built in locally-quarried granite with slate roofs.	
	Wide views from the open plateau over apparently endless sea, giving a	
	strong sense of isolation.	
	High nature-conservation value and historic interest.	
49: Culm	Rolling, locally steeply undulating open pasture separated by many small	В
ii. Cuiiii	valleys	
	Heavy, poorly drained soil supporting rushy pastures of low agricultural	
	quality but high nature conservation value.	
	Little tree cover except occasional wind shaped hedgerow and farmstead	
	trees, conifer blocks and valley woodlands.	
	Spectacular coastline of high cliffs and a few fishing villages in sheltered	
	coves.	
	Contrasting enclosed wooded valleys of Taw and Torridge cutting	
	through the ridges.	
49: Exmoor	A diverse upland landscape, rising abruptly out of the surrounding	Е
	lowlands and ending in a high and spectacular cliffed coastline with coastal	
	heath at the edge of the Bristol channel	
	• Central high, treeless heather and grass moorlands used for rough grazing.	
	Steep wooded inland valleys and steep coastal combes	
	 Villages and farmsteads nestle in sheltered valley bottoms 	
	 Wooded lower slopes in some places, some with former deer parks 	
39: Quantock Hills	Central high heathland ridge, with some beech clumps	F
	 Irregular field patterns and farmsteads in sheltered fringes. 	
	 Steep wooded valleys and lower slopes, commonly with former deer 	
	parks. Beech copses and lines are characteristic.	
	 Red sandstone and shale used in older buildings and giving colour to the 	
	soils.	
	 High archaeological interest of Bronze Age Monuments such as burial 	
	mounds.	
	d • Lowland farmland qualities in sharp contrast to surrounding upland	F
Quantock Fringes	landscapes.	
	 Lowland, mixed farming landscape dense hedges, sparse woodland and 	
	frequent settlement.	
	Scattered villages.	
	• Cider apple orchards.	
	• Willows on floodplains.	
	• Flat open landscape of wet pasture, arable and wetland divided up by wet	F
Moors	ditches or 'rhynes'.	
	Absence of dispersed farmsteads or any buildings on levels and moors.	
	Nucleated settlements on ridges/islands.	
	 Surrounded and divided up by low hills, ridges and islands which form 	

$\label{eq:hard-point} \mbox{Hartland Point to Anchor Head SMP2} \\ \mbox{Appendix D} - \mbox{SEA Environmental Baseline Report (Theme Review)}$

Landscape Character Area	Key Characteristics	Coastal Sections
	distinctive skylines. • Peat working and nature reserves contrasting with the rectilinear planned landscape of the Moors. • Dramatic and prominent hills such as Brent Knoll and the Isle of Avalon rising above the Levels and Moors. • Sparse tree cover on Levels and Moors contrasting with woodland, hedges and orchards of surrounding hills. • Sparsely populated Moors but settlements common on hills, ridges and islands • Historic landscape strongly evident in features ranging from prehistoric track ways and lake villages to post medieval enclosures and peat working. • International nature conservation significance for wetland waders and	
Mendip Hills	 waterfowl. Narrow dune belt fringing Bridgwater Bay. Raised rivers and Levees, with main roads and causeways flanked by houses. Flooding in winter over large areas. 	Н
пченир піш	 A chain of prominent limestone hills extending inland from the coast and rising up sharply from surrounding lowlands. An open, largely treeless, limestone plateau with karst features, cave systems, dry stone walls and sparse settlement. Dramatic gorges, cliffs and escarpment slopes around the plateau. A sharp contrast between the open plateau and steep escarpment slopes of the karst landscape and the more complex, gentler landforms in the east. Many industrial archaeological sites reflecting the lead, coal and cloth industries. Perpendicular church towers. 	П
	 Country houses in the east with wooded parks. Buildings in local stone with pantile roofs: stones include grey limestone, reddish dolomitic limestone and grey or honey-colored oolitic limestone. Outstanding prehistoric ritual landscapes. 	



D.7 Historic Environment

This section reviews the historic environment features found between Hartland Point in Devon and Anchor Head in Somerset including both archaeological and historic elements in the terrestrial and marine environments.

English Heritage's approach to the coastal historic environment for SMPs is set out within Defra Guidance (2006) and "The Shoreline Management Plan Review of the Historic Environment" (English Heritage, 2006). It recognises that a wide range of historic buildings and significant below ground archaeology may be at risk from coastal erosion and that the Government's policy on archaeology set out in Planning Policy Guidance (PPG) 15, 16 and 20 will be followed, including "Where archaeological remains are present, these should be avoided or alternatively preserved in situ where ever practicable".

A Phase One Severn Estuary Rapid Coastal Zone Assessment Survey (Draft, January 2008) has been completed for English Heritage. Rapid Coastal Zone Assessment Surveys are seeking to inform coastal management priorities with respect to archaeological or historic sites of differing levels of importance.

Maps illustrating the historic environment features within the SMP are shown on Figures 3.0 to 3.8 within Annex D.I.

D.7.1 Terrestrial

D.7.1.1 Overview

Statutory designated sites within the terrestrial environment include:

- Scheduled Monuments designated under the Ancient Monuments and Archaeological Areas Act 1979;
- Listed Buildings (Grade I, II or II*) and Conservation Areas designated under the terms of the Town and Planning Act 1990; and

There are 52 Scheduled Monuments within 500m of the SMP coastline (see Annex D.6 for further details). The Scheduled Monuments include castles and hill forts, barrows and earthworks. There are numerous listed buildings (Grades I, II and II*), 10 Registered Parks and Gardens, built 24 Conservation Areas, 2 Nationally Important Wreck Site and I Registered Battle field these are detailed on Figures 3.0 - 3.8 in Annex D.1.

Additional non statutory features include 10 Registered Parks and Gardens one Registered Battlefield, these are listed in Table 7.1 and are also shown on Figures 3.0 - 3.8 in Annex D.1.

Table 7.1 Registered Parks and Gardens within the SMP Area

Name	NGR	Listing criteria	Area (ha)	Coastal Section
Saunton Court	SS4537	Grade II	2.37	С
Tapeley Park	SS4729	Grade II*	99.37	С
Youlston Park	SS5837	Grade II	66.23	С
Arlington Court	SS6140	Grade II*	188.14	E
Dunster Castle	SS9943	Grade II*	297.98	F
St Audries (House)	ST1142	Grade II	111.34	F
Fairfield	ST1943	Grade II	45.64	F
Nettlecombe court	SS0537	Grade II	118.00	F
Crowcombe Court	ST1436	Grade II	95.65	F
Halswell Park	ST2533	Grade II	183.00	G
Registered Battle fields	I	1		1
Battle of Sedgemoor	ST345 346	n/a	230.33	F



As well as known built features, potentially significant archaeological interest features are likely to be buried within the SMP area. These should be investigated through desk study and field evaluation (if appropriate) where schemes are implemented. The Historic Environment Records (HERs), Devon Sites and Monuments Register and Somerset Sites and Monuments Register contain details of numerous archaeological sites and finds within the SMP area. Phase I of the Severn Estuary Rapid Coastal Zone Assessment Surveys reported on the results of the National Mapping Programme and will provide a basis for developing management priorities with respect to archaeological or historic sites of differing levels of importance. The assessment reported on a number of new sites relating to fishing in the intertidal zone and World War II remains, that were previous unrecorded. This points to the historic significance of the fishing industry in this area, dating from the 10th to the 20th centuries, and war time defences surrounding estuaries. In this theme review, archaeological sites and finds (and listed buildings) have not been identified individually. It is anticipated that these sites will be considered at scheme and/or project level and therefore it is not considered necessary to identify each of these site individually at this high level of assessment.

Although not considered at the SMP stage of assessment, it is important to note that Historic Landscapes are also affected by changes to the coastline. These features should be considered at scheme and/or project level and have therefore not been included in this Theme Review.

D.7.2 Marine

D.7.2.1 Overview

The Statutory designated sites within the marine environment are Historic shipwrecks designated under the Protection of Wrecks Act 1973.

The marine environment at Lundy Island has two nationally important historic wreck sites listed in Table 7.2 (these are the only two recorded within the SMP area) and are shown on Figure 3.1 in Annex D.1 There are many other known shipwrecks not afforded statutory protection, but which may also be of national importance. These features should be considered at scheme and/or project level and have therefore not been included in this Theme Review.

Table 7.2 Wreck sites in SMP Area

Name	Location	Coastal Section
Gull Rock Wreck	Lundy	Α
Wreck of Iona II	Lundy	Α



D.8 Human health, Population and Material Assets

D.8.1 General

This section reviews the status of the built environment present along the coastline between Hartland Point and Anchor Head and comprises main population centres, infrastructure, residential developments, recreational interests and current and future land uses.

Maps illustrating current land use within the SMP area are provided in Annex D.I.

D.8.1.1 Residential, commercial and industry

Industrial and economic activities within the SMP area include: -

- Tourism (see Section D.8.1.4)
- Ports and Harbours (see Section D.8.1.3)
- Military establishments e.g. airfield at Chivenor
- Power Station e.g. Hinkley Point
- Agriculture

D.8.1.2 Population in the SMP Study area

Population estimates are taken from the 2001 Census undertaken by the UK National Statistics Authority (www.statistics.gov.uk) to be repeated in 2011. Parts of the North Devon, Torridge and West Somerset censuses fall within the SMP study area; the population of North Devon is estimated at 87,518, Torridge District is estimated at 58,975 and West Somerset is estimated at 35,075. The SMP area contains a number of towns and those within the census are listed in Table 8.1.

Table 8.1 Urban areas in the Study Area

Town	Population	Coastal Section
Northam	12,137	С
Bideford	15,779	С
Barnstaple	24,478	С
Braunton	8,286	С
Woolacombe	900	D
Ilfracombe	17,431	E
Combe Martin	2,736	E
Lynton and Lynmouth	1,716	E
Porlock	1,377	E
Minehead	10,000	F
Bridgwater	35,000	G
Burnham-on-Sea	12,400	G
Highbridge	5,986	G
Weston-Super-Mare	61,900	Н

There are also numerous villages scattered along the coastline including Hartland, Clovelly, Combe Martin Watchet and Croyde.

Tourism has a significant impact on populations in the SMP area, for example Burnham on Sea and High bridge and the surrounding area including Brean and Berrow have a permanent population of approximately 10,000, which escalates to 40,000 in the peak tourist season (Sedgemoor Local Development Framework, 2007).



Sustainable coastal erosion and flood risk management of these settlements is one of the main objectives of the SMP, in order to meet social and economic needs.

The properties at risk of coastal erosion or flooding will be identified at a later stage in the SMP development.

Flooding events/coastal erosion have adverse impacts upon human health and significant socio-economic consequences. Impacts on human health such as emotional distress can be caused by the event itself, as well as the fear of a flooding event. Socio-economic factors such as the financial burden created by flooding or cliff erosion can continue to have an impact well after the event has occurred.

D.8.1.3 Ports and Harbours

Numerous historic ports and harbours are situated along the SMP coastline remnant of a busy trading past. Many are now used as a base for fishing fleets and recreational activities, with a few still operating as commercial ports (e.g. Appledore) and these are listed in Table 8.2.

Table 8.2 Ports and Harbours in SMP Area

Name	Details	Coastal Section
Lundy	Small harbour	Α
Clovelly	Small harbour	В
Bideford	Mixed port and other jetties / moorings	С
Appledore	Commercial port/quay and other jetties / moorings	С
Instow	Small harbour (the Cobb)	С
Barnstaple	Mixed Port and other jetties / moorings	С
Ilfracombe	Small port/harbour	E
Lynmouth	Small port with large marina	E
Porlock Weir	Harbour Office	E
Minehead	Harbour and other jetties / moorings	F
Watchet	Harbour	F
Bridgwater (including Combwich, Highbridge and Burnham-on-Sea)	Commercial port (Dunball) and other jetties / moorings	G
Knightstone, Weston-Super-Mare	Small harbour	Н

Chivenor Airfield is a Royal Marine base at the mouth of the Taw Estuary. This air base also provides assistance for search and rescue operations.

Although the region is not renowned for its yacht moorings, marinas and sailing clubs a handful can be found associated with the larger settlements along the coast and are listed in Table 8.3.

Table 8.3 Marinas, yacht and sailing clubs in SMP Area

Marinas, Yacht and Sailing Clubs	Coastal Section
Instow, Bideford (North Devon Yacht Club)	С
Watchet Marina, Sailing and Yacht Club	F
Burnham-on-Sea Motorboat and Sailing Club	G
Weston Yacht Club	Н



D.8.1.4 Recreation, Tourism and Amenity

Tourism is an important industry in the South West, attracting 20.46 million visitors from within the UK contributing £3.8 billion to the region's economy (United Kingdom Tourism Survey, 1997) and directly supporting around 85,000 jobs (Key Facts about South West England, South West Tourism, 2007). The North Devon and West Somerset Coast attracts numerous visitors to the region as it provides access to a stunning coastal landscape, extensive sandy beaches and Exmoor National Park and is a valued resource for its land and water based recreation. Its rural nature and picturesque historic fishing villages or small ports such as Clovelly, Ilfracombe, Combe Martin, Lynton and Lynmouth provide tourist facilities, access to the natural environment and a quiet retreat for visitors. Larger historic port towns at Minehead, Bideford Westward Ho!, Burnham-on-Sea and Weston-Super-Mare provide a wide range of traditional seaside tourist facilities and provide a base from which to explore the region.

Local recreational assets on the land within the SMP encompass Lundy Island itself, Northam Country Park and golf course; Lynton and Lynmouth Cliff Railway, Holiday Park at Minehead, Bridgwater National Nature Reserve, Dunster castle, Coastal resort at Westward Ho!; numerous museums and forts, as well as the South West Coast Path along the coastline, and the Tarka and Parrett Trails and Mendip Way leading inland. Other land based activities taking place that generally rely on the natural environment include fishing, wildfowling, fossil collecting, bird watching and rock climbing. The South West Coast Path is estimated to generate £300 million a year for the economy of the region, supporting over 7,500 jobs (www.ramblers.org.uk).

The beaches support a full range of water based activities, providing a popular destination for surfers and bathers alike. It is estimated surfing itself contributes £52 million to North Devon's economy (Trisurf project, www.79.170.40.168/trisurf.eu). Saunton, Croyde, Woolacombe and Putsborough are particularly popular amongst many others; all the beaches within the SMP study area are listed in Table 8.4.

There is extensive tourism-related infrastructure along the study area including numerous coastal camping and caravan parks, guesthouses, Bed and Breakfasts and numerous holiday parks.

There are peak periods of tourist activity, which tend to include all school holidays particularly in the summer months (between May and September).

Table 8.4 Bathing Beaches

Beach Name	Nearest Town or village	Recommended by the Marine Conservation Society	Lifeguard Cover	Coastal Section
Lundy Beaches	Lundy	No	No	Α
Buck's Mill	Clovelly	No	No	В
Westward Ho!	Westward Ho!	Yes	No	С
Instow	Westward Ho!	No	No	С
Saunton Sands	Westward Ho!	No	No	С
Barricane Bay/Combesgate	Woolacombe	No	No	D
Woolacombe village	Woolacombe	Yes	No	D
Woolacombe - Barricane Bay	Woolacombe	Yes	No	D
Putsborough Sands	Woolacombe	Yes	No	D
Rockham Bay	Mortehoe	No	No	D
Croyde	Barnstaple	No	Yes	D
Tunnels Beach	Ilfracombe	Yes	Yes	E
Hele Beach	Ilfracombe	No	No	Е
Capstone - Wildersmouth	Ilfracombe	No	No	E



Beach Name	Nearest Town or village	Recommended by the Marine Conservation Society	Lifeguard Cover	Coastal Section
Woody Bay	Lynton	No	No	E
Clovelly	Hartland	No	No	В
Combe Martin	Ilfracombe	No	No	E
Porlock Weir - Porlock bay	Porlock	Yes	No	Е
Lynmouth	Lynton	No	No	E
Minehead Terminus	Minehead	Yes	No	F
Minehead - The Strand	Minehead	No	No	F
Watchet	Watchet	No	No	F
Blue Anchor West	Minehead	No	No	F
Brean	Burnham-on-Sea	No	No	G
Brean Beach at Brean Farm	Burnham-on-Sea	No	No	G
Burnham on Sea Jetty	Burnham-on-Sea	No	Yes	G
Burnham on Sea Yacht Club	Burnham-on-Sea	No	Yes	G
Uphill beach	Burnham-on-Sea	No	No	G
Weston Super Mare – Sand Bay	Weston-Super- Mare	Yes	No	Н
Weston Super Mare – Weston Bay	Weston-Super- Mare	No	No	Н

D.8.1.5 Agriculture

Agricultural Land Classifications (ALC) across the SMP area are shown on Figure 4 (Annex I). A large part of the SMP2 area is used for agriculture. The ALC system grades agricultural land based on its quality and the range of different types of agriculture it can be used for. The grade is based on a number of factors including soil depth, risk of flooding and drought risk. Grade I land is the most valuable because it is high quality and can be used to grow a wide range of crops. Grade 5 land is the least valuable because it is only generally suitable for grazing.

English, Welsh and UK policies recognise the importance of agricultural land for producing food and the challenges facing farming, including those from climate change, globalisation and rising fuel prices and competition for land. The issues of food security and how self-sufficient the UK is in food production are becoming more important. The UK is currently 60% self-sufficient in all foods (i.e. producing 60% of all the food consumed in the UK) and could produce more than enough food to make the UK completely self-sufficient (Defra, 2008).

Land use planning guidance in England and Wales (WAG 2002, ODPM 2006) advises that significant development of agricultural land is avoided and that lower grade land (Grades 3b, 4 and 5) should be used in preference to higher grade land (Grades 1, 2 and 3a) if there is a need to develop agricultural land. Currently, there is no national guidance on the relative priority of agricultural land when making decisions about the management of flood and erosion risks.

In the absence of specific guidance, the SMP2 has used existing agricultural land values to assess the importance of agricultural land.

This reveals that the land from Hartland Point to Combe Martin, then from Porlock to Weston-Super-Mare under Defra's Agricultural Land Classification System is predominantly between Grade 3 'good' and 4 'poor', with patches of Grade 5 'very poor'. The Exmoor National Park between Combe Martin and Porlock is classified as Grade 4 'poor' and Grade 5 'very poor'. This grading applies to land with moderate limitations to its agricultural use due to the soil, relief and climate, or some combination of these factors that restricts the choice of crops, timing of cultivations or the level of yield.

D.8.1.6 Transport Infrastructure

The only motorway within the SMP area is the M5 which strategically links the South West to the Midlands and to the M4 providing access to London and Wales. It crosses the Huntspill River 3.5km from the coast. The M5 at Bridgwater provides a link to the A39 "Atlantic Highway" which is the main trunk road running parallel to the north coast of Devon; and the A38 which runs parallel to the north Somerset coast up to Burnham-on-Sea. Linking to the A39 and A38 are numerous major 'A' roads providing greater access to the coast including:

- A361 known as the "North Devon Link Road" providing access to North Cornwall;
- A386 running from Northam to Appledore
- A370 providing a link to Weston-Super-Mare.

There are also numerous "B" roads and minor roads providing access to settlements and viewing points along the coastline, and the coast is largely accessible by foot or by sea. The main long distance national trail footpath providing access along the coast is the South West Coastal Path which starts at Minehead and continues around the South West peninsula to Dorset. This links with the Tarka Trail at Saunton providing access along the Taw and Torridge Rivers. There is also the Parrett Trail at Bridgwater Bay providing access along the River Parrett.

Railways in the SMP area include:

- The Bristol to Exeter main line, with stations at Weston-super-Mare, Highbridge and Bridgwater.
- The West Somerset Railway, starting at Minehead and following the coast in close proximity to the shoreline at Blue Anchor and Watchet before heading inland and leading to Taunton
- The Barnstaple to Exeter line which follows part of the south bank of the River Taw

The mainland and Lundy Island are connected by a Ferry crossing between Ilfracombe and Lundy, as well as a helicopter link between Hartland Point and the Island.

D.8.1.7 Fisheries

Many coastal fishing ports and harbours (see Table 8.2 above) are located between Hartland and Anchor Head providing a base for commercial fishing. The Devon Sea Fisheries Committee is responsible for sea fisheries as far as six nautical miles from the high water mark within the SMP area. Shellfish, demersal (bottom living) and pelagic (mid-water) fish are caught along the coast. Lobster and edible crabs are caught from off Hartland Point to Clovelly. Mussels are harvested in Bideford Bay and cod, whiting, herring and flat fish species are also caught (Bridgwater Bay SMP, 1998). Bass, mullet, pollack, and mackerel can be found along the coast and in the estuaries within the SMP (North Devon CFMP 2008). Atlantic salmon, sea trout and eels are caught in the estuaries within the SMP area (Bridgwater Bay SMP, 1998). Bait digging is likely to be carried out over the lower shores in the SMP area.

The area between Minehead and Steepholm is a nursery and spawning area for the Dover sole and cod (Bridgwater Bay SMP, 1998)

Somerset's eel population is nationally significant, and as it is a rapidly declining species, the fishery has been recommended for closure (Parrett CFMP, 2008). This is part of an Eel Recovery plan to return the eel stock to more sustainable levels (West Somerset CFMP (2008).

Fishermen at Clovelly are working with CEFAS to monitor lobster catches and work towards a more sustainable fishery (www.CEFAS.co.uk).

Lundy's Marine Nature Reserve has zones to conserve the marine environment and ensure sustainable fishing stocks for the future. Areas include England's first 'no take zone' preventing any fishing or collection; a 'refuge



zone' preventing fishing but allowing angling and potting; a 'recreational zone' and a 'general use zone' enabling all activities except spear fishing (for more information see www.lundy.org.uk).

D.8.1.8 Mineral Extraction and Landfill

Landfill sites on the coast could be at risk from coastal erosion depending on location and these will need to be considered during the SMP process. Active landfill sites are located along the coastline within close proximity to the shoreline at Northam and Hinkley Point B. Historic landfill sites are also located along the coast and are mainly associated with urban settlements including Barnstaple, Ilfracombe, Lynton, Porlock, Minehead, Watchet, Burnham-on-Sea, Highbridge and Weston-Super-Mare. Historic landfill sites in close proximity to the shoreline are at Hinkley Point and Brean beach. Maps illustrating areas of landfill are on Figure 5 in Annex D.I.

Along the coastline there are not likely to be any contaminated sites that present a significant risk as a result of flooding or coastal erosion. There are a number of potentially contaminated sites within Highbridge and Bridgwater located within the main urban areas/industrial estates.

D.8.2 Future Land Use/Planning Targets

D.8.2.1 Overview

It is important to recognise that the 100 year time horizon of the SMP is well beyond the time scale of current development plans, which do not extend beyond the plan period of the Regional spatial Strategy, up to 2026. The SMP not only needs to have regard to planned development but also should serve as an influence on the longer term location, scale and nature of future development in the coastal zones. The purpose of this Section is to provide an overview of relevant planning policies at national, regional and local level, and to identify proposals for development in the coastal zone contained in existing and emerging planning documents.

Future built development and land use change will be managed through the statutory planning system, so that planning applications will be determined having regard to national, regional and local policies.

D.8.2.2 National

National Policies including Guidance and Statements of relevance to development within the SMP area are listed below. In relation to development in the coastal zone, particular attention should be paid to PPS1 and PPS25. Planning Policy Statements (PPSs) are superseding older Planning Policy Guidance notes (PPGs) and are of importance, as they represent the government's policy position on specific subjects.

- Planning Policy Statement 1: Delivering Sustainable Development.
- Planning Policy Statement: Planning and Climate Change: Supplement to Planning Policy Statement 1.
- Planning Policy Guidance 2: Green Belts.
- Planning Policy Statement 3: Housing.
- Planning Policy Guidance 4: Industrial, Commercial Development and Small Firms.
- Planning Policy Statement 6: Planning for Town Centres.
- Planning Policy Statement 7: Sustainable Development in Rural Areas.
- Planning Policy Statement 9: Biodiversity and Geological Conservation.
- Planning Policy Statement 10: Planning for Sustainable Waste Management.
- Planning Policy Guidance 14: Development on Unstable Land.
- Planning Policy Guidance 15: Planning and the Historic Environment.
- Planning Policy Guidance 16: Archaeology and Planning.
- Planning Policy Guidance 20: Coastal Planning.
- Planning Policy Statement 22: Renewable energy.
- Planning Policy Statement 23: Planning and Pollution Control.



- Planning Policy Statement 25: Development and Flood Risk.
- · Good Practice Guide on Planning for Tourism.

More detailed information on these policies is contained within Annex D.7.

D.8.2.3 Regional Planning Policies:

The Draft Regional Spatial Strategy (RSS) for the south-west sets out a regional framework for the location and scale of development and guides the planning process at a local level. The RSS recognises the need for an integrated approach to managing the coastal zone, recognising the links between the natural and historic environment, social, recreational and economic value of the coastal area, as well as flood and erosion risk management, the relevant policies are detailed below in section (a). The draft RSS will guide development in the south-west up to the year 2016 and will, upon adoption, supercede the Structure Plans for Somerset & Exmoor National Park and Devon (detailed further below in sections (b) and (c) below as these are the current statutorily adopted planning policies for the area). Adoption for the RSS is expected in summer 2009.

(i) The Draft South West Regional Spatial Strategy

Pertinent policies from the latest version of the RSS, which includes the Proposed Changes to the RSS made by the Secretary of State in 2008, have been identified below and are detailed further in Annex D.8. It should be noted that the RSS does not allocate land on an ordnance base, but simply indicates a general area for the focus of development, so it is not possible - at this stage – to confirm which allocations, or parts of allocations, would be within the coastal zone.

Development Policy A: The primary focus for development in the South West will be the Strategically Significant Cities and Towns (SSCTs). The 21 SSCTs include three in the SMP area, namely Barnstaple, Bridgwater and Weston-super-Mare.

Development Policy B sets criteria to guide which Market and Coastal Towns should accommodate additional housing, employment shopping and other services.

- **Policy HMA1** includes 12,000 new homes at Weston-super-Mare (3,000 within the urban area, 9,000 SE of the town an annual average of 600 new homes up to 2026) and 34 ha of employment land.
- Policy SR6 states that development at Weston-super-Mare will be economy led, focusing on regenerating the town centre and increasing the provision of employment opportunities with provision for job growth
 - Provision should be made for an average of about 600 dwellings per annum within and adjoining Weston-super-Mare's urban area over the plan period. The focus for housing provision will be on the reuse of previously developed land and buildings within the urban area,
- Policy HMA6 includes 7,700 new homes at Bridgwater (6,200 within the urban area, 1,500 N of the town an annual average of 385 new homes) and 54 ha of employment land.
- **Policy HMA10** includes 7,200 new homes at Barnstaple (4,800 within the urban area, 2,400 outside the town an annual average of 360 new homes) and 50 ha of employment land.
- Policy SR43 states that, in the northern Devon area, Barnstaple will be the prime focus for development.

Other relevant policies in the Draft RSS are as follows:

- ENVI (Protecting and Enhancing the Region's Natural and Historic Environment).
- ENV3 (Protected Landscapes).
- Policy E5 (Waterside Employment Sites).
- Policy TO2 (Safeguarding and Investing in Tourism Destinations).
- COI (Defining the Coastal Zone).



Policy FI (Flood Risk).

(ii) Exmoor National Park Authority Joint Structure Plan

The Joint Structure Plan contains the statutorily adopted planning policies for the area, until the new RSS for the South-west is adopted. The Joint Structure Plan Review for Somerset County Council and Exmoor National Park provides the strategic base for all land use planning in the combined area. The Plan has been prepared as a joint Structure Plan between Somerset County Council and the Exmoor National Park Authority. The two authorities adopted the policies and proposals in the plan, in April 2000.

The overall strategy for development at or near the coast in the Joint Structure Plan within the SMP area pays heed to the largely rural character of Somerset and the need to preserve and enhance its historic and ecological assets. Development is directed towards the key settlements in the county with development along the coastal and rural areas being protected by appropriate development control policies. Pertinent policies are outlined below and are detailed in Annex D.9.

- Policy I (Nature Conservation & Biodiversity).
- Policy 2 (Exmoor National Park).
- Policy 3(Areas of Outstanding Natural Beauty).
- Policy 4 (Somerset Levels & Moors).
- Policy 5 (Preserving and Enhancing Landscape Character).
- Policy 7 (Agricultural Land).
- Policy 15 (Coastal Development).
- Policy 16 (Provision of land for industrial, warehouse and business development).
- Policy 18 (Location of land for industrial, warehousing & business development).
- Policy 21 (Town Centre uses).
- Policy 23 (Tourism development in the countryside).
- Policy 33 (Provision for Housing).
- Policy 58 (Ports & Wharves).
- Policy 60 (Floodplain Protection).
- Policy 61 (Development in areas liable to marine flooding).

(iii) The Devon Structure Plan

The Devon Structure Plan will be superseded by the RSS, upon its adoption. Until this point, the Devon Structure Plan will form the basis for planning policy and decisions. The Devon Structure Plan sets out strategic planning policies for development and other land uses over a 15 year period. It provides a framework for detailed decisions by local authorities, other organisations and individuals in the preparation of their forward Plans.

The Devon Structure Plan was adopted in October 2004 and covers the period up to 2016. The document is the current Structure Plan for the whole of Devon, including Plymouth, Torbay and Dartmoor National Park, but excluding Exmoor National Park.

The Devon Structure Plan seeks to direct major housing and employment areas towards Barnstaple, which should maintain and develop its role as a sub regional centre. Elsewhere, the Structure Plan seeks to promote the distinctive natural assets in the county, particularly along the coastal areas as well as safeguarding economic assets associated with maritime industries, including ports and tourism facilities. Pertinent policies are outlined below and are detailed in Annex D.10.

Policy ST9: Barnstaple Sub Regional Centre.



- Proposal ST19: Strategic Development Sites.
- Policy ST21: Regeneration Priority.
- Policy CO3: Areas of Outstanding Natural Beauty.
- Policy CO4: Areas of Great Landscape Value.
- Policy CO5: Coastal Preservation Area.
- Policy CO9: Biodiversity and Earth Science Diversity.
- Policy CO10: Protection of Nature Conservation Sites and Species.
- Policy CO14: Conserving Agricultural Land.
- Policy TR13: Ports.
- Policy TO2: Tourism Development in Other Settlements.

D.8.2.4 Local Planning Policy

Local Plans and Unitary Development Plans

This section reviews the relevant local policies for the SMP and has been undertaken in relation to the local planning authorities falling within the SMP boundary. These local authorities include the following:

- North Devon District Council;
- Torridge District Council;
- North Somerset Council (Unitary authority);
- Sedgemoor District Council; and
- West Somerset District Council.

Each Council listed above is required under The Planning and Compulsory Purchase Act (2004) to introduce a new system of development plan preparation. Under this new system Structure Plans, Local Plans and Supplementary Planning Guidance are to be replaced by a 'Local Development Framework' (LDF). Once the LDFs are adopted the Local Plan will cease to be the statutory planning document guiding development principles, housing and employment sites within the local authority areas. Until such time, the Local Plans will remain the statutory basis for development control decisions. Accordingly, an indicative date for adoption of the LDF has been given for each local authority within the SMP boundary. In the following sections are an overview of the Local Plan and Local Development Framework for each Local authority.

(a) North Devon District Council and Torridge District Council

North Devon District Council's and Torridge District Council's Local planning policies are presented below, this is followed by their jointly prepared Local Development Framework.

(i) North Devon District Council Local Plan

The Local Plan for North Devon District Council was adopted in July 2006 and sets out the policies and proposals to guide development and the use of land up to 2011. The North Devon Local Plan covers the whole of the district outside the Exmoor National Park boundary. Pertinent policies have been outlined below and are detailed in Annex D.11. The overall strategy for that part of the coast in North Devon is to seek its conservation, while focussing new development at Barnstaple and Ilfracombe and, to a lesser degree, Braunton.

- Policy ENVI (Development in the Countryside).
- Policy ENV2 (Areas of Outstanding Natural Beauty).
- Policy ENV3 (The Heritage Coast).



- Policy ENV4 (Exmoor National Park).
- Policy ENV5 (Coastal Preservation Areas).
- Policy ENV6 (Areas of Great Landscape Value).
- Policy ENV7 (Agricultural Land).
- Policy ENV8 (Biodiversity).
- Policy ENV9 (International Nature Conservation Sites).
- Policy ENV10 (Sites of Special Scientific Interest).
- Policy ENVII (Protected Species).
- Policy ENV12 (Locally Important Wildlife or Geological Sites).
- Policy HSGI (The Sequential Approach).

(ii) Torridge District Council Local Plan

The Torridge District Local Plan was adopted in September 2004 and covers the period to 2011. The plan sets out detailed policies and proposals that guide the development and use of land and buildings in the district and contains policies relating to the protection and enhancement of the local environment. The Plan covers the whole of the Council's administrative area, including Lundy Island. Much of the new development is to be focussed in and around Bideford and near Westward Ho!, where the importance of the tourism industry is to be safeguarded. The relevant policies to the SMP are listed below and detailed further in Annex D.12.

- Policy DVTI (Development in Strategic Centres).
- Policy DVT2 (Development at Rural Settlements).
- Policy DVT14: Areas at Risk.
- Policy ECD1: Employment Land.
- Policy ECD2: General Employment Areas (GEAs).
- Policy ECD3: Employment Development outside GEAs.
- Policy ECD7: Westward Ho!.
- Policy HSC1: Housing Development.
- Policy HSC19: Major Retail Development.
- Policy ENVI: Conservation Interest.
- Policy ENV6: Designated Landscape Areas.
- Policy ENV7: Protection of Important Nature Conservation Interests.
- Policy ENV9: Important Wildlife Corridors.

(iii) Local Development Framework for North Devon and Torridge District Councils

A Core Strategy is being prepared jointly with Torridge District Council. This document establishes the vision, strategic objectives and spatial strategy for North Devon and Torridge to 2021 including the broad distribution of development and targets for a range of uses across the whole of the District. Adoption is expected in June 2010.

The first stage in Core Strategy preparation has now been achieved with publication of an Issues and Options Report. This document looked at various options for different levels of growth at Barnstaple, Bideford, Northam, Great Torrington and Holsworthy and the market towns. The document emphasises the



environmental distinctiveness and biodiversity of the joint area as well as the importance of safeguarding the biological integrity of the UNESCO biodiversity reserve at Broughton Burrows.

The Core Strategy Issues and Options feedback identifies potential regeneration, employment and housing growth options at Barnstaple. In addition to the growth areas identified within the consultation report, a range of alternative housing and employment options were promoted both inside and beyond the development boundary defined in the respective Local Plans. Indicative allocations for housing and employment sites were identified for comment by members of the public have been made, as follows:

Barnstable: 327ha.
Bideford West: 35ha;
Bideford East: 52 ha
Ilfracombe: 165 ha
Northam: 44 ha

An Area Action Plan is being produced for Barnstaple. This will set out residential, employment and retail development proposals for the town and surrounding villages including detailed policies and proposals aimed at strengthening Barnstaple's Sub Regional role. Adoption of this document is expected in July 2012.

(b) West Somerset

(i) West Somerset District Council Local Plan

The West Somerset Local Plan covers the administrative area of West Somerset, excluding Exmoor National Park for which the Exmoor National Park Authority has prepared a separate Local Plan. The relevant policies to the SMP are listed below and detailed further in Annex D.13.

- Policy SP/5 (Development outside Defined Settlements).
- Policy CO/2 (Coastal Defences).
- Policy CO/3 (Coastal Defences).
- Policy TO/I (Tourism in Minehead & Watchet).
- Policy TO/5 (Tourism).
 - (ii) <u>Local Development Framework for West Somerset District Council (The Statement of Community Involvement was adopted in March 2007)</u>

The Core Strategy will contain the spatial vision, spatial objectives and strategy for development in West Somerset up to 2026 in which core policies for the district will be established. The core policies will essentially cover the issues deemed as most important in achieving the district's spatial vision/objectives which will be linked with the Settlement Strategy. This will address development proposals in Minehead and regeneration issues in both Watchet and Williton. The indicative date for adoption of this document is February 2009.

The Site Specific Allocations will identify sites to be allocated for new development i.e. housing, employment, retail, open space, including their delivery. Content will consist of the identified sites and associated policies from the relevant Development Plan Documents, with a justification, through appraisal techniques, as to why they are deemed the most suitable locations. The indicative date for adoption of this document is December 2009.

An Area Action Plan is being prepared for Williton which will be the lead document for the future development of the town. Content will be made up of policy and proposals to direct and control development opportunities and the extension of the urban area with associated infrastructure improvements. Major components will outline new individual sites for commercial/retail purposes to assist defined regeneration objectives.

(C) Sedgemoor

(i) Sedgemoor District Council Local Plan
The Local Plan for Sedgemoor District Council was adopted in September 2004 and covers the period to



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2011. Pertinent policies have been outlined below and are detailed in Annex D.14. Most development in the district is focussed in Highbridge within the SMP boundary and in Bridgwater, which is outside of the SMP boundary.

- Policy STR3 (Protection of the Countryside).
- Policy STR4 (Distribution of Housing).
- Policy H60 (Housing Allocations).
- Policy H61 (Phasing of Housing Development).
- Policy CNE4 (The Countryside & Natural Environment).
- Policy CNE5 (Agricultural Land).
- Policy CNE7 (Designated Sites).
- Policy CNE8 (SSSIs, NNRs).
- Policy CNEI0 (Priority Species and Habitats).
- Policy CNE14 (Flood Risk).
- Policy RLT12 (Recreation, Leisure & Tourism).
- Policy RLT12(b) (Burnham-on-Sea West Huntspill).
- Policy RLT16 (Holiday Accommodation Allocations).
- Policy HE9 (Areas of High Archaeological Potential).
- Policy HEII (Nationally Important Archaeological Sites).
- Policy HE12 (Locally Important Archaeological Remains).

(ii) Local Development Framework for Sedgemoor District Council.

Sedgemoor District Council adopted their Statement of Community Involvement in April 2007

The Council is prioritising the preparation of the Core Strategy, which will be the overarching district wide strategy for the LDF and will provide a vision for the future of the District as a whole and for specific places. It is envisaged that the Core Strategy will be adopted by July 2011, with the Preferred Options for the document being published towards the end of 2009.

The Issues and Options Paper for the Core Strategy examined various levels of growth in Bridgewater with up to 6200 houses projected for the town up to 2011. The Core Strategy vision for Burnham on Sea and Highbridge sets out an approach for market towns to act as focal points for the provision of locally significant growth where the scale and mix of development should increase self containment, develop their function as a service centre and secure development that can address regeneration needs.

The Council is currently considering the public response to the Issues and Options Report for the Core Strategy.

(d) North Somerset Council

(i) North Somerset Council Local Plan

The Replacement Local Plan for North Somerset Council was adopted in March 2007. The document forms part of the development plan for the local planning authority and guides development up to 2011. The Local Plan contains a number of policies which are pertinent to the SMP, which guide development within the coastal area. These policies are outlined below and are detailed in Annex D.15.

- Policy GDP/I: Preferred locations for development.
- Policy GDP/2: Environmental and public protection (including floodplain protection, coastal/riverbank erosion and ground instability).
- Policy GDP/4: Sustainable water management.



- Policy H/I: Residential Development Strategy.
- Policy ECH/9: Forest of Avon.
- Policy ECH/12: Wildlife sites of international importance.
- Policy ECH/14: Wildlife and geological sites and local nature reserves.
- Policy ECH/15: Coastal Zone.
- Policy E1: Weston-super-Mare Vision.
- Policy E/5 Safeguarded Employment Areas.

(ii) Local Development Framework for North Somerset Council.

The Statement of Community Involvement was published in February 2007.

The findings following consultation on the Core Strategy are summarised in a pre-production brief for the Core Strategy. This document outlines general public consensus towards development principles and site allocations in the district.

Weston Regeneration Area AAP

The Weston Regeneration Area AAP will cover the areas of future major employment and residential growth including Weston Airfield, RAF Locking, West Wick and Worle. The Weston Regeneration Area AAP is now progressing to the Preferred Options stage.

Weston Town Centre AAP

The Weston Town Centre AAP will cover the established, built-up areas in need of selective regeneration requiring a site-by-site approach including the town centre, seafront and gateway areas.

D.8.3 Other Proposed/Ongoing Developments

In addition to the planned future developments described in 8.2, there are a number of other ongoing or proposed developments along the coastal zone that have been identified:

- Decommissioning of Hinkley Point Power Stations A and B with the proposed construction of one or more new nuclear reactors at Hinkley Point, probably using adjacent land in addition to parts of the present power station sites.
- Studies of Managed Realignment to create intertidal habitat at Steart
- A Feasibility Study has identified several options for the Severn Tidal Power Scheme; the option which is
 within the SMP study area involves a barrage across the Severn estuary between Weston-Super-Mare and
 Cardiff.
- Proposal to redevelop Ilfracombe harbour including building an outer breakwater, a marina with a barrage
 and lock with facilities for ferries and visiting cruise ships, and to redevelop the Theatre area with
 additional tourist attractions.
- Studies for a surge barrier on the River Parrett downstream of Bridgwater are ongoing by the Environment Agency.



D.9 Glossary

Abbreviation	Term	Definition
ALLI	Area of Local Landscape Importance	Areas which represent landscapes of importance at a local level. They are identified as areas that enhance local amenity and environmental quality and provide attractive settings for villages and urban areas. These areas are promoted in Local Development Frameworks.
AONB	Area of Outstanding Natural Beauty	Were designated by the Countryside Agency, now Natural England. The purpose of the AONB is to identify areas of national importance and to promote the conservation and enhancement of natural beauty. This includes protecting its flora, fauna, geological and landscape features. This is a statutory designation.
	Character Area	Areas of England identified by the Natural England as separate character areas of national significance which are identified on the basis of geomorphology, vegetation and human activity. The Countryside Agency, now Natural England has mapped 159 separate Character Areas in England.
LLA	Local Landscape Area	Areas which represent landscapes of importance at a local level. They are identified as areas that enhance local amenity and environmental quality and provide attractive settings for villages and urban areas. These areas are promoted in Local Development Frameworks.
LNR	Local Nature Reserve	These are established by local authorities in consultation with Natural England. These sites are generally of local significance and also provide important opportunities for public employment, recreation and interpretation. This is a non-statutory designation.
NNR	National Nature Reserve	Designated by Natural England. These represent some of the most important natural and semi-natural ecosystems in Great Britain, and are managed to protect the conservation value of the habitats that occur on these sites. This is a statutory designation.
PSA	Public Service Agreement	Targets set by the Government for Government departments. Part of the PSA target for Defra includes: To care for our historic environment, make the countryside attractive and enjoyable for all and to preserve biological diversity by bringing into favourable condition, by 2010, 95% of all nationally important wildlife sites.
Ramsar Site	Ramsar Site	Wetland sites, especially waterfowl habitats, designated under the Ramsar Convention as wetlands of international importance.
RIGS	Regionally Important Geological/ Geomorphological Site	The most important places for geology, geomorphology and soils outside of legally-protected nature reserves and Sites of Special Scientific Interest.
SAC	Special Area of Conservation	This designation aims to protect habitats or species of European importance and can include Marine Areas. SACs are designated under the EC Habitats Directive (92/43/EEC) and will form part of the Natura 2000 site network. All SAC sites are also protected as SSSI, except those in the marine

$\label{eq:hard-point} \mbox{Hartland Point to Anchor Head SMP2} \\ \mbox{Appendix D} - \mbox{SEA Environmental Baseline Report (Theme Review)}$

Abbreviation	Term	Definition	
		environment below the Mean Low Water (MLW).	
SLA	Special Landscape Area	A county level designation, promoted by local council.	
SM	Scheduled Monument	Scheduled monuments are nationally important archaeological sites which have been awarded Scheduled status in order to protect and preserve the site for the educational and cultural benefit of future generations.	
SMP	Shoreline Management Plan	A non-statutory document that sets out strategic level guidance designed to assist coastal defence decision making for a defined length of coast over a defined period.	
SNCI	Site of Nature Conservation Interest	A county designation, usually designated because of its wildlife value. This is a non-statutory designation.	
SPA	Special Protection Area	Internationally important sites, being set up to establish a network of protected areas for birds.	
SSSI	Site of Special Scientific Interest	These sites, notified by Natural England, represent some of the best examples of Britain's natural features including flora, fauna, and geology. This is a statutory designation.	
UNESCO	United Nations Educational, Scientific and Cultural Organisation	Britain's first UNESCO Biosphere Reserve, where conservation is complemented by sustainable development.	

D.10 Sources of Information

D.10.1 Difficulties experienced in obtaining data

The Theme Review has been prepared on the basis of publicly available information. Consultation has not yet been undertaken. It is likely that additional information will be identified during the consultation process.

D.10.2 Reports

- Bridgwater to Bideford Bay Shoreline Management Plan, North Devon and Somerset Local Group, June 1998.
- Draft Revised Regional Spatial Strategy for the South West incorporating the Secretary of State's Proposed Changes, Government Office for the South West, July 2008.
- Braunton United Nations Educational Scientific and Cultural Organisation (UNESCO) Strategy 2007- 2012
- North Devon District Local Plan, North Devon District Council, adopted 2006.
- Torridge District Local Plan, Torridge District Council, adopted 2006.
- North Somerset Replacement Local Plan, North Somerset Council, adopted March 2007.
- North and Mid Somerset Catchment Flood Risk Management Plan, Environment Agency, Draft June 2008.
- North Devon Catchment Flood Risk Management Plan, Environment Agency, Draft June 2007.
- Parrett Catchment Flood Risk Management Plan, Environment Agency, Draft July 2008.
- Severn Estuary Rapid Coastal Zone Assessment Phase One Report for English Heritage, Gloucestershire County Council, Draft January 2008.
- Severn Estuary Coastal Habitat Management Plan, Environment Agency 1996.
- Sedgemoor District Local Plan, Sedgemoor District Council, 1991 2011 adopted version.
- West Somerset Catchment Flood Risk Management Plan, Environment Agency, July 2008.
- West Somerset District Local Plan, West Somerset District Council, April 2006.

D.10.3 Websites (accessed December 2008)

- http://gosw.limehouse.co.uk/portal
- http://www.ukbap.org.uk
- http://www.naturalengland.org.uk
- http://environment-agency.gov.uk
- http://english-heritage.org.uk
- http://www.magic.gov.uk
- http://www.ons.gov.uk/census
- http://www.nddc.gov.uk
- http://www.n-somerset.gov.uk
- http:// www.westsomersetonline.gov.uk
- http:// www.sedgemoor.gov.uk
- http:// www.torridge.gov.uk
- http://www.exmoor-nationalpark.gov.uk
- www.devonseafisheriescommittee.co.uk



ANNEX D.I: FIGURES

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FIGURE 4 OVERVIEW OF AGRICULTURAL LAND CLASSIFICATIONS

FIGURE 5 OVERVIEW OF LANDFILL SITES



ANNEX D.2: INTERNATIONAL CONSERVATION DESIGNATIONS

Designation	Location	Coastal Section	Area (ha)	Qualifying Features
Special Protection Area (SPAs)	Severn Estuary	F,G,H	24017.64	 Qualifies under Article 4.1 for: internationally important wintering population of Bewick's swan Cygnus columbianus bewickii. Qualifies under Article 4.2 for: wetland of international importance by regularly supporting in winter over 20,000 waterfowl. regularly supporting in winter internationally important numbers of the following 5 species of migratory water fowl: European white fronted goose Anser albifrons albifrons albifrons, shelduck Tadonrna tadorna, gadwall Anas strepera, dunlin Calidris alpina and redshank Tringa totanus In addition the estuary also supports: nationally important wintering populations of a further 10 species: wigeon Anas penelope, teal Anas crecca, pintail Anas acuta, pochard Aythya ferina, tufted duck Aythya fuligula, ringed plover Charadrius hiaticula, grey plover Pluvialis squatarola, curlew Numenius arquata, whimbrel N.phaeopus and spotted redshank Tringa erythropus nationally important numbers of ringed plover, dunlin, whimbrel and redshank during passage periods (spring and autumn). nationally important breeding population of a migratory species of lesser black back gulls Larus fuscus graellsii.
Ramsar Site	Severn Estuary	F,G,H	24023.17	 Ramsar criterion: Sandbanks lightly covered by water all the time Estuaries Mudflats and sandflats not covered by seawater at low tide Atlantic salt meadows (Galuco-Puccinellietalia maritimae) Due to unusual estuarine communities, reduced diversity and high productivity Important for run of migratory fish between sea and river via estuary. Including Salmon Salmo salar sea trout S.trutta, sea lamprey Petrmyzon marinus, river lamprey Lampetra fluviatilis, allis shad Alosa alosa, Twaite shad, A .falllax, and eel Anguilla Anguilla. Also of importance for migratory birds during spring and autumn. Fish are most diverse in Britain, with over 110 species recorded. Site is important for feeding and nursery ground for many fish species particularly allis shad and twaite shad which feed on mysid shrimps in the salt wedge.
				 Qualifying populations of international importance: 70919 water fowl (5 year peak mean 1998 -2003 without 2001) Tundra swan Cygnus columbianus bewickii 229 individuals representing 2.8% of GB population Greater white fronted goose Anser albifrons albifrons 2076 individuals representing 35.8% of GB population Common Shelduck Todorna tadorna 3223 individuals representing 1% of the population Gadwall Anas strepera strepera 241 individuals representing 1.4% of GB population Dunlin Calidris alpine alpina 25082 individuals representing 1.8% of population Common redshank Tringa totanus tetanus 2616 individuals representing 1% of population
Special Areas of Conservation	Severn Estuary Candidate SAC	F,G,H	73715.4	Also occurring are noteworthy species of invertebrates and fish. Qualifying* Habitats: Estuaries Mudflats and sandflats not covered by seawater at low tide Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Sandbanks which are slightly covered by seawater all the time Reefs Qualifying* species: Sea lamprey Petromyzon marinus River Lamprey Lampetra fluviatilis Twaite shad Alosa fallax
	Lundy SAC	A	3383.08	 Qualifying* Habitats: Reefs Sandbanks which are slightly covered by sea water all the time Submerged or partially submerged sea caves Qualifying* Species: Halichoerus grypus
	Tintagel- Marsland- Clovelly Coast SAC	В	2380.47	Qualifying* Habitats European dry heaths Old sessile oak woods with <i>llex</i> and <i>Blechum</i> in the British Isles Vegetated sea cliffs of the Atlantic and Baltic coasts Outlifying* Habitates
	Braunton Burrows SAC	С	1346.64	 Qualifying* Habitats: Fixed dunes with herbaceous vegetation (grey dunes) Dunes with Salix repens ssp.argenta (Salicion arenariae)

Location	Coastal Section	Area (ha)	Qualifying Features
			 Humid dune slacks Mudflats and sandflats not covered by seawater at low tide Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) Qualifying* Species:
Exmoor Heaths SAC	E	10705.87	 Petalwort Petalophyllum ralfsii Qualifying* Habitats: Blanket bogs Alkaline fens European dry heaths Northern Atlantic wet heaths with Erica tetralix Old sessile oak woods with Ilex and Blechnum in the British Isles Vegetated sea cliffs of the Atlantic and Baltic coasts
Exmoor & Quantocks Oak woods	F	1895.17	 Qualifying* Habitats Old sessile oak woods with <i>llex</i> and <i>Blechnum</i> in the British Isles Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicon albae)</i> Qualifying* species Barbastelle <i>Barbestella barbestella</i> Bechstein's bat <i>Myotis bechsteinii</i> Otter <i>Lutra lutra</i>
Mendip Limestone Grasslands SAC	Н	417.47	Qualifying* Habitats: Tilio-Acerion 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 (Festuco-Brometalia) Qualifying* Species: Greater horsehoe bat Rhinolophus ferrumequinum
	Exmoor & Quantocks Oak woods Mendip Limestone Grasslands	Exmoor & F Heaths SAC Exmoor & F Quantocks Oak woods Mendip Limestone Grasslands	Exmoor Heaths SAC Exmoor & F 1895.17 Quantocks Oak woods Mendip H 417.47 Limestone Grasslands

Qualifying * habitat or species are defined above as a qualifying feature that is a primary reason for site selection or as a qualifying feature that is not a primary reason for site section.

Halcrow

ANNEX D.3: NATIONAL CONSERVATION DESIGNATIONS

Designation	Biological/Geological Area (ha)	Summary	% in Favourable Condition (December 2008)	Coastal Sections (Key below)
Site of Special Scientific I	nterest (SSSI)		,	l
Lundy	B 345.0ha	kittiwake <i>Rissa tridactyla</i> , razorbill <i>Alca torda</i> , guillemot <i>Uria aalge</i> , peregrine <i>Falco peregrinus</i> and raven <i>Corvus corax</i> breeding on the cliff faces. It is also used as staging post by migratory birds and vagrants. Grey seals <i>Halichoerus grypus</i> breed in the sea level caves. It has an endemic plant species the Lundy Cabbage <i>Rhynchosinapis wrightii</i> . Lundy's dry heath of <i>Calluna</i> occurs in a waved form due to the exposure to the wind and is interspersed with numerous lichens including <i>Cladonia</i> and <i>Parmelia</i> sp. This occurs amongst semi improved acid grassland with abundant Yorkshire fog <i>Holcus lanatus</i> and western gorse <i>Ulex gallii</i> . Boggy areas and acid flushes occur around ponds. The grassland and heath are overgrazed by rabbits <i>Oryctolagus cuniculus</i> , soay sheep and sika deer <i>Cervus nipon</i> and domestic animals. The deer seek refuge within the Rhododendron <i>Rhododendron ponticum</i> .	50.91% Favourable; 49.09% Unfavourable recovering	A
Marsland to Clovelly Coast	B/G 951.74	This length of coast contains four Geological Review Sites including Hartland Quay (not in SMP boundary), Hartland Point, Welcombe Mouth (Not in SMP boundary) and Clovelly to Mouth Mill. Hartland Point has bed layers of the lower Bude formation Upper Carboniferous period showing asymmetric syncline. The north limb dips south at 30 degrees and the south limb dips north at 80 degrees, the link between the two has collapsed due to the inversion. These formations are displayed in profile from the foreshore along the coast. These sites are important for their coastal and fluvial geomorphological features including hog's back cliffs and platforms, displaying the relationship between cliff forms, platform development and lithological variations. There is also evidence of former valleys being truncated by the retreat of the cliff line. Cliffs between Clovelly and Mouth Mill display Upper Caboniferous Crackington Formation also showing a series of asymmetric folds. The cliff tops support a mosaic of habitats including grassland, heath, woods and parkland. The grassland is characterised by thrift Armeria maritima, red fescue Festuca rubra, sea campion Silene maritima, wild thyme Thymus praecox and buck's-thorn plantain Plantago coronopus. The heath is characterised by heather Calluna vulgaris, bell heather Erica cineria and western gorse Ulex gallii. At Hartland Point the heath is rich in lichens notably Lecidia aeruginosa and Loligatroph. The woods and parkland are characterised by sessile oak Quercus Petraea ash Fraxinus excelsior beech Fagus sylvatica and sycamore Acer psuedoplatanus. With an abundant understorey of hazel corylus avellana, hawthorn Crataegus monogyna and holly Ilex aquifolium with characteristic ground flora. The stunted well lit oak trees have enabled an abundant rich and diverse lichen community to develop. Culm grassland present at Brownsham contains a species rich wetland flora notably including Lesser butterfly-orchid Plantathera bifola the scarce yellow bartsia Parentucellia viscosa, lady's mant		В
Mermaids Pool to Rowdens Gut	G I 56.54 ha	This 5.5km stretch is the only complete sequence of the Bideford Formation, made up of 'Coal Measure' type deposits. The partly coeval Crackington and Bude formations represent the more marine influenced sediments in the South West England Culm basin. The strata of broad and slightly asymmetrical folds are extensively exposed along the cliff and foreshore and are complicated by two sets of wrench faults. The lateral change from Crackington to Bideford formations makes this an important site for palaeoenvironmental and palaeogeographical studies. In addition to this it shows the exposed fold structures on the northern edge of the variscan belt.	100% Favourable	В
Hobby to Peppercombe	B/G 240.6 ha	This 6km section of coast supports extensive oak <i>Quercus petraea</i> woodlands which contain nationally important communities of Atlantic- climate woodlands which contain nationally important communities of Atlantic climate old – woodland lichens, many of which are rare and have a restricted distribution. The sea cliffs are composed of much folded carboniferous sandstones and shales of the Bude and Crackington Formations.		В
Braunton Burrows	B/G I 356.7ha	binervosum. From the mid to fore shore the 'yellow' dunes colonised by marram grass Ammophila arenaria, include notable species such as sea stock Matthiola sinuate, sea stork's bill Erodium maritimum, sea clover Trifolium aquamosum, Portland and sea spurges Euphobia potlandica and E. Paralias and white horehound Marrubium vulgare. Inland are the 'grey slacks' where other vegetation replace the marram grass such as dune fescue Vulpia membranacea. In the slacks which flood other notable species can be found including round headed club-rush Scirpus holoschoenus, sharp rush Juncus acutus, round leaved winter green Pyrola rotundifolia ssp. maritime, early gentian Gentianella anglica and orchids. The grassland known as 'dune pasture' although not grazed contains has a mixture of grasses, sedges and herbs including rough poppy Papaver hybridum. Scrub encroaches including native willow Salix sp, bramble Rubus fruticosus and introduced sea buckthorn Hippophae rhamnoides.	22% Favourable (60% Unfavourable declining, 18% unfavourable recovering)	С
Greenaways and Freshmarsh, Braunton	13.5	Herb rich marshy grasslands and rich water —plant communities in the drainage ditches of particular importance due to their limited distribution in Devon. The site is on the northern fringe of Braunton Marsh, with soils derived from marine alluvium and patchy peaty horizons. Notable species within the herb rich grazing marsh include southern marsh orchid Dactylorhiza pratermissa and marsh arrow grass Triglochin palustris a rare plant in Devon. There is a rich assemblage of aquatic plants in the ditches, submerged species include common starwort Callitriche stagnalis and ivy leaved duckweed Lemna trisula. In the emergent vegetation of note is tasteless water-pepper Polygnum mite. The site supports reed bunting Emberiza schoeniclus and sedge warbler Acrocephalus schoenobaenus	100% Favourable	C

Designation	Biological/Geological Area (ha)		% in Favourable Condition (December 2008)	Coastal Sections (Key below)
Braunton Swanpool	11.7	This site has a reedbed and herb rich marshy grasslands, habitats area in Devon. Common reed <i>Phragmites australis</i> and associated plants supports Marsh Arrowgrass <i>Triglochin palustris</i> a rare plant in Devon. The rich meadow flora supports characteristic plants of wetlands. The site supports reed bunting <i>Emberiza schoeniclus</i> and sedge warbler <i>Acrocephalus schoenobaenus</i>		С
Taw-Torridge Estuary	B/G 1,336.5ha	The estuary has wide tidal mudflats, sandbanks, saltmarshes and beaches. It is of major importance for it's over wintering and migratory birds including nationally important numbers of curlew <i>Numenius arquata</i> golden plover <i>Pluvialis apricaria</i> and lapwing <i>Vanellus vanellus</i> . Other species include abundant numbers of redshank <i>Tringa totanus</i> , dunlin <i>Calidris alpina</i> and oyster catcher <i>Haematopus ostralegus</i> . 20,000 waders can be present at any one time. A typical zonation of estuarine plant communities are evident, the lower levels include glasswort <i>Salicornia spp</i> . common saltmarsh grass <i>Puccinella maritima</i> and cord grass <i>Spartina sp</i> . the middle reaches include sea aster <i>Aster tripolium</i> and annual seablite <i>Suaeda maritima</i> and upper reaches: red fescue <i>Festuca rubra</i> and sea rush <i>Juncus maritmus</i> . Notably the rare great sea-stock <i>Matthiola sinuata</i> and nationally scarce rock sea-lavender <i>Limonium vinerbosum</i> are present. The Taw and Torridge support many fish species including mullet <i>Mugil sp.</i> , bass <i>Dicentrarchus labrax</i> , pollack <i>pollachius pollachius</i> and on migration salmon <i>salmo salar</i> and sea trout <i>S. trutta</i> and eel <i>Anguilla anguilla</i> . Peppery furrow shell <i>Scorbicularia plana</i> can be found on the mud flats with mussels <i>Mytius edulis</i> on the rocky outcrops and seawalls.		С
Westward Ho! Cliffs	G	Important locality illustrating several key features of the coastal geomorphology and quaternary deposits of SW England, including multiple shore platforms and a classic succession of raised beaches and head deposits. It is particularly noted for its intertidal peat bed of Flandrain age, resting on soliflucted and cryoturbated beach deposits. These provide an exception record of former changes in sea level and climatic conditions.	100% Favourable	С
Northam Burrows	B/G 422.5ha	important land feature. It has a wide range of coastal habitats supporting rare and local plants and over wintering birds. The pebble ridge protects yellow dunes residing behind characterised by marram grass <i>Ammophila arenaria</i> along with other dry grasses including red fescue <i>Festuca rubra</i> . The nationally scarce dune fescue <i>Vulpia membranacae</i> , the nationally scarce rock sea-lavender <i>Limonium vinerbosum</i> and bird's-foot clover Trifolium ornithopodioides and	17.60% Favourable (42.0% Favourable recovering; 10.2 % unfavourable no change; 30.8% unfavourable declining)	С
Fremington Quay Cliffs	G 10.6 ha	Site provides evidence for uninterrupted marine sedimentation in North Devon at about the Devonian –Carboniferous boundary. The northerly beds display a uniform sequence of dark ashes which are richly fossiliferous. Late Devonian and early carboniferous faunas have been found.	100% Favourable	С
Saunton to Baggy Point Coast	G 152.8 ha	This site is designated for its geological exposures and botanical interest. The cliffs facing the Atlantic between Saunton Down and Baggy Point provide a variety of different conditions for plant growth due to the different aspects of the cliff tops, crevices, rocky foreshores and sands of Croyde and the Burrows. Rock samphire <i>Crithmum maritimum</i> and sea beet <i>Beta vulgaris</i> ssp. <i>maritima</i> can be found on on rock ledges with sea kale <i>Crambe maritima</i> and sea stock <i>Matthiola sinuata</i> on the foreshore. Between Saunton and Croyde is the best location to study key features of coastal geomorphology and Pleistocene stratigraphy in the South West providing evidence of former changes in climate and sea levels. The area has examples of Lower Pilton Beds which show the transition of former water levels and paleoecology and paleogeography. Laticosta cave has a good Pilton Beds Fossil record. Above the cliffs is low growing European Gorse <i>Ulex europa</i> amongst maritime heath including heather <i>Calluna vulgaris</i> and maritime grassland containing thrift <i>Armeria maritima</i> . wild carrot <i>Daucus carota</i> , hairy bird's foot trefoil <i>Lotus subbiflora</i> , autumn squill <i>Scilla autumnalis</i> , musk storks bill <i>Erodium moschatum</i> , and sea storks bill <i>E.maritum</i> .	76% Favourable (24% Unfavourable recovering)	D
Barricane beach	B/G 8.23 ha	The Upper Devonian (Frasnian- Fammenian) Morte Slates were deposited in a marine environment and are highly fossiliferous. These fosils helped date the rock to the Upper Devonian period rather than the Lower Devonian period as had been proposed.	100% Favourable	D
Mill Rock	G 0.16 ha	This site has scattered well preserved fragments of Upper Devonian fish within a tuff (volcanic ash band), which is geologically unusual and the palaeoenvironmental ecological relationships deduced from studying this are of considerable importance.		D
Morte Point	Primarily designated for its maritime heath, although the coastal cliffs and foreshore habitats are also included. Morte Point has cliffs 50 to 100m high made of Upper Devonian Rocks of slates and sandstones overlain by thin leached soils. The land rises up to 450m, on these steep slopes are heather Calluna vulgaris, bell heather Erica cinera and western gorse Ulex europa. There are also extensive areas of bracken Pteridium aquilinum and bramble Rubus fruticosus, areas of grassland dominated by tussocks of Purple Moor grass Molinia caerula with ant hills; and areas of richer soil with primrose Primula vulgaris and bluebells Hyacinthoides non-scripta. On the less steep grazed areas are characteristic cliff species of thrift Armeria maritima rock samphire Crithmum martitum wild thyme Thymus praecox and buck's-thorn plantain Plantago coronopus amongst common grasses. Sea heath Frankenia laevis has been recorded in the area. The cliffs provide breeding habitat for sea birds including Larus Sp. and Fulmar Fulmaris glacialis with cormorant Phalacrocorax carbo and shags P. Aristotelis on the lower rocks.		100% Favourable	E
Hele, Samson's and Combe Martin Bays	G 22.21 ha	This site provides good exposures of the Middle Devonian (Givetian) Ilfracombe beds, consisting of sandstone, mudstone and occasional limestone. The Western part of this site exposes the Jenny Start Limestone and Rillage Limestone. Combe Martin Bay displays the Combe Martin Slates a thin fossiliferous limestone. This layering amongst other evidence has been interpreted as a transition from shallow to slightly deeper marine environments. There are also folds ranging from a few centimetres thick to larger than the size of the cliffs. The Hele, Samson and Combe Martin Bay are of national importance for their Devonian Stratigraphy, palaeontology and palaeogeography studies	100% Favourable	Е

Designation	Biological/Geological Area (ha)	Summary	% in Favourable Condition (December 2008)	Coastal Sections (Key below)
Napps Cave	G/B		0% Favourable	E
	II.7ha	Britain. Several species of bat inhabit the cave including the greater and lesser horseshoe bats Rhinolophus ferrumequinum and R. hipposideros.	100% Unfavourable declining	
Exmoor Coastal Heaths	В	Important for extensive heathland communities which are rare in Britain and confined to the South West. In the coastal zone further important habitats	51.17% Favourable; 23.97	E
	1758.3	occur including: woodland and scrub, acidic and maritime grassland, associated with these coastal communities are numerous rare plants and a breeding	Unfavourable recovering;	
		colony of nationally rare breeding colony of butterflies – the High brown fritillary <i>Argynnis cydippe</i> . The coastal slopes are good examples of a heather <i>Calluna vulgaris</i> and bilberry <i>Vaccinium myrtillus</i> community in which abundant bryophytes occur. This typically upland community exists here due to the cool north facing slopes. At Hurlestone Point a very short grassland of the red fescue <i>Festuca rubra</i> – thrift <i>Armeria maritima</i> type is found. There are two nationally rare endemic species of whitebeam <i>Sorbus subcuneata</i> and <i>S. vexans</i> occurring within woodland. The coastal heath support many of Exmoor's breeding Wheatear <i>Oenanthe Oenanthe</i> , with strong poplations of whinchat <i>Saxicola rubetra</i> and stonechat <i>Saxicola torquata with</i> peregrine <i>Falco peregrinus</i> hunting over the cliffs.	22.75 unfavourable no change 2.10% unfavourable declining	
West Exmoor Coast and	B/G	Important for ancient sessile oak woodlands, maritime plant communities outstanding lichen flora in the valleys and a rich bird population with three	34.14% Favourable;	E
Woods	709.6	important geological features. The north facing cliffs support typical maritime plant communities including heather <i>Calluna vulgaris</i> , bilberry <i>Vaccinium myrtillus</i> , bell heather <i>Erica cinarea</i> and western gorse <i>Ulex gallii</i> . With thrift <i>Armeria maritima</i> and rock sea spurrey <i>Spergularia rupicola</i> amongst other species on the tufts. The sheltered river valleys of sessile oak woodlands contain the two nationally rare endemic species of whitebeam <i>Sorbus subcuneata</i> and <i>S. vexans</i> with interesting ground flora. The Valley of rocks contains over 100 species of lichen. Typical woodland bird species occur including pied flycatcher <i>Muscicapa hypoleuca</i> , red start <i>Phoenicurus phoenicurus</i> and wood warbler <i>Phylloscopus sibilatrix</i> . It is the best mainland site in North Devon for breeding razorbill <i>alco tord</i> and guillemot <i>Uria aalge</i> . Hollowbrook between Heddons mouth and Woody Bay is important for showing a complete section through the Lynton Beds/ Hangman sandstone group boundary. It is a key site for determining the southern shoreline of the old red sandstone continent. Crock Point between Woody Bay and Lee Bay is a key site for showing the Lynton beds which are richly fossiliferous and will help determine past ecology. The Valley of Rocks is important to establish the coastal and drainage evolution of North Devon and is of considerable importance for its pleistocene geomorphology.	57.13%Unfavourable recovering; 8.33 Unfavourable no change	
Porlock Ridge and	B/G		8.07% Favourable;	F
saltmarsh	186.29	source of sediment has long disappeared and the ridge has been rolling back and curving into Porlock bay since. The now narrow ridge was unable to withstand the storm of October 1996 therefore the low lying marsh behind became flooded. This is the only fully documented example in the UK of a nationally important coastal system which has undergone catastrophic failure and subsequent evolution following sediment inhibition. The lower lying part of saltmarsh is dominated by glasswort <i>Salicornia spp.</i> , common saltmarsh grass <i>Puccinella maritima</i> , annual seablite <i>Suaeda maritima</i> and cord grass <i>Spartina sp.</i> . The upper reaches have sea plantain <i>Plantago maritima</i> and sea milkwort <i>Glaux maritima</i> . On the shingle which is not inundated by saltwater a variety of vegetation has established including lichens on the front and sea storksbill <i>Erodium martimum</i> and the nationally scarce Babbington's leek <i>Allium ampeloprasm ssp. babingtonii</i> . The site is visited by over wintering birds and a wide range of migratory bird species.	91.93% unfavourable recovering;	
Dunster Park and Heath- lands	B 466.0	The site has nationally important lowland dry heath (Western gorse <i>Ulex galii</i> - Bristle bent <i>Agrostis curtisii</i>); dry lowland acid grassland; wood-pasture with veteran trees and black polar <i>Populus nigra</i> ; and ancient semi natural woodland supporting ferns including hard fern <i>Blechnum spicant</i> with a shrub layer of Holy <i>Ilex aquifolium</i> and a ground cover of bilberry <i>Vaccinium myrtillus</i> . The fauna includes the nationally rare butterfly the Heath butterfly <i>Mellicta athalia</i> . The assemblage of beetles associated with the veteran trees is of national significance. Noteworthy birds species associated with these habitats are the nightjar <i>Caprimulugus europaeus</i> and Dartford Warbler <i>Sylvia undata</i> .	0% Favourable; 44.53% Unfavourable recovering; 53.55% Unfavourable no change; 1.92% Unfavourable declining	F
Blue Anchor to Lilstock	G	Blue anchor to Lilstock shows a series of sections through the Lower Lias, spanning the Hettangian and Pleinsbachian stages. This is of international	76.24 Favourable; 22.72	F
Coast	742.8	significance for Britain's Lias sequence is arguably the best in NW Europe. It has been proposed that this coast represents the Hettangian stage and thus by definition the Jurassic as a whole.	Unfavourable recovering; 1.02 unfavourable no change	
The Quantocks	2506.9	Extensive area of semi natural habitat including dry dwarf shrub heath, wet dwarf shrub heath, acidic flushes, ancient semi natural broadleaved woodland and dense scrub. It has a number of plants with a local distribution in Somerset including Cornish honeywort Sibthorpia europaca, shoreweed Littorella uniora, heath pearlwort Sagina subulata, deer grass Trichophorum cespitosum and hay scented bucker fern Dryopteris aemula. The site also supports an outstanding bird fauna including grass hopper warbler Locustella naevia nightjar Caprimulugus europaeus and pied flycatcher Ficedula hypoleuca. The Quantocks are important for red deer Cervus elaphus. Invertebrates include 3 nationally rare dead wood beetles Thyalus limbatus, Orchesia undulate and Rhinosimus ruficollis.	7.4% Favourable, 21.54% Unfavourable recovering; 65.63 Unfavourable no change; 5.43 Unfavourable declining	F
Bridgwater Bay	B/G 3574.I	Bridgwater Bay has a succession of habitats from extensive mudflats, saltmarsh, shingle beach and grazing marsh with a complex of ditches and ponds intersecting the marsh. This supports internationally and nationally important numbers of over wintering, passage and migrant waders and waterfowl. The bay is a wave cut platform of Jurassic blue Lias which projects into the severn estuary and provides some protection from the erosive tide creating extensive mudflats. The prevailing winds have created sand dunes at Berrow and a shingle ridge at Steart. On the landward side the River Parrett meanders	90.56% Favourable; 7.79% Unfavourable recovering; 0.90% Unfavourable no change; 0.57% Unfavourable declining.	F/G/H

Designation	Biological/Geological Area (ha)		% in Favourable Condition (December 2008)	Coastal Sections (Key below)
Berrow Dunes	B 200.0	This site has a wide range of coastal habitats including saltmarsh, fore, grey and yellow dunes, stable dune grassland and dune slacks, scrub and a freshwater lagoon. The zonation of plants is striking, four communities occur (1) Dominated by cord grass Spartina anglica (2) Red Fescue Fetsuca rubra and saltmarsh grass Juncus gerardi (3) Sea clubrush Scirpus maritimus, and (4) Common reed Phragmites australis. A foredune is now establishing on the sea ward side of this vegetation and is colonised by sand couch Elymus farctus. Yellow dunes establish on the landward side of the saltmarsh colonised by marram grass Ammophila arenaria and scrub including sea buckthorn Hippophae rhamnoides. Behind the dune crests is extensive species-rich dune grassland with a small number of dune slacks supporting wetland flora including round headed club-rush Scirpus holoschoenus only found in two locations in Britain. A large lagoon known as Berrow Marsh which is largely freshwater in character provides the only location in Britain for the rush Juncus subulatus. A rich invertebrate flora utilises these habitats with 14 notable species of beetle and the nationally rare Greater silver diving beetle Hydrophilus piceus, two nationally rare soldier fly Stratiomys furcata and S. potamida, two notable dragonflies the Hairy dragonfly Brachytron pretense and the ruddy darter Sympetrum sanguineum. The site also supports breeding birds including the sedge warbler Acrocephalus schoenobaenus with bittern Botaurus stellaris, merlin Falco columbarius and hen harriers Circus cyaneus being regular winter visitors.	0% Favourable , 100% Unfavourable recovering	G
Brean Down	B/G 65.1	A peninsula of carboniferous limestone projecting westwards into the Severn Estuary and has maritime vegetation. It displays variations in slope and aspect, grazing and recreational pressure, maritime influence and soil depth making it suitable for the study of ecological factors. The grassland is species rich and supports three nationally rare plant species, two of which are on the red data book. The peninsula represents bed from the devensian age with remains of reindeer and lemmings excellently preserved.	100% Favourable	G, H
Uphill Cliff	B 19.8	grassland. A tower tops the Hill and can be climbed for a panoramic view. Archaeological features include a disused lime kiln, a sheepwash and a powder house. Uphill Hill is part of the Mendip Limestone Grasslands Special Area of Conservation (SAC), supporting a diverse flora and valuable insect habitat. An outstanding display of cowslips, primroses and green winged orchids covers the northern and eastern hill slopes in the Spring.	31.98% Favourable; 68.02% Unfavourable recovering;	Н
Severn Estuary	B 15950	Britain and World Wide. It has the second highest tidal variation in the world. The intertidal zone of mudflats, saltmarsh, sand banks and rocky platforms is	95.71% Favourable ;2.44% Unfavourable no change; 1.85 %Unfavourable declining	F, G, H
National Nature Rese	rve (NNR)		l	
Braunton Burrows	Unknown	Braunton Burrows is one of the largest dune systems in Britain, with lime rich dunes up to 30m high and an extensive system of variably–flooded slacks, grassland and scrub, inland of a wide sandy foreshore. There is a variety of habitats for many flowering and lower plants and for many birds and invertebrates. Several species are nationally rare or vulnerable. There are also important features of geological interest.	N/A	С
Bridgwater Bay	2639.1 ha	The reserve consists largely of intertidal mudflats with saltmarsh, sandflats and shingle ridges, some of which are vegetated. The Bristol Channel has the second largest tidal range in the world and this exposes huge mudflats and sand banks in the area. The site has an important bird population with approximately 190 species recorded on the reserve. Large numbers of wintering waders and waterfowl visit the site and some species use the area as a stopoff on migration routes. Vegetation at the site is an important food source for some birds and parts of the saltmarsh are grazed by sheep to maintain a palatable sward for wigeon grazing. Wildfowling is permitted in some areas while the main body of the reserve is a wildlife sanctuary.		G
Huntspill River	148.97 ha	The river is wholly artificial, dug in 1940 to provide water for a Royal Ordnance Factory. The river's value as a drain was also recognised and retention sluices were placed at each end to create an elongated reservoir. In the winter the Huntspill is used to clear flood water from agricultural land in the Brue valley, and in the summer it is filled by water from local peat moors. At its western end the Huntspill enters the Bridgwater Bay NNR (see above). Most of the grassland on the banks of the river is leased for haymaking, or grazing by cattle and sheep. The waterway holds a large stock of coarse fish and part of the reserve is leased to a local angling association. Otters use the site and artificial holts (homes) have been constructed for their benefit. Barn owls breed in the area using boxes erected by the Hawk and Owl Trust and nearby grassland is now being managed to provide a hunting ground for these birds. Willow and scrub are being planted in some areas to create a more natural-looking landscape, provide new habitats and increase diversity. The area is of some archaeological interest and the remains of Romano-British salt works have been found on the site.		G

Designation	Biological/Geological Area (ha)		% in Favourable Condition (December 2008)	Coastal Sections (Key below)
Dunkery and Horner Woods	1604.0 ha	The reserve comprises two sites: Horner Woods and an upland area of heathland on Dunkery Hill. Horner Woods is an ancient oakwood that is an important site for mosses, liverworts, lichens and ferns. Local birdlife includes the pied flycatcher, wood warbler, lesser-spotted woodpecker, redstart and dipper. The woods are also home to 14 of the UK's 16 known bat species, including breeding roosts of barbastelle and Bechstein bats. The NNR's upland area exhibits a complete range of heathland habitats showing a transition from 'true' upland down to lowland heath. Plant life includes fir and stagshorn clubmoss, Cornish moneywort and cranberry. The site is also important for its population of heath fritillary butterflies. Moorland birds seen here include stonechat and whinchat, curlew, ring ouzel and merlin.	N/A	E
Hawkcombe Woods	98.1 ha	Lowland heath.	N/A	E

ANNEX D.4: COUNTY WILDLIFE SITES AND LOCAL WILDLIFE SITES

Identity Number	Nature Reserve	Coastal Section
1330	South Yeo Fields	С
1594	Allenstyle Wood	С
1346	Mill Leat, Fremington	С
1592	Fremington Pill	С
1593	Saltpill Duckpond	С
1329	Horsey Island (W)	С
1328	Middleborough Hill	D
1325	Woolacombe Down	D
1321	Bull Point & Rockham Bay	Е
1322	Hillymouth	Е
1323	Borough & Six Acre Woods	Е
1324	Big Counting Hole Fields	E
1578	Torrs Park	E
1581	The Cairn and Old Railway	Е
1582	Langleigh Manor Fields	Е
1583	Warmscombe Wood	Е
1355	Hillsborough/Beacon Point	Е
1356	Widmouth Head	Е
1360	Northfield Wood	E
1358	Newberry Beach Fields	E
1359	Salt Wood	E
1600	South Cleave	E
1601	Oakland Wood	E
1602	Higher East Lyn Fields	E
3327	Stags Head Woods	E
3328	Whitebloom Linhay	E
3324	Embelle Wood West	E
3323	Embelle Wood East	E
3349	Yenworthy Lodge	E
3351	Embelle Wood Heath	E
3353	Glenthorne Heath	E
3329	Holmer's Combe Heath	E
3361	Holmer's Combe Field	E



Identity Number	Nature Reserve	Coastal Section
3319	East Culbone Wood	E
3320	Silcombe	E
3360	Culbone Wood Beach	E
3313	Yearnor Wood	E
3314	Worthy Wood	E
3318	Laneclose Plantation	E
3311	The Parks (west)	E
3317	The Parks East	E
3321	Culbone Wood West	E
3325	Yenworthy Woods	E
3326	Guildhall	E
3535	Woodcombe Plantation	E
3364	Hawk Combe	E
3363	Horner Water	E
3352	Sugarloaf Hill Heath	E
3359	Bossington Wood	E
3557	Upper Grexy Combe	E
3558	Wydon Allotment	E
3559	Bratton Ball South	E
3534	Greenaleigh Plantation North	E
3531	Woodcombe & Whitecross	E
3532	Moor Wood	E
3533	Culver Cliff Wood	E
3513	White Cross Fields	E
3521	Dunster Marshes	F
3515	Dunster Beach	F
3362	River Avill	F
3737	Blue Anchor Railway Line and Upper	F
3716	Cridlands Copse	F
3714	The Huntingball	F
4801	Blue Anchor to Lilstock Cliff	F
3707	Cornfield Nr Crow Covert	F
3708	Chapel Cornfield	F
3715	The Double	F
3717	Blue Anchor Hotel Field	F

Identity Number	Nature Reserve	Coastal Section
3718	Daws Castle	F
3719	Minster Field Road Verge	F
3720	Tuck's Brake	F
3724	Washford River	F
3726	Doniford Stream	F
3735	The Coach House	F
3736	Watchet Station	F
3721	Mount Fields	F
3732	Rydon Hill	F
3910	Lilly Copse	F
3904	West Wood &	F
3920	Aldergrove Copse	F
3922	St Audries Park	F
3906	East Wood	F
3909	Lower Hill Scrubs	F
3915	Kilton Park Wood	F
3907	Cross Elms	F
4176	Hinkley	F
LWS	Wick Park Covert	G
LWS	Mud House Copse	G
LWS	Combwich Brick Pit	G
LWS	Otterhampton Heronry	G
LWS	Wick Park Covert	G
4175	Wall Common West	G
4174	Bridgwater Bay NNR (Subsite outside of NNR)	G
4326	River Brue	G
4327	Apex Gardens	G
4348	Brambles Road Ponds & Rhyne	G
4349	St Christophers Playing Field	G
4178	Brean Dunes	G
349	Ditch south of the Grange, near Uphill	G
357	Bridgwater Road verge and Oldmixon Bridge Tips	G
359	Uphill Cliff SSSI/LNR and adjacent land	G
356	Severn Estuary SSSI (part of) - Axe Estuary to Weston golf course	Н
358	Weston Golf Course and fields below Uphill	Н

$\label{eq:hard-point} \mbox{Hartland Point to Anchor Head SMP2} \\ \mbox{Appendix D} - \mbox{SEA Environmental Baseline Report (Theme Review)}$

Identity Number	Nature Reserve	Coastal Section
361	Uphill Great Rhyne (part of) and meadow east of Uphill Manor	Н
345	Uphill Great Rhyne (part of)	Н
344	Ellenborough Park SSSI	Н
467	Severn Estuary SSSI and adjacent land	Н
463	Spring Cove Cliffs SSSI	Н



ANNEX D.5: BIODIVERSITY ACTION PLAN HABITATS AND SPECIES

Biodiversity Action Plans (BAPs) relating to the SMP study area have been reviewed, the broad and priority BAP habitats are listed in Table i below, and species are listed in Table ii below. The BAPs relevant to the SMP study area include:

- South west
- Devon
- West Somerset Local BAP
- Exmoor Local Biodiversity Action Plan
- North Devon Biodiversity Action Plan
- Action for Nature North Somerset BAP
- Quantock Hills AONB Local BAP
- Sedgemoor Biodiversity Action Plan
- West Somerset Biodiversity Action Plan
- The nature of Devon: A Biodiversity Action Plan
- Mendip Biodiversity Action Plan

Table I: BAP Broad and Priority Habitats

Broad Habitat	Habitat Name and combination present in LBAP.	Relevant Regional/Local BAP
	* =Priority Habitat	
Inland rock	Caves karst and mines	Devon
	Pits quarries and cuttings	Devon
Broadleaved, mixed and yew	Ancient semi natural woodland	North Somerset
woodland	Wet woodland*	Devon, North Somerset
	Veteran Trees and Parkland	North Somerset
	Upland oak woodland*	West Somerset, Quantocks, Exmoor National Park
	Wood pasture and parkland	Quantocks, North Devon
	Parkland, wood pasture and veteran trees	Exmoor National Park
	Oak woodland	Devon, North Devon
	Endemic whitebeams	Devon, Exmoor National Park
Arable and horticulture	Farmland	North Devon
Boundary and linear features	Ancient and or species rich hedgerows*	Devon, North Somerset, North Devon
	Road verges	North Somerset
	Stone walls	North Somerset
Neutral grassland	Flower rich meadows and pastures	Devon North Somerset, Mendips, Exmoor National Park
Improved grassland	Coastal and floodplain grazing marsh*	Devon Sedgemoor



Broad Habitat	Habitat Name and combination present in LBAP.	Relevant Regional/Local BAP
	* =Priority Habitat	
	Rhynes/ditches	North Somerset
	Seasonally wet grassland	North Somerset
Calcareous grassland	Calcareous grassland	North Somerset
	Lowland calcareous grassland	Sedgemoor
Acid grassland	Acid grassland	North Somerset
	Purple moor grass and rush pastures (culm grassland)*	Exmoor National Park
Bracken	Bracken and scrub	Exmoor National Park
Dwarf shrub heath	Limestone Heath	North Somerset
	Lowland heathland	Devon, West Somerset, Quantocks, Exmoor National Park
	Coastal heathland	North Devon
	Upland heathland*	Exmoor National Park
Fen, marsh and swamp	Mires	North Somerset, Mendips
	Reedbeds*	Devon, North Somerset
Bogs	Blanket bog*	Exmoor National Park
Urban		
Built up areas and gardens	Gardens	North Somerset
	Brown field sites	North Somerset
	Public open spaces and parks	North Somerset
	Cities towns and villages	Devon, North Devon
Standing open water and	ponds	North Somerset
canals	open lakes	North Somerset
Rivers and streams	River streams and associated habitats	Devon, North Somerset, West somerset
	Tufa springs and streams	Mendips
	Estuaries	North Devon
	Coastal saltmarsh*	North Somerset
	Coastal mudflats*	North Somerset
	Coastal Sand dunes*	North Somerset, Sedgemoor, North Devon
	Maritime cliffs and slopes*	Devon, North Somerset, Quantocks
	Sabellaria reefs*	North Somerset, West Somerset
	Coastal Vegetated shingle*	North Somerset, West Somerset
	Rocky foreshore	North Devon
	Rocky sea bed	North Devon



Table II: BAP Species

Taxonomic Groups	Species	BAP
Mammals	Otter	Devon
	Water vole	Devon
	Water shrew	North Somerset
	Greater horseshoe bat	Devon North Somerset, Sedgemoor
	Lesser Horseshoe bat	Devon, North Somerset, West Somerset, Mendips
	Dormouse	North Somerset
	Brown hare	Devon North Somerset, Mendips
	Otter	West Somerset
Birds	Curlew	Devon
	Barn owl	Devon
	Nightjar	West Somerset, Mendips
Amphibian	Great crested newt	Devon, Mendips, Exmoor National Park
Reptile	Adder	Quantocks, Exmoor National Park
Fish	Sea trout	Quantocks
	Twaite shad	Devon
Vascular Plants	Greater water parsnip	Sedgemoor
	Primrose	Mendips
	Lizard orchid	Devon
Fungus	Balerina waxcap	Exmoor National Park
Lichens	Lungwort lichens	Exmoor National Park
	Golden hair lichen	Exmoor National Park
Beetle	Lesser silver water beetle	Devon (More relevant to South Devon)
	Dune tiger beetle	Exmoor National Park
Crickets/	Large marsh grasshopper	Devon West Somerset
grasshoppers	Great green bush cricket	Devon
Butterfly	Marsh fritillary	Mendips
	Pearl bordered fritillary	West Somerset
	Heath fritillary	West Somerset
	High brown fritillary	Devon
Damselflies	Southern damselfly	Exmoor National Park
Crustaceans	Freshwater White-clawed crayfish	Devon Sedgemoor
Corals	Pink sea fan	Devon
Molluscs	Freshwater pearl mussel	Devon



$\label{eq:hard-point} \mbox{Hartland Point to Anchor Head SMP2} \\ \mbox{Appendix D} - \mbox{SEA Environmental Baseline Report (Theme Review)}$

Taxonomic Groups	Species	BAP
	Mountain bullin snail	Mendips

ANNEX D.6: Historic Environment Assets

Scheduled Monuments within 500m where it is likely to be affected by any change to the coastline.

Monument Number	Name	Easting	Northing	Area (Ha)	Coastal Section
DV73	Windbury Head Camp	228641	126626	3.39	В
32238	Round Barrow Cemetery	226883	120805	0.28	В
32193	Clovelly Dykes Hillfort	231111	123467	11.17	В
DV448	Earthwork E of Buck's Mill	235895	123489	0.98	В
33062	Barnstaple Castle	255557	133329	1.33	С
DV927	Cross Ridge dyke on Godsborough Castle Earthwork	243665	127364	0.37	С
DV926	Kenwith Castle	243288	127380	0.19	С
30315	Lenwood Bowl Barrow	244115	128136	0.08	С
DV513	The Castle Knowle	248897	138304	2.39	С
DV197	Spreacombe Manor Well Chapel Braunton	248276	141383	0.05	С
DV414	Hillsbrough Promontory Fort	253278	147784	12.13	E
DV40	Martinhoe Castle	266308	149337	0.60	E
DV974	Barrows SE of Martinhoe	267326	148331	0.04	E
DV974	Barrows SE of Martinhoe	267259	148348	0.04	E
DV974	Barrows SE of Martinhoe	267293	148232	0.04	E
DV520	Round barrow	270792	148597	0.06	E
33056	Earthwork Defences of Contisbury Castle Promontory Fort	273897	149493	0.63	Е
33056	Earthwork Defences of Contisbury Castle Promontory Fort	274065	149351	1.45	E
33054	Myrtleberry North Camp late historic multiple enclosure fort	274287	148759	2.20	E
33055	Myrtleberry South Camp late prehistoric hillslope enclosure	274159	148309	0.72	Е
33033	Old burrow	278797	149343	1.11	Е
35327	Round Cairn Cemetery	292411	148033	0.06	E
35327	Round Cairn Cemetery	292308	148025	0.09	E
35327	Round Cairn Cemetery	292528	147902	0.13	E
35327	Round Cairn Cemetery	292454	147693	0.01	E
SO503	Deserted Medieval Farm	294053	147915	0.20	E
24031	Iron Age Defended Settlement, Furzebury Brake	293588	148299	0.57	E

Monument Number	Name	Easting	Northing	Area (Ha)	Coastal Section
33730	Four Medieval fish weirs	297645	147056	20.97	F
35598	Hillfort on Grabbist Hill	298302	143667	2.60	F
33039	Motte and Bailey at Dunster Castle	299147	143459	5.14	F
24003	Black ball camp: a later prehistoric defended settlement on Gallox Hill	298428	142651	1.13	F
24002	Bats castle a small multivallate Hillfort and associated outwork	299040	142019	0.53	F
24002	Bats castle a small multivallate Hillfort and associated outwork	298809	142149	2.88	F
27962	Early Christian to Medieval settlement and cemetery	301113	142683	1.56	F
28519	Cleeve Abbey	304746	140588	12.04	F
33712	Daw's Castle	306183	143219	2.93	F
33704	Round Barrow cemetery at Battle Gore	307457	141506	1.76	F
24008	Trendle Ring Hillfort and associated outwork	311828	139356	1.58	F
22083	Two Cairns and two bowl barrows on Weacombe Hill	312862	139890	0.23	F
39351	Bowl Barrow on Thorncombe Hill	313030	139495	0.03	F
29352	Bowl Barrow on Thorncombe Hill	313018	139460	0.03	F
33708	Stogursey Castle	320326	142586	2.31	F
SO28	Wick Barrow Pixie's Pond	320907	145575	0.07	F
SO28	Wick Barrow Pixie's Mound	320907	145575	0.06	G
SO26	Cynwit Castle	324672	140475	5.78	G
SO459	Settlement	324597	140281	12.57	G
33714	Motte with two baileys	330899	141364	1.30	G
10504	Alstone Lake Settlement Site	331295	146792	0.78	G
24001	Brent knoll Hillfort and associated field system	334136	151031	6.18	G
13811	Multi-period site on Brean Down	328796	159035	100.06	Н
22825	Motte and Bailey Castle and Associated earthworks of Locking head Farm	336376	160881	0.60	Н

Monument Number	Name	Easting	Northing	Area (Ha)	Coastal Section
22841	Worlebury Camp: a large multivallate hillfort on Worlebury Hill	331323	162499	10.27	Н
22818	Shrunken medieval village of Christon and associated filed system	337783	157691	11.54	Н

There are over 1000 Grade 1, 2* and 2 Listed Buildings within 500m of the North Devon and Somerset Coast that may be affected by any change to the coastline. A detailed listed of these assets is not provided in this Appendix. The reader is referred to English Heritage's website for details of Listed Buildings.

Registered Parks and Gardens within 500m where it is likely to be affected by any change to the coastline.

Name	NGR	Listing criteria	Area (ha)	Coastal Section
Saunton Court	SS4537	Grade II	2.37	С
Tapeley Park	SS4729	Grade II*	99.37	С
Youlston Park	SS5837	Grade II	66.23	С
Arlington Court	SS6140	Grade II*	188.14	E
Dunster Castle	SS9943	Grade II*	297.98	F
St Audries (House)	ST1142	Grade II	111.34	F
Fairfield	ST1943	Grade II	45.64	F
Nettlecombe court	SS0537	Grade II	118.00	F
Crowcombe Court	ST1436	Grade II	95.65	F
Halswell Park	ST2533	Grade II	183.00	G
Registered Battle fields	1	<u> </u>	<u> </u>	
Battle of Sedgemoor	ST345 346	n/a	230.33	F

Conservation Areas within 500m where it is likely to be affected by any change to the coastline.

Conservation Areas	Coastal Section	
Clovelly	С	
Bucks Mill	С	
Appledore	С	
Northam	С	
Instow	С	
Bideford	С	
East-the-Water	С	
Fremington	С	
Bicklington	С	



Barnstaple	С
Tawstock	С
Braunton	С
Woolacombe	С
Ilfracombe	D
Lynton	D
Lynmouth	D
Porlock	D
Bossington	D
Minehead	D
Dunster and Dunster Castle	D
Watchet	D
Bridgwater	D
Burnham-on-Sea	D
Highbridge	D
Uphill	E
Weston-super-Mare	E



ANNEX D.7: NATIONAL PLANNING POLICY RELEVANT TO

Document	Relevance
PPSI – Delivering Sustainable Development (2005)	Sets out the Government's overarching planning policies on the delivery of sustainable development through the planning system. PPSI will aim to ensure that urban and rural development within the study area is developed in a sustainable way that benefits the local community, conserves the environment, and ensures economic growth and employment, as well as making prudent use of natural resources. The PPS also identifies the potential impact of the environment on proposed developments by avoiding new development in areas at risk of flooding and sea-level rise, and as far as possible, by accommodating natural hazards and the impacts of climate change.
Planning and Climate Change: Supplement to PPSI (2007)	Supplements PPSI by setting out how planning should contribute to reducing emissions and stabilising climate change and take into account the unavoidable consequences. This will have a direct and indirect impact on the climate and environment of the study area. The PPS also identifies that modern human activity has the potential to cause more extreme weather events, including hotter and drier summers, flooding and rising sea-levels leading to coastal realignment.
PPG2 – Green Belts (1995)	Stipulates that general policies controlling development in the countryside apply with equal force in Green Belts but there is, in addition, a general presumption against inappropriate development (harmful to the Green Belt) within them. Such development will not be approved, except in very special circumstances.
PPS3 – Housing (2006)	Underpins the delivery of the Government's strategic housing policy objectives and their goal to ensure that everyone has the opportunity to live in a decent home, which they can afford in a community where they want to live.
PPG4 - Industrial, Commercial Development and Small Firms (1994)	Identifies that the planning system should operate on the basis that applications for development should be allowed, having regard to the development plan and all material considerations, unless the proposed development would cause demonstrable harm to interests of acknowledged importance. Also, development control should not place unjustifiable obstacles in the way of development which is necessary to provide homes, investment and jobs, or to meet wider national or international objectives.
PPS6 – Planning for Town Centres (2005)	Aims for town centres to promote their vitality and viability by planning for the growth and development of existing centres; and promoting and enhancing existing centres, by focusing development in such centres and encouraging a wide range of services in a good environment, accessible to all. This will result in the development and enhancement of coastal towns in the study area.
PPS7 – Sustainable Development in Rural Areas (2004)	Identifies that local planning should include policies to sustain, enhance and, where appropriate, revitalise country towns and villages (including through the provision of affordable housing) and for strong, diverse, economic activity, whilst maintaining local character and a high quality environment.
PPS9: Biodiversity and Geological Conservation (2005)	Aims to ensure that sites of geological importance and geological features are protected in the same way as other nature conservation interests, providing protection for much of the study area.
PPG14 – Development on Unstable Land (1990)	Seeks to identify that the Government wishes to encourage the full and effective use of land in an environmentally acceptable manner. However, difficulties have been experienced in developing land in areas of past and present mining and in other areas where land is unstable or potentially unstable.
	It is also identifies that, in the context of the management of coastal zones, coastal authorities may wish to consider the introduction of a presumption against built development in areas of coastal landslides or rapid coastal erosion.
PPG15 - Planning and the	Specifies that it is fundamental to the Government's policies for environmental stewardship

Document	Relevance
Historic Environment (1994)	that there should be effective protection for all aspects of the historic environment. The Historic Environment should be protected and enhanced, where possible.
PPG16 - Archaeology and Planning (1990) PPG20 - Coastal Planning (1992)	PPG16 sets out the Secretary of State's policy on archaeological remains on land, and how they should be preserved or recorded both in an urban setting and in the countryside. Development should pay heed to the location or potential location of archaeological remains and should seek to minimise the impact that it has on the arahcaeological record. Seeks to identify that it is the role of the planning system to reconcile development requirements with the need to protect, conserve and, where appropriate, improve the landscape, environmental quality, wildlife habitats and recreational opportunities of the coast. Local authorities should recognise that on-shore development can often have an impact offshore. There is a need to protect the environment while providing appropriately for development, and the need to plan with due regard for hazards from flooding, erosion and unstable land, are not unique to the coast.
	Opportunities for developed on the coast are limited by physical circumstances, such as risk of flooding, erosion and land instability, and by conservation policies. Policies should aim to avoid putting further development at risk from flooding, erosion and land slips. It is highlighted that stretches of coast damaged by industrial and urban development, mining or waste disposal, will need proposals for improving the environment. This will be an essential prerequisite for restoring the physical environment and securing economic and physical regeneration. Further, policies should encourage the imaginative re-use of disused commercial docks as part of the regeneration of such areas, whilst conserving and restoring landmarks and structures of special historic interest.
PPS22 - Renewable Energy (2004)	Encourages the use of appropriate land and the development of existing energy production for renewable energy sources, including wind, water, tidal, solar and biomass.
PPS23 - Planning and Pollution Control (2004)	Seeks to establish the role of planning in determining the location of development which may give rise to pollution, either directly or indirectly, and ensuring that other uses and developments are not as far as possible, affected by major existing or potential sources of pollution.
PPS25 – Planning and Flood Risk (2006)	The aims of planning policy on development and flood risk are to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk. Where new development is, exceptionally, necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and where possible, reducing flood risk overall. The PPS also identifies that extensive, low-lying coastal lands around most British estuaries are particularly susceptible to flooding. Changes to the drivers associated with coastal erosion (surges, waves, coastal sediment supply and morphology, and relative sea level rise) will affect the probability of flooding to new developments.
Good Practice Guide on Planning for Tourism (2007)	Identifies that the planning system, by taking a pro-active role in facilitating and promoting the implementation of good quality development, is crucial to ensuring that the tourism industry can develop and thrive throughout the UK. Maximising the economical, social and environmental benefits. The guidance identifies that tourism can become the focus of regeneration in urban areas and a key element of rural diversification and revitalisation of market towns and villages. Tourist developments should be located where they are accessible and sustainable. It is also identified that caravan sites should be relocated away from visually intrusive locations, or from sites prone to flooding or coastal erosion.

ANNEX D.8: POLICIES CONTAINED IN THE DRAFT REGIONAL SPATIAL STRATEGY

Proposed new wording of policy statement by Secretary of State

Policy FI (Flood Risk)

Taking account of climate change and the increasing risk of coastal and river flooding the priority is to:

- Defend existing properties and, where possible, locate new development in places with little or no risk of flooding
- Protect flood plains and land liable to tidal or coastal flooding from development
- Follow a sequential approach to development in flood risk areas
- Use development to reduce the risk of flooding through location, layout and design.

Policy ES4: Waterside Employment Sites

Within coastal settlements and the developed coast, waterside sites must be safeguarded for social and economic uses which require such a location, giving priority to maritime industries.

Policy TO2: Safeguarding and Investing in Tourism Destinations

Within the context of Policy COI, Local Authoritity Destination Management Organisations and atakeholders should collaborate across administrative boundaries to define the future role of tourism in each of the nine recognised destination zones, identify the measures required to support it and develop action plans for their delivery. Such plans should identify:

- the need to allocate specific sites for new tourism related investment;
- the development needs of existing businesses to tackle the seasonality challenge;
- the nature and mix of new investment required; and
- the necessary infrastructure and investment required to support the industry within the context of the need for regeneration and economic viability

The role of existing resorts should be maintained and enhanced, especially the major resorts of ... Weston-super-Mare, by safeguarding existing high quality accommodation and facilites, developing new facilities where appropriate and be of an appropriate scale and supporting the specialisation of resorts into particular markets suited to their location.

COI Defining the Coastal Zone

Within the undeveloped coast there will be a presumption against development unless it:

- Does not detract from the unspoilt character and appearance of the coast, and
- Is essential for the benefit of the wider community, or
- Is required to improve public access for informal recreation, or
- Is required to support the sustainable management of fisheries, and
- Cannot be accommodated reasonably outside the undeveloped coast zone

ENVI Protecting and Enhancing the Region's Natural and Historic Environment

The quality, character, diversity and local distinctiveness of the natural and historic environment in the South West will be protected and enhanced, and developments which support their positive management will be encouraged. Where development and changes in land use are planned which would affect these assets, Local Authorities will first seek to avoid loss of or damage to the assets, then mitigate any unavoidable damage, and compensate for loss or damage through offsetting actions. Priority will be given to preserving and enhancing sites of international or national landscape, nature conservation, geological, archaeological or historic importance. Tools such as characterisation and surveys will be used to enhance local sites, features and distinctiveness through development, including the setting of settlements and buildings within the landscape and contributing to the regeneration and restoration of the area.



Proposed new wording of policy statement by Secretary of State

ENV3 Protected Landscapes

In Dartmoor and Exmoor National Parks and the 14 Areas of Outstanding Natural Beauty in the region, the conservation and enhancement of their natural beauty, wildlife and historic environmentwill be given priority over other considerations in the determination of development proposals. Development will only be provided for

- Conserve and enhance the natural beauty, wildlife and historic environmentof the National Park or Area of Outstanding Natural Beauty, or
- Promote the understanding and enjoyment of the special qualities of the National Park, or
- Foster the social or economic well-being of the communities within the National Park or Area of Outstanding Natural Beauty, provided that such development is compatible with the pursuit of National Park or Area of Outstanding Natural Beauty purposes

Consideration will also be given to proposals which promote the understanding and enjoyment of the special qualities of the Areas of Outstanding Natural Beauty. Particular care will be taken to ensure that no development is permitted outside the National Park or Areas of Outstanding Natural Beauty which would damage their natural beauty, character and special qualities or otherwise prejudice the achievement of National Park or Area of Outstanding Natural Beauty purposes.

A number of further changes are proposed in housing allocations for the south-west. These are outlined below

SSCT*	Housing number proposed in draft RSS	Housing numbers proposed in Examination in Public Panel Report	Proposed Changes	Difference between Draft RSS andd Proposed Changes
Weston-super- Mare	12,000	12,000	12,000	0 (0%)
Bridgewater	6,200	7,700	7,700	+1,500 (24.2%)
Barnstaple	4,800	7,200	7,200	+2,400 (50%)

^{*} Strategically Significant Cities and Towns (SSCT)



ANNEX D.9: EXMOOR NATIONAL PARK AUTHORITY JOINT STRUCTURE PLAN

Policy I (Nature Conservation)

The biodiversity of Somerset and the Exmoor National Park should be maintained and enhanced. The greatest protection will be afforded to nature conservation sites of international and national importance.

Policy 2 (Exmoor National Park)

In the Exmoor National Park:

- the conservation and enhancement of the natural beauty, wildlife and historic environment; and
- the promotion of opportunities for public understanding and enjoyment of the special qualities of the

should be given priority over other planning considerations. In cases of conflict between these purposes, greater weight should be attached to the first.

Provision for development should only be made where it would not conflict with the purposes of the National Park designation. Provision should only be made for major development where there is an overriding need in terms of national considerations that cannot be met in any other way.

Particular care will be taken to ensure that no development is permitted outside the National Park which would damage its natural beauty, character and special qualities or otherwise prejudice the achievement of National Park purposes.

Policy 3(Areas of Outstanding Natural Beauty)

In Areas of Outstanding Natural Beauty the conservation of the natural beauty of the landscape should be given priority over other planning considerations. Provision should only be made for major industrial or commercial development where it is in the national interest and there is a lack of alternative sites. Particular care should be taken to ensure that any development proposed does not damage the landscape character of the area.

Policy 4 (Levels & Moors)

The biodiversity and unique character of the Somerset Levels and Moors should be maintained and enhanced.

Policy 5 (Landscape Character)

The distinctive character of the countryside of Somerset and the Exmoor National Park should be safeguarded. Particular regard should be had to the distinctive features of the countryside in landscape, historic environment and nature conservation terms in the provision for development.

Policy 7 (Agricultural Land)

Subject to the overall aims of the strategy, provision should not be made for permanent development, involving the best and most versatile agricultural land unless there are no alternative sites on lower quality agricultural land and there is an overriding need for the development.

Policy 15 (Coastal Development)

Provision for any development along the coast, including the Exmoor Heritage Coast, should be made within Towns, Rural Centres and Villages. Where development requires an undeveloped coastal location it should respect the natural beauty, biodiversity and geology of the coast and be essential in that location. New coastal developments should minimise the risk of flooding, erosion and landslip.

Policy 16 (Provision of land for industrial, warehouse and business development)

Provision will be made for about 405 Hectares of land for industrial, warehouse and business development purposes over the period 1991 - 2011. This will include activities within classes B1, B2 and B8 for local authorities within the SMP boundary, as follows:

- Sedgemoor: approx 95 ha.
- West Somerset: approx 10ha.



In the Exmoor National Park provision should only be for an appropriate scale of development to meet local social and economic needs.

Policy 18 (Location of land for industrial, warehousing & business development)

When determining the location of land for employment generating activities, in the context of other policies in the plan, consideration should be given to environmental, sustainability and amenity issues. Allocation and development of land for B1, B2 & B8 purposes is as follows:

Local Planning Authority	Allocation	Remaining
Sedgemoor District Council	95	78.7
West Somerset District Council	10	8

Policy 21 (Town Centre uses)

The functional centres of Towns and Rural Centres will be the primary focal points of new facilities. A sequential approach to development should be adopted, in the following order:

- in town centres,
- in edge-of-town centre locations,
- in local centres, and only then,
- in new locations within or well related to the settlements concerned,

Policy 23 (Tourism development in the countryside)

Outside of settlements or defined Tourism Development Areas, the priority is to improve existing attractions and accommodation and to mitigate the environmental impact of existing development.

Policy 33 (Provision for Housing)

Provision will be made for about 44,800 dwellings over the period 1991 - 2011. This requirement will be distributed in accordance with the following allocations:

- Sedgemoor: approx. 9,200
- West Somerset: approx. 2,400

In addition to the district distribution, provision for about 100 dwellings will be identified within that part of the Exmoor National Park that is in Devon.

In the Exmoor National Park provision for new residential development should only be made where it would help to meet local social or economic needs and be of a scale in keeping with the size and character of the settlement, and the rural character of the surrounding area.

Policy 58 (Ports & Wharves)

Existing port and wharf facilities should be safeguarded from development which would prejudice their potential in the transport network. Any proposal for new facilities should be within or related to settlements.

Policy 60 (Floodplain Protection)

Areas vulnerable to flooding should continue to be protected from development which would cause a net loss of flood storage area or interrupt the free flow of water or adversely affect their environmental or ecological value. Consideration must be given to measures to mitigate the impact on the existing land drainage regime to avoid exacerbating flooding problems.

POLICY 61 (Development in areas liable to marine flooding)

Provision should only be made for development in areas vulnerable to marine or tidal flooding where; the development is needed in that location, no alternative location exists for the development and adequate measures exist or can be readily provided to protect the development.



ANNEX D.10: DEVON STRUCTURE PLAN

Policy ST9: Barnstaple Sub Regional Centre

Within northern Devon the main focus of development will be at Barnstaple, which should maintain and develop its role as a sub regional centre. Provision should be made at Barnstaple for a strategic employment site to accommodate larger scale economic investment. Bideford should meet its own development needs and contribute towards meeting the wider needs of northern Devon.

Proposal ST19: Strategic Development Sites

Strategic Development Sites for employment are identified at the Barnstaple Sub Regional Centre. This site must be of a sufficient scale to accommodate major economic development proposals. In the period 2001 to 2016 the following Strategic Development Sites should be identified and safeguarded for major investment proposals:

Barnstaple Sub Regional Centre

North Devon: Roundswell (25 ha)

Policy ST21: Regeneration Priority

In considering initiatives for economic and social regeneration, priority should be given to the tourist resorts of Ilfracombe and Westward Ho! which have experienced significant decline in economic vitality and viability.

Policy CO3: Areas of Outstanding Natural Beauty

In designated Areas of Outstanding Natural Beauty, the conservation and enhancement of their natural beauty will be given priority over other considerations. Within these areas, development will only be provided for where it would support their conservation or enhancement

Policy CO4: Areas of Great Landscape Value

The Areas of Great Landscape Value are identified as areas of high landscape quality having strong and distinctive characteristics. Within these areas the primary objective will be the active conservation and enhancement of their landscape quality and individual character. New development should only be provided for where it would be limited in its visual impact.

Policy CO5: Coastal Preservation Area

Within the Coastal Preservation Area, development, other than that of a minor nature, will not be provided for, except where it is required for the benefit of the community at large, and only when such development cannot reasonably be accommodated outside the protected areas. Such development will only be provided for when it would not detract from the unspoilt character and appearance of the coastal area.

Policy CO9: Biodiversity and Earth Science Diversity

The biodiversity and earth science resource of Devon's natural environment should be sustained and, where possible, enhanced. Its diversity and distinctiveness should not be diminished.

Policy CO10: Protection of Nature Conservation Sites and Species

Sites of National and International importance for nature conservation will be protected from development which would harm their nature conservation interest or conflict with their conservation objectives. Special consideration should be given to any development proposals likely to affect a European Protected Species.

Policy CO14: Conserving Agricultural Land

The use of agricultural land, particularly the best and most versatile agricultural land, for any form of development not associated with agriculture or forestry should only be permitted where there is an overriding need for development in that location.

Policy TR13: Ports

Port facilities and their associated infrastructure should be maintained and developed in order to ensure that the following ports fulfil their strategic function. This includes Bideford which should function as a commercial port.

Policy TO2: Tourism Development in Other Settlements



Large scale accommodation and tourist facilities should be located within Principal Urban Areas, Sub Regional or Area Centres, where they would be in keeping with the scale and character of the settlement.



ANNEX D.II: NORTH DEVON DISTRICT COUNCIL LOCAL PLAN

Policy ENVI (Development in the Countryside)

Development in the countryside will only be permitted where a rural location is required and it protects or enhances its beauty, the diversity of its landscape and ecological assets.

Policy ENV2 (Areas of Outstanding Natural Beauty)

In the AONB, development that conflicts with the conservation and enhancement of its natural beauty, wildlife and historic environment will not be permitted. Particular care will be taken to ensure that any development proposed adjacent to such areas does not damage their natural beauty.

Policy ENV3 (The Heritage Coast)

Within the Heritage Coast, as shown on the proposals map, development will only be permitted where it is consistent with the conservation, protection and enhancement of its natural beauty and facilitates, enhances the enjoyment, understanding and appreciation of the heritage coast by the public or improves the environmental health of inshore waters and the beaches within the area.

Policy ENV4 (Exmoor National Park)

Development affecting the Exmoor National Park will only be permitted where it does not harm its natural beauty, wildlife and historic environment or the public enjoyment and understanding of its special qualities.

Policy ENV5 (Coastal Preservation Areas)

Within the coastal preservation area defined on the proposals map, development will only be permitted where it does not detract from the unspoilt character and appearance of the area. Any such development should be required for the benefit of the community at large or requires a coastal location and cannot be reasonably located outside the protected area.

Policy ENV6 (Areas of Great Landscape Value)

In the Areas of Great Landscape Value development will not be permitted where it detracts from the particular Landscape qualities and characteristics.

Policy ENV7 (Agricultural Land)

Development proposals not associated with agriculture will only be permitted on the best and most versatile agricultural land and where land of a lower grade is unavailable

Policy ENV8 (Biodiversity)

Development will not be permitted where it harms a substantive biodiversity habitat, species, network or landscape feature.

Policy ENV9 (International Nature Conservation Sites)

Development will not be permitted where it would harm the integrity or conflict with the nature conservation objectives of a designated or candidate Special Area of Conservation or UNESCO Biosphere Reserve.

Policy ENVIO (Sites of Special Scientific Interest)

Development will not be permitted where it would harm the wildlife, Geological or geo-morphological interest features of a SSSI.

Policy ENVII (Protected Species)

Development will not be permitted where it would directly or indirectly harm a statutorily protected animal or plant species, or would damage, destroy or lead to the deterioration of a breeding site, foraging area or resting place of a European protected species.

Policy ENV12 (Locally Important Wildlife or Geological Sites)

Development will not be permitted where it would harm a County Wildlife Site, a County Geological Site, a Local Nature Reserve, the Braunton Bat Sustenance zone, the Voluntary Marine Conservation Area or sites of equivalent value unless:



- the economic or social benefits of the development outweigh the identified value of the site;
- any damage to the identified value of the site is minimised;
- there are no reasonable, less damaging alternatives; and
- appropriate compensatory measures are undertaken.

Housing

The Structure Plan sets out the housing requirements for North Devon for the period 1995-2011, which is about 6,800 dwellings. Much of the housing required from 1995 to 2011 has already been built, is under construction or will be achieved through the implementation of existing planning permissions. The balance of housing required to 2011 is therefore for about 1,950 dwelling

Barnstaple is identified as a Sub Regional Centre in the Devon Structure Plan. To reflect this role, most of the new housing in the District required to the year 2011 will be concentrated in Barnstaple. The Local Plan (adopted 2006) proposes 1,375 dwellings for North Devon from 2003 - 2011. Developments relevant to the study area include 1,375 dwellings in Barnstaple, 420 in Ilfracombe and 185 in Braunton.

Policy HSGI (The Sequential Approach)

At least 60% of all new housing should be provided on previously developed land and through the conversion of existing buildings. Within urban areas, the development of a greenfield site for housing will only be permitted where there is a need to increase the supply of land to meet strategic housing requirements.

Employment

The Devon Structure Plan requires about 70 hectares of land to be made available in North Devon for employment purposes over the period of 1995 to 2011. Significant employment land allocated for other uses includes Anchorwood Bank, Mill Road and Evans Transport all in Barnstaple.

Most of the land proposed for employment development has been directed towards the towns of Barnstaple, South Molton and Ilfracombe and, to a lesser extent, Braunton, in accordance with the settlement strategy.



ANNEX D.12: TORRIDGE DISTRICT COUNCIL LOCAL PLAN

Policy DVTI Development in Strategic Centres

Development will be permissible within Strategic Centres provided that it is of a nature and scale consistent with the function and character of such Centres and their capacity to provide necessary infrastructure. In the Local Centres development shall be in keeping with their rural character.

Policy DVT2 Development at Rural Settlements

Outside the Local Centres, new development in the rural area should be located in existing settlements, where it must be in keeping with the form, character, appearance, and setting of the settlement

Policy DVT14: Areas at Risk

Development proposals on sites known or suspected to be affected by contaminants, instability, constraints, or other hazards will need to demonstrate that the risk has been adequately assessed. Measures proposed to resolve identified risks will be required to make the site safe for the use proposed before occupation and to protect the surrounding environment.

Policy ECD I: Employment Land

About 52 hectares (128 acres) of land will be released, to provide for general employment land requirements between 2001 and 2011.

Policy ECD2: General Employment Areas (GEAs)

Within the GEAs defined on the Proposals Map, employment uses, being uses falling within the business (BI), general industrial (B2), and storage or distribution (B8) use classes, will be permissible provided that the development proposed would not harm significantly the amenity of local residents.

Policy ECD3: Employment Development outside GEAs

Within the Strategic Centres, employment development will be allowed on unallocated sites provided that the land is suitable for the purpose, the scale acceptable, and the site well related to the transport network; and there is no adverse impact on the living conditions of local residents. In all other settlements, new small scale employment development on unallocated sites will be allowed provided that the development:

- meets an identified local need;
- takes account of the form, character, appearance, and setting of the settlement;
- can be provided with an adequate and safe access; and
- does not harm the living conditions of local residents.

Policy ECD7: Westward Ho!

In the coastal resort of Westward Ho! planning permission will be granted for tourist development that improves the attractiveness of the resort for both visitors and residents and other appropriate development that would maintain the tourist character of the resort. The core tourist areas defined on the Proposals Map will be retained primarily for tourism purposes.

Policy HSCI: Housing Development

Provision will be made for the development of about 4850 houses 2001 - 2011 on appropriate sites. The Local Plan identifies housing development opportunities at East—the-water and west of Bideford for between 1,411-2,043 houses over the period 2001-2011.

Policy HSC19: Major Retail Development

Major retail development, including retail warehousing and discount trading outlets, outside the defined town centres or a site allocated for retail use will be permissible only where all potential options in the town centre,



on the edge of the centre, or more accessible to the centre have been assessed and are unsuitable or demonstrably unavailable.

Policy ENVI: Conservation Interest

Development will be expected to protect or enhance the distinctive architectural, historical, archaeological, geophysical, landscape, geological, ecological, and hydrological attributes, characteristics, and features of the area. Where the benefits of development outweigh the conservation interest, built and /or natural environmental loss and disturbance shall be minimised and any mitigation measures required to offset such effects may be secured by a planning condition or by a planning obligation.

Policy ENV6: Designated Landscape Areas

Development that would affect an Area of Outstanding Natural Beauty will be permitted only where it will not harm the landscape and scenic beauty of the designated area

In the Areas of Great Landscape Value, development should not detract from the particular landscape qualities and characteristics that have lead to the designation of that area.

Within the Coastal Preservation Area (CPA), development will be permitted only where there is a particular and proven need for that development to be located within the CPA, including where it supports public access and enjoyment of the coast, and where the need outweighs any harm to the unspoilt nature of the area.

Within the Rural Gaps, development will be expected to mitigate any adverse effect on the natural appearance of the designated area or the separate identity of settlements with measures that seek to maintain or enhance the surrounding landscape.

Policy ENV7: Protection of Important Nature Conservation Interests

Development in or around a Site of Nature Conservation Importance or likely to affect such nature conservation interests, will be expected to protect and, where possible, enhance the interests for which the site is identified.

Development will not be permitted if it is likely to harm the nature conservation value of a Special Protection Area, a Special Area of Conservation, or a Ramsar site; and

Development that would be liable to harm a Site of Special Scientific Interest will be permitted only if it can be subject to conditions that will prevent damaging impacts on wildlife habitats or important physical features, or if other material considerations are sufficient to override nature conservation considerations; and

Development that would be liable to harm the nature conservation value of a site of local conservation interest will be permitted only if the importance of the development outweighs the local value of the site.

Policy ENV9: Important Wildlife Corridors

Development within the Important Wildlife Corridors shown on the Proposals Map, or which may affect such links adversely, will not be permitted unless: there is a need or a benefit that outweighs the nature conservation interest and adequate measures can be put in place to mitigate the adverse effects



ANNEX D.13: WEST SOMERSET DISTRICT COUNCIL LOCAL PLAN

Policy SP/5 (Development outside Defined Settlements)

In the countryside areas outside of settlement development limits, development will only be permitted where it both benefits economic or social activity without leading to a significant increase in car travel and maintains or enhances environmental quality.

Policy CO/2 (Coastal Defences)

The construction of coastal defences will be permitted where they protect existing communities, commercial and industrial assets, port facilities, best and most versatile agricultural land, irreplaceable habitats and historic sites and where no adverse environmental impacts will result.

Policy CO/3 (Coastal Defences)

Development which would require, either directly or indirectly, the construction of new, or upgrading of existing, coastal defences will only be permitted where it can be demonstrated that the development is essential to the economic and social well-being of the locality and no alternative sites are available.

Policy TO/I (Tourism in Minehead & Watchet)

Proposals for tourism-related developments in defined settlements will be permitted where they consolidate and expand coastal holiday and visitor facilities centred on Minehead or Watchet.

Tourism (Policy TO/5)

Development proposals for the provision of touring caravans and tented camping sites or small scale extensions to existing sites will be permitted provided that there will be no adverse impact upon the local community or nature conservation interests.



ANNEX D.14: SEDGEMOOR DISTRICT COUNCIL LOCAL PLAN

Policy STR3

The countryside will be protected for its own sake. Outside defined development boundaries, new house building and other new development will be strictly controlled. In general, all such development will benefit economic activity, will maintain or enhance the environment.

Policy STR4

The overall policy on development distribution for the period 1991-2011 is to identify a sequential use to development as follows:

Firstly on brownfield land or sites which offer the opportunity for redevelopment or re-use,

- within Bridgwater, Burnham-on-Sea and Highbridge;
- within Rural Centres and Villages;
- in the countryside, re-using existing buildings, or for development where a countryside location is
 essential

Secondly on greenfield sites, only if it is demonstrated that sufficient brownfield sites or re-use opportunities are unavailable. It shall be in this order:

- at Bridgwater;
- at Burnham-on-Sea/Highbridge;

Policy H60

The Local Plan (adopted 2004) made provision for an average of 460 dwellings per year (a total of 9,200 over the 20 year period to 2011) focussed mainly at Bridgwater, Highbridge and Burnham-on-Sea. In accordance with the sequential approach to development a target of 44% for brownfield housing supply has been adopted by the UDP

Policy H61

A phased approach to housing development is proposed in order to give priority to the development of brownfield sites and to maintain a sufficient supply of housing land throughout the plan period to 2011

Employment.

The period to 2011 could also see development of about 65 ha of employment land at Bridgwater and 26 ha at Highbridge.

Policy CNE4

Areas of land which have particular importance as Green Wedge, Green Edge or Strategic Gap should benefit from positive land management which benefits the landscape, countryside access, amenity, nature conservation or urban area containment. Enhancement functions of these areas will be encouraged and developments which would have a detrimental effect on these functions will not be permitted.

Policy CNE5

The best and most versatile agricultural land will be protected from development. Planning permission for development affecting such land will only be granted if there is an overriding need for the development

Policy CNE7

Development which is likely to have a significant adverse effect on the conservation objectives or the integrity of a site of international importance (i.e. Ramsar sites, potential and classified Special Protection Areas, or candidate and designated Special Areas of Conservation) will not be permitted.

Policy CNE8

Development which would have a detrimental effect on a Site of Special Scientific Interest or National Nature Reserve will only be permitted if:



- it can be subject of conditions that will prevent damaging impacts on wildlife habitats or important physical features; or
- other material factors are sufficient to override nature conservation considerations.

Policy CNEI0

Development proposals which would harm protected or priority species, or their habitats, will only be permitted if the proposal would:

- facilitate the survival of a sustainable population of the affected species;
- reduce disturbance to affected species to an acceptable minimum; and/or
- provide adequate alternative habitats, preferably in situ, to sustain at least the current population levels of affected species.

Policy CNE14

Development will not be permitted on "high risk" floodplain land unless it can be demonstrated that flood water or mitigation measures would not adversely affect the development;

Policy RLT12

Proposals for development that would prejudice the creation of recreational walking, cycling and/or horse riding routes will not be permitted.

Policy RLT12(b) Burnham-on-Sea - West Huntspill

Policy RLT12(b) will seek to safeguard this National Cycle Network route cycle route which forms part of the coast-to-coast route from Clevedon to Seaton

Policy RLT16

Planning permission for new static caravan sites, holiday chalet or holiday cabin developments will only be granted in a limited number of circumstances.

Policy HE9

Where development proposals will affect Areas of High Archaeological Potential and elsewhere where there is reason to believe that there may be archaeological remains, an assessment of the nature, character and importance of the site will be sought

Policy HEII

There will be a presumption in favour of preservation in situ of nationally important archaeological sites. Planning permission will not be granted for development that would damage or destroy these sites or their settings unless the importance of the proposed development outweighs the national significance of the remains.

Policy HE12

Planning permission will not be granted for development which would damage or destroy locally important archaeological remains, unless the importance of the development outweighs the local significance of the remains. Where physical preservation in situ is not possible, mitigation strategies will be required for the protection and/or recording of the site.

Policy HE13

Where development is proposed in the vicinity of important archaeological sites, consideration should be given to the promotion of schemes for their management, interpretation and public access.



ANNEX D.15: NORTH SOMERSET COUNCIL LOCAL PLAN

General Development Criteria

Policy GDP/I: Preferred locations for development

The preferred location for major developments within the local authority area is Weston-super-Mare, including regeneration sites in the Weston area.

Policy GDP/2: Environmental and public protection (including floodplain protection, coastal/riverbank erosion and ground instability)

Development that, on its own or cumulatively, would result in air, water or other environmental pollution or harm to amenity, health or safety will only be permitted if the potential adverse effects could be mitigated to an acceptable level

Policy GDP/4: Sustainable water management

Development that would:

- affect the continuing availability of local water resources;
- create a demand for water that cannot be met from existing or planned resources without serious environmental harm;
- alter the water table:
- cause silt deposition;
- prevent maintenance of a water body or watercourse; or
- preclude the solution to existing flooding problems

will only be permitted if adequate, environmentally-acceptable measures are incorporated which provide suitable protection or mitigation.

Other Policies

Policy H/I: Residential Development Strategy

To achieve more sustainable patterns of development, development will be located within the boundaries of Weston-super-Mare, with only limited development elsewhere. Previously-developed land and buildings within Weston-super-Mare will be favoured over other locations

Residential commitments over the Local Plan period from 2006-2011 total approximately 5024 units within the North Somerset area. Weston Super Mare is the centre of development for numerous housing and regeneration with projects totalling over 90 ha between 2006-2011. Residential commitments in Weston-super-Mare over this period total some 1978 dwellings.

Policy ECH/9: Forest of Avon

Within the defined area of the Forest of Avon, landowners and developers will be encouraged to promote its aims and objectives.

Policy ECH/12: Wildlife sites of international importance

Development which would be likely to have a direct or indirect adverse effect or which conflicts with the conservation objectives of a potential, candidate or designated Special Protection Area, Special Area of Conservation, or RAMSAR Site will not be permitted.

Policy ECH/14: Wildlife and geological sites and local nature reserves

Planning permission will not be granted for development that would have a significant adverse effect on local biodiversity or geological interests, unless the importance of the development outweighs the value of the substantive interest present.



Policy ECH/15: Coastal Zone

Development within the defined Coastal Zone will be permitted only for uses and activities appropriate to and requiring a coastal location that cannot be accommodated elsewhere. When considering such proposals, account will be taken of the likely impact on the coastal environment, the proposal's scale, the degree of risk from flooding, erosion and instability, the effect of any works necessary to remove or minimise those risks, and the provision of public access to the coast.

Policy E1: Weston-super-Mare Vision

The Vision aims to rejuvenate all of Weston and to establish the town as a dynamic and diverse modern economy which has a positive and distinctive profile. To achieve this step change, the Vision for Weston includes three distinct but related sub-areasThese include:

Weston Seafront & Town centre (Policy E/IA)

Area Action Plans will provide the basis for guiding future development up to and beyond 2011, complemented by a series of detailed and integrated master plans. An area development framework, brought forward as Area Action Plans and Supplementary Planning Documents, will provide the basis for guiding future development of Weston up to, and beyond, 2011.

Within the Weston Seafront and Town Centre areas development proposals will be required to make a positive and distinctive contribution to the existing built environment and capitalise on the coastal setting and promote sub-regional role and function of the Town Centre.

Policy E/5 - Safeguarded Employment Areas

Safeguarded employment land in Weston-super-Mare totals 81.48ha. over 14 sites. Other major sites for employment use in the locale include land at the Former RAF Locking site (25ha) land at Weston Airfield (East), (33ha) and Weston Business Park, (5.3ha.)

