Form HR01: Proforma for new applications within Stage 2 criteria.

ENVIRONMENT AGENCY

ENVIRONMENT AGENCY RECORD OF ASSESSMENT OF LIKELY SIGNIFICANT EFFECT ON A EUROPEAN SITE (STAGE 2)
The South Devon and Dorset Shoreline Management Plan, detailed below, is within the Stage 1 criteria of Plans or Strategies that, in accordance with Environment Agency policy, should be subject to Appropriate Assessment under the Conservation (Natural Habitats, & c.) Regulations 1994 (the Habitats Regulations). In order to progress the plan a Stage 2 assessment and consultation with Natural England is required.

PART A

To be completed by relevant technical/project officer in consultation with Conservation/Ecology section and Natural England/CCW

1. Type of permission/activity:	Plan / Strategy
2. Agency reference no:	N/A
3. National Grid reference:	N/A
4. Site reference:	South Devon and Dorset Coast (Durlston Head to Rame Head)
5. Brief description of proposal:	Shoreline Management Plan (SMP2)
6. European site name(s) and status:	St Albans Head to Durlston Head Special Area of Conservation (SAC) Isle of Portland to Studland Cliffs SAC Crookhill Brick Pit SAC Chesil Beach and The Fleet SAC Chesil and The Fleet Special Protection Area (SPA) Chesil Beach and The Fleet Ramsar Site Sidmouth to West Bay SAC River Axe SAC Dawlish Warren SAC Exe Estuary SPA Exe Estuary Ramsar site South Devon Shore Dock SAC Blackstone Point SAC Plymouth Sound and Estuaries SAC Tamar Estuaries Complex SPA Poole Bay to Lyme Bay Reefs proposed SAC (cSAC) Prawle Point to Plymouth Sound and Eddystone cSAC South Hams SAC
7. List of interest features:	**St Albans Head to Durlston Head SAC:** <u>Annex I habitats:</u> • Vegetated sea cliffs of the Atlantic and Baltic Coasts • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia)* (important orchid sites) <u>Annex II species:</u> • Early gentian *Gentianella anglica* • Greater horseshore bat *Rhinolophus ferrumequinum* (not primary reason for selection) **Isle of Portland to Studland Cliffs SAC:** <u>Annex I habitats:</u> • Vegetated sea cliffs of the Atlantic and Baltic Coasts • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia)* • Annual vegetation of drift lines (not primary reason for

	selection) Annex II species: • Early gentian *Gentianella anglica* **Crookhill Brick Pit SAC:** Annex II species: • Great crested newt *Triturus cristatus* **Chesil and the Fleet SAC:** Annex I habitats: • Coastal lagoons • Annual vegetation of drift lines • Perennial vegetation of stony banks • Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi)* • Atlantic salt meadows *Glauco-Puccinellietalia maritimae* (not a primary reason for selection) **Chesil Beach and the Fleet SPA** Under Article 4.1 of the Directive (79/409/EEC): *During breeding season:* • Little Tern *Sterna albifrons*, 55 pairs representing up to 2.3% of the breeding population in Great Britain (Count as at 1997) Under Article 4.2 of the Directive (79/409/EEC): *Over winter;* • Dark-bellied Brent Goose *Branta bernicla,* , 3,182 individuals representing up to 1.1% of the wintering Western Siberia/Western Europe population (5 year peak mean 1991/2 - 1995/6) **Chesil Beach and the Fleet Ramsar site** *Criterion 1:* The Fleet is an outstanding example of rare lagoon habitat and is the largest of its kind in the UK. In Europe lagoons are classified as a priority habitat by the EC Habitats and Species Directive. The site also supports rare salt marsh habitats. *Criterion 2:* supports 15 specialist lagoonal species – more than any other UK site – and five nationally scarce wetland plants as well as ten nationally scarce wetland animals. Chesil Bank is one of the most important UK sites for shingle habitats and species. *Criterion 3:* largest barrier-built saline lagoon in the UK, and has the

	greatest diversity of habitats and of biota *Criterion 4:* important for a number of species at a critical stage in their life cycle including post-larval and juvenile bass *Dicentrarchus labrax*. *Criterion 8:* The site is important as a nursery for bass *Dicentrarchus labrax* *Criterion 6:* *Species with peak counts in winter:* Dark-bellied brent goose, *Branta bernicla bernicla*, **Sidmouth to West Bay SAC:** Annex I habitats: • Vegetated sea cliffs of the Atlantic and Baltic Coasts • *Tilio-Acerion* forests of slopes, screes and ravines • Annual vegetation of drift lines (not primary reason for selection) **River Axe SAC:** Annex I habitats: • Watercourses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation Annex II species: • Sea lamprey *Petromyzon marinus* • Brook lamprey *Lampetra planeri* • Bullhead *Cottus gobio* **Dawlish Warren SAC:** Annex I habitats: • Humid dune slacks • Shifting dunes along the shoreline with *Ammophilia arenaria 'white dunes'* (not primary reason for selection) • Fixed dunes with herbaceous vegetation 'grey dunes' (not primary reason for selection) Annex II species: • Petalwort *Petalophyllum ralfsii* **Exe Estuary SPA:** Under Article 4.1 of the Directive (79/409/EEC): *Overwinter:* • Avocet *Recurvirostra avosetta,* 359 individuals

	representing at least 28.3% of the wintering population of Great Britain (5 year peak mean1991/2 – 1995/6) • Slavonian Grebe *Podiceps auritus,* 20 individuals representing at least 5% of the wintering population in Great Britain (5 year peak mean 1984/85 – 1988/89) <u>Under Article 4.2 of the Directive (79/409/EEC):</u> *Over winter;* • Regularly supporting 23,513 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: Black-tailed Godwit *Limosa limosa islandica*, Dunlin *Calidris alpina alpina*, Lapwing *Vanellus vanellus*, Grey Plover *Pluvialis squatarola*, Oystercatcher *Haematopus ostralegus*, Red-breasted Merganser *Mergus serrator*, Wigeon *Anas penelope*, Dark-bellied Brent Goose *Branta bernicla bernicla*, Cormorant *Phalacrocorax carbo*, Avocet *Recurvirostra avosetta*, Slavonian Grebe *Podiceps auritus*, Whimbrel *Numenius phaeopus* **Exe Estuary Ramsar site:** *Criterion 5:* *Assemblages of international importance - Species with peak counts in winter:* • 20263 waterfowl (5 year peak mean 1998/99-2002/2003) *Criterion 6:* *Species with peak counts in winter:* • Dark-bellied brent goose, *Branta bernicla bernicla* **South Devon Shore Dock SAC:** <u>Annex I habitats:</u> • Vegetated sea cliffs of the Atlantic and Baltic Coasts <u>Annex II species:</u> • Shore dock *Rumex rupestris* **Blackstone Point SAC:** <u>Annex II species:</u> • Shore dock *Rumex rupestris* **Plymouth Sound and Estuaries SAC:** <u>Annex I habitats:</u> • Sandbanks which are slightly covered by seawater all

	of the time • Estuaries • Large shallow inlets and bays • Reefs • Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) • Mudflats and sandflats not covered by seawater at low tide (not a primary reason for selection) <u>Annex II species:</u> • Shore dock *Rumex rupestris* • Allis shad *Alosa alosa* (not a primary reason for selection) **Tamar Estuaries Complex SPA:** <u>Under Article 4.1 of the Directive (79/409/EEC):</u> *On passage:* • Little Egret *Egretta garzetta*, 72 individuals representing at least 9.0% of the population in Great Britain (Count as at 1993) *Over winter:* • Avocet *Recurvirostra avosetta*, 201 individuals representing at least 15.8% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6) • Little Egret *Egretta garzetta*, 42 individuals representing at least 8.4% of the wintering population in Great Britain (Count as at 1993) **Poole Bay to Lyme Bay Reefs cSAC:** <u>Annex I habitats:</u> • Submerged or partially submerged sea caves • Reefs **Prawle Point to Plymouth Sound and Eddystone cSAC:** <u>Annex I habitats:</u> • Reefs **South Hams SAC:** <u>Annex I habitats:</u> • European dry heaths • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)

	• Vegetated sea cliffs of the Atlantic and Baltic coastal (not primary reason for selection) • Caves not open to the public (not primary reason for selection) • *Tilio-Acrerion* forests of slopes, screes and ravines (not primary reason for selection) <u>Annex II species:</u> • Greater horseshoe bat *Rhinolophus ferrumequinum*
8. Is the proposal directly connected with or necessary to the management of the site for nature conservation?	No

9. What potential hazards are likely to affect the interest features? (Refer to relevant sensitivity matrix and only include those to which the interest features are sensitive). **Are the interest features potentially exposed to the hazard?**

St Albans Head to Durlston Head SAC: This SAC lies within policy unit 5g01. The preferred policy for this epoch is 'no active intervention'. This is unchanged from SMP1.

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
Vegetated sea cliffs of the Atlantic and Baltic coasts	Sea level rise	Sea level rise may accelerate natural erosion patterns, resulting in the loss of cliff habitats in the long term. However, this would not be the result of a change in SMP policy. *No significant effect*
Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia)* (important orchid sites)	These habitats occur on the landward parts of the site, and are unlikely to be affected by SMP policy.	*No significant effects* foreseen.
Early gentian *Gentianella anglica*	This species is associated with calcareous grassland habitats, which are unlikely to be affected by SMP policy.	*No significant effects* foreseen.
Greater horseshoe bat *Rhinolophus ferrumequinum* (not primary reason for selection)	The habitats and features on which this species depends occur on the landward parts of the site, and are unlikely to be affected by SMP policy.	*No significant effects* foreseen.

Isle of Portland to Studland Cliffs SAC: This SAC lies within policy units 5g02 to 5g14, 5g22 and 23, and 6a01. Within PU 5g03 (Kimmeridge Bay (defended length)) and 5g07 Lulworth Cove (defended length) there is a policy of 'no active intervention' for all epochs, although the plan does allow provision for defences to remain if funds are available. For PU 5g10 (Ringstead Bay (defended length)) there is a policy of 'hold the line' in the short term, followed by 'no active intervention' in the medium and long term. For PU 5g13 (Bowleaze Cove (Gabions) to Furzy Hill) there is a policy of 'hold the line' in the short term followed by 'managed realignment' in the medium and 'hold the line' of the realigned defence in the long term. For PU 5g21 (Small Mouth to Osprey Quay (Portland Harbour) and 5g22 (Osprey Quay

(Portland Harbour) to King's Pier) there is a policy of 'hold the line'. For all other policy units there is a policy of 'no active intervention' for all epochs. These policies are largely unchanged from SMP1, with the exception of the following: 5g07 was 'retreat' but is now 'no active intervention'; 5g10 was 'hold' but is now to move to 'no active intervention' in the medium to long term; 5g14 was 'Retreat' but is now 'no active intervention';

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
Vegetated sea cliffs of the Atlantic and Baltic Coasts	Sea level rise	Sea level rise may accelerate natural erosion patterns, resulting in the loss of cliff habitats in the long term. However, this would not be the result of a change in SMP policy. *No significant effects*
	Hold the line	In the two units where a policy of 'hold the line' applies in the short term, it is considered unlikely that this would have a significant effect on these habitats, although there is a theoretical risk that this could limit natural erosion patterns. However, a policy of 'no active intervention' or 'managed realignment' applies in the medium and long term, which will promote natural processes. For the area around Portland Harbour, a policy of 'hold the line' applies for all epochs. A 'hold the line' policy also applies to policy units 5g15-17 (becoming a Managed Realignment at Policy Unit 5g15 in the long-term). There is the potential that this could result in significant effects on this feature by constraining natural processes or increasing erosion rates. *Potential for significant effect*
Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia)*	These habitats lie mainly on landward slopes of the site, and are unlikely to be affected by SMP policy.	*No significant effects* foreseen.
Annual vegetation of drift lines	Sea level rise / hold the line / coastal squeeze	If natural processes arising from sea level rise (e.g. rolling back of shingle habitats and species) are constrained, either by natural features

		such as cliffs, or by man-made defences, this may have a significant effect on this feature (e.g. through habitat loss) in the medium / long term. However, this will be dependent on the distribution of this habitat type; i.e. its proximity to constraining features. However, where the constraint is a result of sea level rise against natural features, any significant impact would not be as a result of SMP policy. *No significant effects* A policy of 'hold the line' applies only in the short term within two policy units; it is unlikely that this would result in a significant effect on these features within this time-frame. If this feature is present in the areas around Portland harbour, where a policy of 'hold the line' applies for all epochs, there is the potential that this could result in a significant effect on this feature. *Potential for significant effects*
Early gentian *Gentianella anglica*	This species is associated with calcareous grassland habitats, which are unlikely to be affected by SMP policy.	*No significant effects* foreseen.

Crookhill Brick Pit SAC: This SAC lies approximately 1km inland, and does lie within any policy unit. PU 6a05 (Cogden Beach to Hive Beach (Burton Bradstock) lies closest to the site, where a policy of 'no active intervention' applies for all epochs. This is unchanged from SMP1.

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
Great crested newt *Triturus cristatus*	This species is dependent on terrestrial and freshwater habitats that are some distance and elevation from the coastal area likely to be affected by SMP policy.	*No significant effects* foreseen.

Chesil Beach and The Fleet SAC: The policy units and preferred policies within this area are:

- 5g17 (Weymouth (Stone Pier) to Portland Harbour (North Breakwater)): 'hold the line' (unchanged from SMP1).
- 5g18 (Portland Harbour North Breakwater to Small Mouth): 'managed realignment'
- 5g19 (Portland Harbour North Breakwater to Small Mouth): 'hold the line'
- 5g20 (Portland Harbour North Breakwater to Small Mouth): 'managed realignment' in the short and medium term; 'hold the line' in the long term.
- The above three units were a single policy unit in SMP1 for which there was a policy of 'retreat' (managed realignment).
- 5g21 (Small Mouth to Osprey Quay (Portland Harbour)): 'hold the line' (unchanged from SMP1).
- 6a02 (Chiswell to Chesil Beach): 'hold the line'. SMP1 policy was 'selectively hold the line'.
- 6a03 (Chesil Beach (to Wyke Narrows)): 'managed realignment' to allow intervention after storm events only to restore the defence function of the beach. SMP1 policy was 'selectively hold the line'.
- 6a04 (Chesil Beach and the Fleet): 'no active intervention' (unchanged from SMP1).
- 6a05 (Abbotsbury to Cogden Beach): 'no active intervention' (unchanged from SMP1).
- 6a06 (Cogden Beach to Hive Beach (Burton Bradstock): 'no active intervention' (unchanged from SMP1).
- 6a07 (Hive Beach (Burton Bradstock): 'no active intervention' (unchanged from SMP1).
- 6a08 (Burton Cliff): 'no active intervention' (unchanged from SMP1).
- 6a09 (Freshwater Beach): 'managed realignment'. SMP1 policy was 'do nothing' (no active intervention).
- 6a10 (East Cliff (West Bay) 'no active intervention' (unchanged from SMP1).
- 6a11 (West Bay (East Beach to eastern pier)): 'hold the line' in the short and medium term; 'managed realignment ' in the long term. The SMP1 policy was 'hold the line'.

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
Coastal lagoons	These habitats (The Fleet) lie within PU 6a04, where there is a policy of 'no active intervention', allowing natural processes. There is the potential that these habitats could be affected by sea level rise in the long term, but any effects would not be a result of SMP policy.	*No significant effects* foreseen.

• Annual vegetation of drift lines • Perennial vegetation of stony banks • Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi)* • Atlantic salt meadows *Glauco-Puccinellietalia maritimae* (not a primary reason for selection)	Sea level rise / hold the line / coastal squeeze	If natural processes arising from sea level rise (e.g. rolling back of shingle habitats and species) are constrained, either by natural features such as cliffs, or by man-made defences, this may have a significant effect on these feature (e.g. through habitat loss) in the medium / long term. However, this will be dependent on the distribution of these habitat types; i.e. their proximity to constraining features. However, where a constraint is a result of sea level rise against natural features, any adverse would not be as a result of SMP policy. In policy units where these features occur and a policy of 'hold the line' applies, an effect is likely in the medium to long term. *Potential for significant effect.*

Chesil Beach and The Fleet SPA and Ramsar Site: The policy units and preferred policies within this area are:

- 6a03 (Chesil Beach (to Wyke Narrows)): 'managed realignment' to allow intervention after storm events only to restore the defence function of the beach. SMP1 policy was 'selectively hold the line'.
- 6a04 (Chesil Beach and the Fleet: 'no active intervention' (unchanged from SMP1).
- 6a05 (Abbotsbury to Cogden Beach): 'no active intervention' (unchanged from SMP1).

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**

Breeding little tern *Sterna albifrons* (SPA)	Sea level rise / hold the line / coastal squeeze	Coastal squeeze may result in the loss of habitat used by nesting little terns. Where this is a result of man-made defences, this would result in a likely significant effect on this feature. This may be the case in Policy Unit 6a03, depending on the locality of nesting habitat and any defences; however, a policy of 'managed realignment' should mitigate any such losses. There is also the potential that nesting habitat will be lost as a result of sea level rise in other policy units. However, this would not be as a result of change in SMP policy. *No significant effects*.
Wintering Dark-bellied Brent Goose *Branta bernicla bernicla* (SPA and Ramsar site)	Sea level rise	Wintering Brent goose populations use the Fleet lagoon for feeding and roosting. Although there is the potential that sea level rise may affect this feature in the long term as a result of overtopping or changes in the shingle ridge, this would not be as a result of SMP policy. *No significant effects* foreseen.
Lagoon habitats and species (Ramsar site)	Sea level rise	The Fleet lagoon may be affected by sea level rise in the long term as a result of overtopping or changes in the shingle ridge. However, this would not be as a result of SMP policy. *No significant effects* foreseen.

Sidmouth to West Bay SAC: The policy units and preferred policies within this area are:

- 6a12 (West Bay (West Beach from eastern pier) to West Cliff (East) (includes West Bay Harbour)): 'hold the line' (unchanged from SMP1).
- 6a13 (West Cliff (East) to Thorncombe Beacon): 'no active intervention'. The SMP1 policy was 'selectively hold the line'.
- 6a14 (Thorncombe Beacon to Seatown (East)): 'no active intervention'. The SMP1 policy was 'selectively hold the line'.
- 6a15 (Seatown): 'hold the line' in the short term and 'no active intervention' in the medium and long term. The SMP1 policy was 'selectively hold the line'.

- 6a16 (Seatown (West) to Golden Cap): 'no active intervention'. The SMP1 policy was 'selectively hold the line'.
- 6a17 (Golden Cap to Charmouth (East)): 'no active intervention'. The SMP1 policy was 'selectively hold the line'.
- 6a18 (Charmouth): 'hold the line' in the short term and 'managed realignment' in the medium and long term. The SMP1 policy was 'selectively hold the line'.
- 6a19 (Charmouth (West) to East Cliff (Lyme Regis): 'no active intervention'. The SMP1 policy was 'selectively hold the line'.
- 6a20 (East Cliff (Lyme Regis) to Broad Ledge (Lyme Regis): 'hold the line' (unchanged from SMP1).
- 6a21 (Broad Ledge (Lyme Regis) to The Cobb (Lyme Regis): 'hold the line' (unchanged from SMP1).
- 6a22 (Monmouth Beach) 'hold the line' in the short term, 'managed realignment' in the medium term and 'hold the line' of the realigned defence in the long term. The SMP1 policy was 'do nothing' (no active intervention).
- 6a23 (Monmouth Beach to Seven Rock Point: 'no active intervention' (unchanged from SMP1). 'no active intervention' (unchanged from SMP1).
- 6a24 (Seven Rock Point to Haven Cliff (West): 'no active intervention' (unchanged from SMP1).
- 6a25 (Axe Estuary (Mouth Breakwater to Axmouth North): 'hold the line'. This area was not included in SMP1.
- 6a30 (Seaton (West) to Seaton Hole): 'hold the line' in the short, and 'managed realignment' in the medium and long term. SMP1 policy was 'selectively hold the line'.
- 6a31 (Seaton Hole to Beer) 'no active intervention'. The SMP1 policy was 'selectively hold the line'.
- 6a32 (Beer): 'hold the line' The SMP1 policy was 'selectively hold the line'.
- 6a33 (Beer to Beer Head): 'no active intervention'. The SMP1 policy was 'selectively hold the line'.
- 6a34 (Beer Head to Salcombe Hill): 'no active intervention' (unchanged from SMP1).
- 6a35 (River Sid and East Sidmouth): 'managed realignment'. This unit straddles two previous SMP1 policy units that had policies of 'hold the line' and 'do nothing'.

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
• Vegetated sea cliffs of the Atlantic and Baltic Coasts • *Tilio-Acerion* forests of slopes, screes and ravines	Sea level rise	A policy of 'no active intervention' applies along the majority of coast within which this site lies. Sea level rise may accelerate natural erosion patterns, resulting in the loss of cliff and undercliff habitats in the long term. However, this would not be the result of a change in SMP policy. *No significant effects*
	Hold the line / coastal squeeze	A policy of 'hold the line' applies in small areas within the designated site,

		associated with areas of human habitation at West Bay, Lyme Regis, Beer, Seaton and Sidmouth. There is the potential that the introduction of/reconstruction of existing and/or construction of larger man-made defences could prevent natural roll-back of habitats, or constrain natural processes. There is therefore the potential that this could result in a significant effect on these features, depending on the exact locality and nature of defences. In addition, a 'hold the line' policy as applied to Policy Unit 6a36 in SMP1 (with the construction of new defences) has increased erosion rates in the first 100-200m of the SAC to the east, resulting in unfavourable condition of cliff habitat at this location. *Potential for significant effects*
Annual vegetation of drift lines (not primary reason for selection)	Sea level rise / hold the line / coastal squeeze	If natural processes arising from sea level rise (e.g. rolling back of shingle habitats and species) are constrained, either by natural features such as cliffs, or by man-made defences, this may have a significant effect on this feature (e.g. through habitat loss) in the medium / long term. However, this will be dependent on the distribution of this habitat type; i.e. its proximity to constraining features. However, where the constraint is a result of sea level rise against natural features, any adverse would not be as a result of SMP policy. Where a policy of 'hold the line' applies there is the potential that this could result in a significant effect on this feature. *Potential for significant*

		effects

River Axe SAC: The SAC boundary lies approximately 3km upstream of the estuary mouth, outside of the SMP policy units. Within the estuary itself, there are four policy units:

- 6a25 (Axe Estuary (Mouth Breakwater to Axmouth North): 'hold the line'. This area was not included in SMP1.
- 6a26 (Axe Estuary (Axmouth North to Seaton North): 'managed realignment'. This area was not included in SMP1.
- 6a27 (Axe Estuary (Seaton East)): 'hold the line'. This area was not included in SMP1.
- 6a28 (Axe Estuary (Spit): 'no active intervention'. SMP1 policy was 'selectively hold the line'.

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
Watercourses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation	No mechanisms have been identified by which this feature would be significantly affected by SMP policy.	*No significant effects* foreseen.
• Sea lamprey *Petromyzon marinus* • Brook lamprey *Lampetra planeri* • Bullhead *Cottus gobio*	The main hazards to these species are obstacles to migration and pollution. It is not considered that these hazards will be significantly affected by SMP policy	*No significant effects* foreseen.

Dawlish Warren SAC: This site lies within four policy units. A preferred policy has been determined only in the short term; long-term policy will be determined through further investigation, for example through the Exe Estuary Strategy. A short term policy of 'hold the line' applies across the majority of the Warren, except on the landward side (PU 6b19) where there is a policy of 'no active intervention'.

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
• Humid dune slacks • Shifting dunes along the shoreline with *Ammophilia arenaria* 'white dunes' (not primary reason for selection) • Fixed dunes with herbaceous vegetation 'grey dunes' (not primary reason for selection) • Petalwort *Petalophyllum ralfsii*	Sea level rise / hold the line / coastal squeeze in the short-term Assessment will be required as policy for the medium and long term.	Current SMP1 'hold the line' policies are considered to be damaging to the interest features of the SAC, and continuation of 'hold the line' policies in the short term are likely to prolong the effect. The Exe Estuary Strategy will seek to find an acceptable solution in the medium to long-term and further assessment will be required as part of that process. *Existing significant effects, which will continue in the short-term*

Exe Estuary SPA and Ramsar site: The policy units and preferred policies within this area

are:

- 6a43 (Straight Point to Orcombe Rocks): 'no active intervention' (unchanged from SMP1).
- 6a44 (Orcombe Rocks to Maer Rocks): 'hold the line'. SMP1 policy was 'selectively hold the line'.
- 6a45 (The Maer): 'hold the line' in the short term, 'managed realignment' in the medium term and 'hold the line' of the realigned defence in the long term.
- 6a46 (Harbour View to Exmouth Pier): 'hold the line'. SMP1 policy was 'selectively hold the line'.
- 6a47 (Exmouth Spit): 'hold the line'. SMP1 policy was 'selectively hold the line'.
- 6b01 (Exe Estuary – Exmouth (West)): 'hold the line'. This area was not included in SMP1.
- 6b02 (Exe Estuary – Exmouth (West) to Lympstone): 'hold the line'. This area was not included in SMP1
- 6b03 (Exe Estuary – Lympstone): 'hold the line'. This area was not included in SMP1.
- 6b04 (Exe Estuary – Nutwell Park): 'hold the line'. This area was not included in SMP1.
- 6b05 (Exe Estuary – Lympstone Commando): 'hold the line'. This area was not included in SMP1.
- 6b06 (Exe Estuary – Exton): 'hold the line'. This area was not included in SMP1.
- 6b07 (Exe Estuary – Exton to Lower Clyst): 'hold the line'. This area was not included in SMP1.
- 6b08 (Exe Estuary – Lower Clyst): 'managed realignment'. This area was not included in SMP1.
- 6b09 (Exe Estuary – Topsham): 'hold the line'. This area was not included in SMP1.
- 6b10 (Exe Estuary – M5 (east) to St James' Weir): 'hold the line'. This area was not included in SMP1.
- 6b12 (Exe Estuary – St James' Weir to M5 (west)): 'hold the line'. This area was not included in SMP1.
- 6b13 (Exe Estuary – M5 (west) to Turf Lock): 'hold the line'. This area was not included in SMP1.
- 6b14 (Exe Estuary – Turf Lock to Powderham): 'hold the line' in the short term, 'managed realignment' in the medium and 'hold the line' of the realigned defence in the long term. This area was not included in SMP1.
- 6b15 (Exe Estuary – Powderham (south): 'hold the line'. This area was not included in SMP1.
- 6b16 (Exe Estuary – Starcross): 'hold the line'. This area was not included in SMP1.
- 6b17 (Exe Estuary – Cockwood): 'hold the line'. This area was not included in SMP1.
- 6b18 (Exe Estuary – Cockwood to the Warren): 'hold the line'. This area was not included in SMP1.
- 6b19 (Dawlish Warren – landward side): 'no active intervention' in the short term. Policy to be determined for other epochs.
- 6b20 (Dawlish Warren – east distal end): 'hold the line' in the short term. Policy to be determined for other epochs. SMP1 policy was to 'selectively hold the line'.
- 6b21 (Dawlish Warren – central gabion defences): 'hold the line' in the short term. Policy to be determined for other epochs. SMP1 policy was to 'selectively hold the line'.
- 6b22 (Dawlish Warren – west hard defences): 'hold the line' in the short term. Policy to be determined for other epochs. SMP1 policy was to 'selectively hold the line'.

Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
Exe Estuary SPA / Ramsar Site: All interest features (wintering bird populations)	Coastal squeeze / hold the line	In areas where 'hold the line' policies apply, sea level rise will result in the progressive loss of intertidal and supratidal habitats. This will reduce the availability of feeding and roosting sites for bird populations in the estuary. *Potential significant effects*
	Managed realignment	Where 'managed realignment' policies apply, this will allow the creation of new intertidal habitat that can be used by feeding and roosting birds from the estuary. This may mitigate losses due to coastal squeeze, and has the potential to increase the available resource, providing a net benefit. *No significant effect*

South Devon Shore Dock SAC: This site lies within policy units 6b79 (Beesands (South) to Start Point), 6c01 (Start Point to Prawle Point), 6c02 (Prawle Point to Limebury Point) and 6c09 (Bolt Head to Bolt Tail). The policy in all of these units is 'no active intervention' for all epochs. In SMP1 there was a policy of 'selectively hold the line' for PU 6b79 and 6c02, and 'do nothing' (no active intervention) for PU 6c01 and 6c09.

Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
Vegetated sea cliffs of the Atlantic and Baltic Coasts	Sea level rise	Sea level rise may accelerate natural erosion patterns, resulting in the loss of cliff habitats in the long term. However, this would not be the result of a change in SMP policy. *No significant effects*
Shore dock *Rumex rupestris*	Sea level rise	If natural processes arising from sea level rise (e.g. rolling back of beach and cliff toe habitats) are constrained by natural features such as cliffs, there may be significant effects on this feature (e.g. through habitat loss) in the medium / long term. However, any effect would not be as a result of SMP policy. *No significant effects*

Blackstone Point SAC: This site lies within policy unit 6c21 (Erme Estuary (West) to Yealm Estuary (East)). The preferred policy is 'no active intervention' for all epochs. SMP1 policy was 'selectively hold the line'.

Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
Shore dock *Rumex rupestris*	Sea level rise	If natural processes arising from sea level rise (e.g. rolling back of beach and cliff toe habitats) are constrained by natural features such as cliffs, this may have a significant effect on this feature (e.g. through habitat loss) in the medium / long term. However, any effect would not be as a result of SMP policy. *No significant effects*

Plymouth Sound and Estuaries SAC: The policy units and preferred policies within this area are:

- 6c21 (Erme Estuary (West) to Yealm Estuary (East): 'no active intervention'. SMP1 policy was 'selectively hold the line'.
- 6c22 (Yealm Estuary (East Bank-mouth to Passage House)): 'no active intervention'. This area was not included in SMP1.
- 6c23 (Yealm Estuary (East Bank Passage House to Newton Ferrers North)): 'hold the line'. This area was not included in SMP1.
- 6c24 (Yealm Estuary (East Bank – Newton Ferrers North to Fish House Plantation)): 'no active intervention'. This area was not included in SMP1.
- 6c25 (Yealm Estuary (West Bank – Fish House Plantation to Season Point)): 'no active intervention'. This area was not included in SMP1.
- 6c26 (Season Point to Wembury Point): 'no active intervention'. SMP1 policy was 'do nothing'.
- 6c27 (Wembury Point to Mount Batten Breakwater): 'no active intervention'. SMP1 policy was 'selectively hold the line'.
- 6c30 (Plym Estuary – Mount Batten Breakwater to Marsh Mills): 'hold the line'. SMP1 policy was 'selectively hold the line'.
- 6c31 (Tamar Estuary – Devil's Point to Tamerton Lake): 'hold the line'. This area was not included in SMP1.
- 6c32 (Tamar Estuary – Tamerton Lake to Gunnislake (upper Tamar Estuary East)): due to insufficient information to determine precise policies, the SMP suggests a more detailed study but broadly the policy should be 'no active intervention' with either 'hold the line' or 'managed realignment' in areas where defences are currently present. This area was not included in SMP1.
- 6c33 (Tamar Estuary – Gunnislake to Saltash North (upper Tamar Estuary West)): due to insufficient information to determine precise policies, the SMP suggests a more detailed study but broadly the policy should be 'no active intervention' with either 'hold the line' or 'managed realignment' in areas where defences are currently present. This area was not included in SMP1.

- 6c34 (Tamar Estuary – Saltash): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c35 (Tamar Estuary – River Lynher): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c36 (Tamar Estuary – Torpoint North (Jupiter Point) to Torpoint South (Landing Stage)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c37 (Tamar Estuary – St John's Lake (Torpoint South (Landing Stage) to Millbrook (Mill Farm))): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c39 (Tamar Estuary – St John's Lake (Millbrook (Hancocks's Lake) to Palmer Point)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c40 (Tamar Estuary – Palmer Point to Mount Edgcumbe (Cremyll)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c41 (Mount Edgcumbe to Picklecombe Point): 'no active intervention'. SMP1 policy was 'selectively hold the line'.
- 6c42 (Fort Picklecombe): 'hold the line': SMP 1 policy was 'selectively hold the line'.
- 6c43 (Picklecombe Point to Kingsand): 'no active intervention'. SMP1 policy was 'selectively hold the line'.
- 6c44 (Kingsand / Cawsand): 'hold the line': SMP 1 policy was 'selectively hold the line'.
- 6c45 (Cawsand to Rame Head): 'no active intervention. SMP1 policy was 'do nothing'.

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
Sandbanks which are slightly covered by seawater all of the time	Coastal squeeze / sea level rise / hold the line	Natural geomorphological processes have the potential to be influenced or disrupted by coastal management and other, semi-natural processes, such as sea level rise. This may lead to changes in the extent and distribution of sandbanks in the medium or long term; which could result in significant impacts on this interest feature. *Potential for significant effects*
• Large shallow inlets and bays • Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) • Mudflats and sandflats not covered by seawater at low tide (not a primary reason for selection)	Coastal squeeze / sea level rise / hold the line	In areas where 'hold the line' policies apply, sea level rise will result in the progressive loss of intertidal and supratidal habitats. *Potential for significant effects*
Reefs	Coastal squeeze / sea level rise / hold the line	Reefs have the potential to be affected by a variety of mechanisms; for example, changes in

		sediment regime could smother reef habitats, or expose new substrate where reefs could develop. Similarly, sea level rise may increase or decrease areas suitable for reef habitats. There may therefore be significant effects on this interest feature as a result of SMP policy. *Potential for significant effects*
Shore dock *Rumex rupestris*	Coastal squeeze / sea level rise / hold the line	If natural processes arising from sea level rise (e.g. rolling back of beach and cliff toe habitats) are constrained, either by natural features such as cliffs, or by man-made defences, this may have a significant effect on this feature (e.g. through habitat loss) in the medium / long term. However, this will be dependent on the distribution of this habitat type; i.e. its proximity to constraining features. However, where the constraint is a result of sea level rise against natural features, any adverse would not be as a result of SMP policy. Where a policy of 'hold the line' applies there is the potential that this could result in a significant effect on this feature. *Potential for significant effects*
Allis shad *Alosa alosa* (not a primary reason for selection)	The main hazards to this species are obstacles to migration and pollution. It is not considered that these hazards will be significantly affected by SMP policy.	*No significant effects* foreseen.

Tamar Estuaries Complex SPA: The policy units and preferred policies within this area are:

- 6c31 (Tamar Estuary – Devil's Point to Tamerton Lake): 'hold the line'. This area was not included in SMP1.
- 6c32 (Tamar Estuary – Tamerton lake to Gunnislake (upper Tamar Estuary East)): due to insufficient information to determine precise policies, the SMP suggests a more detailed study but broadly the policy should be 'no active intervention' with either 'hold the line' or 'managed realignment' in areas where defences are currently present. This area was not included in SMP1.

- 6c33 (Tamar Estuary – Gunnislake to Saltash North (upper Tamar Estuary West)): due to insufficient information to determine precise policies, the SMP suggests a more detailed study but broadly the policy should be 'no active intervention' with either 'hold the line' or 'managed realignment' in areas where defences are currently present. This area was not included in SMP1.
- 6c34 (Tamar Estuary – Saltash): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c35 (Tamar Estuary – River Lynher): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c36 (Tamar Estuary – Torpoint North (Jupiter Point) to Torpoint South (Landing Stage)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c37 (Tamar Estuary – St John's Lake (Torpoint South (Landing Stage) to Millbrook (Mill Farm))): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.
- 6c40 (Tamar Estuary – Palmer Point to Mount Edgcumbe (Cremyll)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas. This area was not included in SMP1.

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
All interest features: wintering and passage birds	Coastal squeeze / sea level rise	In areas where 'hold the line' policies apply, sea level rise will result in the progressive loss of intertidal and supratidal habitats. This will reduce the availability of feeding and roosting sites for bird populations in the estuary. A similar effect may occur where roll-back of habitats is constrained by natural features; however, it is not considered that this would be as a result of SMP policy. *Potential for significant effects*

Poole Bay to Lyme Bay Reefs cSAC: The boundary of this proposed marine SAC covers extensive offshore areas between Studland and the River Dart, in four blocks. These encompass the following Policy Units:

- Between 5g01 (Durlston Head to St Alban's Head) and 5g11 (Ringstead Bay (defended length west) to Redcliff Point).
- Between 5g22 (Osprey Quay (Portland Harbour) to King's Pier) and 5g23 (5g23 – King's Pier to Portland Bill).
- Between 6a05 (Abbotsbury to Cogden Beach) and 6a34 (6a34 – Beer Head to Salcombe Hill (West)).
- Between 6b36 (Shaldon (The Ness) to Maidencombe (North)) and 6b73 (Blackpool Sands).

A policy of 'no active intervention' applies within most of the uninhabited sections of these areas, with a policy of 'hold the line' around areas of human habitation (for example, around Torbay). A policy of 'managed realignment' also applies within some areas with existing defences.

Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
Submerged or partially submerged sea caves	Sea level rise / hold the line	Sea level rise could affect the extent and duration of inundation for sea caves in the long term. However, this would not be the result of SMP policy. There is the potential for designated sea caves to be significantly affected by do-something policies (i.e. 'hold the line'). The policy units which apply where these features are present are 6b41 (Petit Tor Point to Walls Hill), 6b55 (Hollicombe Head to Roundham Head), 6b58 (Broadsands) and 6b60 Churston Cove to Shoalstone Point). *Potential for significant effects*
Reefs	Coastal squeeze / sea level rise / managed realignment / hold the line	Reefs have the potential to be affected by a variety of mechanisms; for example, a policy of 'hold the line' or 'managed realignment' could result in changes in sediment regime that could smother reef habitats, or expose new substrate where reefs could develop. Similarly, sea level rise may increase or decrease areas suitable for reef habitats. There may therefore be significant effects on this interest feature as a result of SMP policy. *Potential for significant effects*

Prawle Point to Plymouth Sound and Eddystone cSAC: The boundary of this proposed marine SAC covers offshore areas between Prawle Point and Plymouth Sound. This encompasses the Policy Units between 6c02 (Prawle Point to Limebury Point) and 6c45 (Cawsand to Rame Head).

A policy of 'no active intervention' applies within most of the uninhabited sections of these areas, with a policy of 'hold the line' around areas of human habitation (for example, around Plymouth). A policy of 'managed realignment' also applies within some areas with existing defences.

Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
Reefs	Coastal squeeze / sea	Reefs have the potential

	level rise / managed realignment	to be affected by a variety of mechanisms; for example, a policy of 'hold the line' or 'managed realignment' could result in changes in sediment regime that could smother reef habitats, or expose new substrate where reefs could develop. Similarly, sea level rise may increase or decrease areas suitable for reef habitats. There may therefore be significant effects on this interest feature as a result of SMP policy. *Potential for significant effects*

South Hams SAC: The coastal parts of this site lie between PU 6b60 (Churston Cove (East) to Shoalstone Point) and 6b63 (Sharkham Point to Kingswear (South)). A policy of 'hold the line' applies within 6b60 (although only a very small part of the SAC lies within this unit); a policy of 'no active intervention' applies to all other policy units.

Sensitive Interest Feature:	**Potential hazard:**	**Potential exposure to hazard and mechanism of effect/impact if known:**
European dry heaths	These habitats lie mainly on landward parts of the site, and are unlikely to be affected by SMP policy.	*No significant effects* foreseen.
Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)	These habitats lie mainly on landward parts of the site, and are unlikely to be affected by SMP policy.	*No significant effects* foreseen.
Vegetated sea cliffs of the Atlantic and Baltic coastal (not primary reason for selection)	Sea level rise	Sea level rise may accelerate natural erosion patterns, resulting in the loss of cliff habitats in the long term. However, this would not be the result of a change in SMP policy. *No significant effects*.
Caves not open to the public (not primary reason for selection)	These features lie on landward parts of the site, and are unlikely to be affected by SMP policy.	*No significant effects* foreseen.
Tilio-Acrerion forests of slopes, screes and ravines (not primary reason for selection)	Sea level rise	Sea level rise may accelerate natural erosion patterns, resulting in the loss of cliff habitats that support this feature in the long term. However, this would not be the result of a change in SMP policy. *No significant effects*.
Greater horseshoe bat *Rhinolophus ferrumequinum*	The habitats and features on which this species depends, occur on the	*No significant effects* foreseen.

	landward parts of the site, and are unlikely to be affected by SMP policy.	

10. Is the potential scale or magnitude of any effect likely to be significant?

a) Alone?	**St Albans Head to Durlston Head SAC:** **No** The policy of 'no active intervention', which is unchanged from SMP1, is not considered to affect the interest features of this site. Although the progressive loss of cliff habitats due to sea level rise can be foreseen, this loss is not the result of SMP policy. **Isle of Portland to Studland Cliffs SAC:** **Yes** SMP policy around Portland Harbour has the potential to constrain natural processes and affect interest features on the site. **Crookhill Brick Pit SAC:** **No** The policy of 'no active intervention', which is unchanged from SMP1, is not considered to affect the interest features of this site. **Chesil and the Fleet SAC / SPA / Ramsar Site:** **Yes** Where a policy of 'hold the line' applies, this may constrain natural processes (and rolling back of the shingle ridge) and result in the loss of habitat due to coastal squeeze, that may be used by feeding and roosting birds. Where 'managed realignment' policy applies, this will result in the creation of new habitat that can mitigate for loss, and may increase the available resource. **Sidmouth to West Bay SAC:** **Yes** Where a SMP policy of 'hold the line' applies, this may affect the vegetated sea cliffs and annual vegetation of drift lines, as defences could prevent natural roll-back of habitats or constrain natural processes. **River Axe SAC:** **No** The SMP policies are not considered to affect the interest features of this site. **Dawlish Warren SAC:** **Yes (short-term)** **Issues to be resolved following further study** Holding the line in the short-term has the potential for coastal squeeze to affect intertidal habitats supporting bird populations. The Exe Estuary Strategy will seek to find an acceptable solution for the SAC in the medium and long-term. **Exe Estuary SPA / Ramsar Site:** **Yes** Where SMP 'hold the line' policies apply, there is potential for coastal squeeze to affect intertidal and supratidal habitats supporting wintering bird populations. Although

	managed realignment policies will create new habitat and will help to mitigate for losses due to coastal squeeze, a significant effect cannot be discounted at this stage. **South Devon Shore Dock SAC:** **No** The policy of 'no active intervention' is not considered to affect the interest features of this site. Although some progressive loss of cliff habitats and shore dock due to sea level rise may occur, this loss is not the result of SMP policy. **Blackstone Point SAC:** **No** The policy of 'no active intervention' is not considered to affect the interest features of this site. Although some loss of shore dock due to sea level rise may occur, this loss is not the result of SMP policy. **Plymouth Sound and Estuaries SAC:** **Yes** There is the potential for coastal management to disrupt natural geomorphological processes and sediment processes with associated impacts on sandbanks and reef habitats. In addition, where 'hold the line' policies apply, there is potential for coastal squeeze of intertidal and supratidal habitats with impacts on associated interest species. **Tamar Estuaries Complex SPA:** **Yes** Where 'hold the line' policies apply, there is potential for coastal squeeze of intertidal and supratidal habitats with impacts on associated wintering and passage birds. **Poole Bay to Lyme Bay Reefs cSAC** **Yes** Changes in the sediment regime through a change in SMP policy and sea level rise has the potential to affect reef habitats. Some sea caves also have the potential to be significantly affected by hold the line policies. **Prawle Point to Plymouth Sound and Eddystone cSAC:** **Yes** Changes in the sediment regime through a change in SMP policy and sea level rise has the potential to affect reef habitats. **South Hams SAC:** **No** A policy of 'no active intervention' in most policy units is not considered to affect the interest features of this site. In the limited area, where 'hold the line' applies, the potential loss of cliff habitats due to sea level rise is not considered the result of SMP policy.
b) In combination with other Environment Agency permissions and/or other plans or projects?	**No** The following Environment Agency plans are considered to have the potential to interact with the policies of the SMP: • River Basin Management Plans (RBMPs) (draft) for the South West.

	• Catchment Flood Management Plans (CFMPs) for East Devon, Exe, South Devon, River Tamar and West Dorset. • Exe Estuary Strategy: in preparation The objectives of the RBMPs are focussed towards achieving 'good ecological status' of watercourses within the plan areas, in order to meet the requirements of the Water Framework Directive. The effects on internationally designated sites are therefore likely to be neutral or positive, and no in combination effects with the SMP are foreseen. It is not considered that there will be in-combination effects with CFMPs. In some cases, the effects of CFMP policies in the long term are uncertain. However, these will be further assessed at the strategy and project phases, and the EA is committed to ensuring that there are no adverse effects on designated sites. It is anticipated that the Exe Estuary Strategy will seek to avoid adverse effects on European sites.
c) In combination with permissions and/or plans/projects of other Competent Authorities?	**No** The following plans are considered to have the potential to interact with the policies of the SMP: • Draft Revised Regional Spatial Strategy for the South West • World Heritage Coast Management Plan • AONB Management Plans • Heritage Coast Management Plan • Local Development Frameworks - Devon Structure Plan - The Bournemouth, Dorset and Poole Structure Plan (formerly the Dorset Structure Plan) - Cornwall Structure Plan - Purbeck District Council Local Plan - West Dorset Local Plan - Weymouth and Portland Borough Local Plan - East Devon District Local Plan - Exeter City Local Plan - Teignbridge District Local Plan In all cases, however, it is considered that any-in combination effects would not be significant, as each plan contains policies that seek to protect and enhance biodiversity. This should therefore ensure that there are no significant effects on these sites.
11.Conclusion: **Is the proposal likely to have a significant effect 'alone and/or in combination' on a European site?**	**St Albans Head to Durlston Head SAC:** **No** No significant effects on the site are foreseen as a result of SMP policy. **Isle of Portland to Studland Cliffs SAC:** **Yes** SMP policy has the potential to constrain natural processes and affect interest features of the site. **Crookhill Brick Pit SAC:** **No**

	No significant effects on the site are foreseen as a result of SMP policy. **Chesil and the Fleet SAC / SPA / Ramsar Site:** **Yes** Where 'hold the line' applies, this may constrain natural processes and result in the loss of habitat due to coastal squeeze. Where 'managed realignment' policy applies, this will result in the creation of new habitat that can mitigate for loss, and may increase the available resource. **Sidmouth to West Bay SAC:** **Yes** Where a SMP policy of 'hold the line' applies, this may affect the vegetated sea cliffs and annual vegetation of drift lines. **River Axe SAC:** **No** No significant effects on the site are foreseen as a result of SMP policy. **Dawlish Warren SAC:** **Yes (short-term)** **Issues to be resolved following further study** Holding the line (short-term) has the potential to affect intertidal habitats supporting bird populations. The Exe Estuary Strategy will seek to find an acceptable solution for the SAC in the medium and long-term. **Exe Estuary SPA / Ramsar Site:** **Yes** Where SMP 'hold the line' policies apply, there is potential for coastal squeeze of intertidal and supratidal habitats supporting wintering bird populations. Managed realignment policies will create new habitat and will help to mitigate for losses due to coastal squeeze. **South Devon Shore Dock SAC:** **No** No significant effects on the site are foreseen as a result of SMP policy. **Blackstone Point SAC:** **No** No significant effects on the site are foreseen as a result of SMP policy. **Plymouth Sound and Estuaries SAC:** **Yes** Coastal management could disrupt natural geomorphological/sediment processes with associated impacts on sandbanks and reef habitats. Where 'hold the line' policies apply, there is potential for coastal squeeze of intertidal and supratidal habitats and potential loss of Shore dock. **Tamar Estuaries Complex SPA:** **Yes** Where 'hold the line' policies apply, there is potential for coastal squeeze of intertidal and supratidal habitats with impacts on associated wintering and passage birds.

	Poole Bay to Lyme Bay Reefs cSAC **Yes** Changes in the sediment regime resulting from SMP policy, and sea level rise, has the potential to affect reef habitats. Some sea caves may be significantly affected by hold the line policies. **Prawle Point to Plymouth Sound and Eddystone cSAC:** **Yes** Changes in the sediment regime resulting from SMP policy, and sea level rise, has the potential to affect reef habitats. **South Hams SAC:** **No** No significant effects on the site are foreseen as a result of SMP policy.	
12. Justification for Reduced Consultation review process :	The SMP includes a thorough consultation process. An 'elected members forum' and 'key stakeholders forum' are consulted via meetings, emails and the internet. The Plan is also subject to a 3 month consultation period with the general public. Any potential impacts of schemes that arise from the SMP will be subject to further assessment at the strategy and/or project stages.	
13. Name of EA Officer:		**Date:**
14. <Natural England comment on assessment: (If the Natural England officer disagrees with the conclusion of 10c, please include details of the other Competent Authorities which should be consulted)>	For use when the Appendix 11 is to be sent to Natural England **for consultation**.	
15. <Name of Natural England Officer:>	Amanda Newsome	**Date:** 1/11/10

Form HR02: Proforma for FRM stage 3 Appropriate Assessment

PART A: Technical Consideration

1 Table 1 – Plan summary

Type of plan:	Shoreline Management Plan (SMP)								
Site reference:	South Devon and Dorset Coast (Durlston Head to Rame Head)								
Date, version and author	5 February 2010, Version 1, Siri Frost, Halcrow Group Ltd								
	October 2010, Version 4, Update by Corinna Morgan								
Plan Elements/Components (refs)	**Hazard (SMP)**								
	Habitat loss	**Changes in physical regime**	**Physical damage**	**Changes in turbidity**	**Habitat and community simplification**	**Disturbance**	**Changes in sediment supply**	**Watercourse modification**	**Shorter/longer duration of inundation**
SMP Plan Component assessed as having 'likely significant effect' (HR01)									
a) 'Hold the line' Applies to: • Isle of Portland to Studland Cliffs SAC • Chesil Beach & Fleet SAC, • Sidmouth to West Bay SAC, • Exe Estuary SPA & Ramsar site • Dawlish Warren SAC • Plymouth Sound & Estuaries SAC • Tamar Estuaries Complex SPA • Poole Bay to Lyme Bay cSAC • Prawle Point to Plymouth Sound & Eddystone cSAC.	✓	✓	✓	✓	✓	✓	✓	✓	✓
b) 'Managed realignment' Applies to: • Poole Bay to Lyme Bay Reefs cSAC • Sidmouth to West Bay SAC • Prawle Point to Plymouth Sound & Eddystone cSAC).	✓	✓	✓	✓	✓	✓	✓	✓	✓

2 Table 2 – Features List*:*

Features (current status)	Plan has associated hazards to which features are sensitive? (From form HR01)	Details of Hazard (plan component reference)
Isle of Portland to Studland Cliffs SAC		
Vegetated sea cliffs of the Atlantic and Baltic Coasts	✓	• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance
Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)	×	n/a
Annual vegetation of drift lines	✓	• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Shorter / longer duration of inundation
Early gentian *Gentianella anglica*	×	n/a
Chesil Beach and The Fleet SAC		
Coastal lagoons	×	n/a
• Annual vegetation of drift lines • Perennial vegetation of stony banks • Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*) • Atlantic salt meadows *Glauco-Puccinellietalia maritimae* (not a primary reason for selection)	✓	• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Shorter / longer duration of inundation
Sidmouth to West Bay SAC		
• Vegetated sea cliffs of the Atlantic and Baltic Coasts • *Tilio-Acerion* forests of slopes, screes and ravines	✓	• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply
Annual vegetation of drift lines (not primary reason for selection)	✓	• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Shorter / longer duration of inundation
Exe Estuary SPA and Ramsar site		
All interest features (wintering bird populations)	✓	• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification

Features (current status)	Plan has associated hazards to which features are sensitive? (From form HR01)	Details of Hazard (plan component reference)
		• Disturbance • Changes in sediment supply • Watercourse modification • Shorter / longer duration of inundation
Dawlish Warren SAC		
• Humid dune slacks • Shifting dunes along the shoreline with *Ammophilia arenaria 'white dunes'* (not primary reason for selection) • Fixed dunes with herbaceous vegetation 'grey dunes' (not primary reason for selection) • Petalwort *Petalophyllum ralfsii*	✓	• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Beach recharge
Plymouth Sound and Estuaries SAC		
• Sandbanks which are slightly covered by seawater all of the time • Estuaries • Large shallow inlets and bays • Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) • Mudflats and sandflats not covered by seawater at low tide (not a primary reason for selection)	✓	• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Watercourse modification • Shorter / longer duration of inundation
Reefs	✓	• Habitat loss • Changes in sediment supply
Shore dock *Rumex rupestris*	✓	• Habitat loss • Changes in physical regime • Physical disturbance • Disturbance • Changes in sediment supply • Shorter / longer duration of inundation
Allis shad *Alosa alosa* (not a primary reason for selection)	×	n/a
Tamar Estuaries Complex SPA		
All interest features (wintering and passage birds)	✓	• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply

Features (current status)	Plan has associated hazards to which features are sensitive? (From form HR01)	Details of Hazard (plan component reference)
		• Watercourse modification • Shorter / longer duration of inundation
Poole Bay to Lyme Bay Reefs cSAC		
Submerged or partially submerged sea caves	✓	• Habitat loss • Changes in physical regime • Physical damage • Shorter / longer duration of inundation
Reefs	✓	• Habitat loss • Changes in physical regime • Changes in sediment supply
Prawle Point to Plymouth Sound and Eddystone cSAC		
Reefs	✓	• Habitat loss • Changes in physical regime • Changes in sediment supply

3 Introduction

The South Devon and Dorset SMP is a non-statutory policy document for coastal flood and erosion risk management planning. It takes account of other existing planning initiatives and legislative requirements, and is intended to inform wider strategic planning. The SMP does not set policy for anything other than coastal defence management.

The SMP promotes management policies for the coastline into the 22nd Century, to achieve long-term objectives, while being technically sustainable, environmentally acceptable and economically viable. It is, however, recognised that given the differences between short and long term objectives, changes to management policy in the short term may be unacceptable. Thus, the SMP provides an approach for meeting objectives through appropriate management change, i.e. a 'route map' for decision makers to move from the present situation towards the future.

The SMP covers the area between Durlston Head at Swanage, in Dorset, and Rame Head at the mouth of Plymouth Sound in east Cornwall. It will replace SMPs that covered this area in two parts; Portland Bill to Durlston Head SMP (adopted 1998); and Portland Bill to Rame Head (Lyme Bay and South Devon) (adopted 1998). The previous SMPs covered a period of only 50 years (compared to 100 years by this SMP), used different policy units and different policy definitions, so comparisons between the first and second SMP need to be undertaken with care.

The SMP area is divided into 17 coastal units, and each of these is sub-divided into a total of 194 policy units, defined by geographical boundaries. Within each policy unit, appraisal of four potential policy options has been undertaken:

- **Hold the Line**: defences are maintained and upgraded/replaced in their current position or renewed. "Renewed defences" refers to the construction of new, more robust defences, immediately landward of the existing shoreline. This may require some land take. The aim of this is to retain the existing character and form of the coast with minimal disruption while maintaining all existing assets. An example of how this could be implemented is by placing the new defences immediately behind those existing and planning for any losses that may be incurred.

- **Advance the Line**: new defences are built seaward of existing defences, involving a significant reclamation of land in the process.

- **Managed Realignment**: allow retreat (or advance) of the shoreline, with management to control or limit that movement. Any increase of flood risk will also be managed. This policy typically applies to low-lying areas at risk of flooding, but can equally apply to cliffed areas, whereby management intervention slows or limits cliff recession for a period of time.

- **No Active Intervention**: a decision not to invest in providing or maintaining any defences. Where there are presently no defences, this policy means that the shoreline will continue to evolve naturally. However, this policy can mean areas that are currently defended, may not be defended in the future, meaning such areas will be at increased risk of flooding and coastal erosion in the future.

Note that an 'advance the line' policy does not apply within any of the policy units.

Through the policy appraisal process, a preferred policy for each policy unit has been determined, based on fulfilment of objectives for a variety of human, biodiversity, historic environment and economic factors. The preferred policies have been considered over three epochs, to reflect the potential changes in environment and policy that are foreseen in coming decades. These are:

- **Short term**: present day to 20 years
- **Medium term**: 20 to 50 years
- **Long term**: 50 to 100 years

This assessment considers the impacts of the preferred policies on the interest features of European sites where a Likely Significant Effect could not be screened out at Stage 2 (HRO1). For the following European sites, it was considered that there was no Likely Significant Effect and therefore no further assessment is being undertaken:

- St Albans Head to Durlston Head SAC;
- Crookhill Brick Pit SAC;
- Chesil Beach and The Fleet SPA and Ramsar site;
- River Axe SAC;
- South Devon Shore Dock SAC;
- Blackstone Point SAC; and,
- South Hams SAC.

The HRO1 has also concluded that some SMP policies have no Likely Significant Effects on some interest features of European sites within the plan area and similarly these are not considered further (see Table 2).

4 Table 3 – Appendix 12: Proforma for Stage 3 (Appropriate Assessment Record)

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
Isle of Portland to Studland Cliffs SAC Applicable policies[1]: 5g10 (Ringstead Bay: defended length) 'hold the line' in the short term, 'no active intervention' in the medium to long term (SMP1 policy was to 'hold'). 5g13 (Bowleaze Cove: gabions, to Furzy Cliff) 'hold the line' in the short term, 'managed realignment' in the medium to long term (unchanged from SMP1). 5g22 (Osprey Quay: Portland Harbour, to King's Pier) 'hold the line' [all epochs] (unchanged from SMP1). Condition assessment: Isle of Portland SSSI – 36% favourable; 42% unfavourable recovering; 3% unfavourable no change; 20% unfavourable declining Purbeck Ridge (East) SSSI – 64% favourable; 36% unfavourable recovering Nicodemus Heights SSSI – 100% unfavourable declining South Dorset Coast SSSI – 63% favourable; 27% unfavourable recovering; 5% unfavourable no change; 5% unfavourable declining							
• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance	1230 – Vegetated sea cliffs of the Atlantic and Baltic Coasts	Favourable condition is dependent on: • Extent, distribution and composition of habitats and communities. • Presence of critical / notable species. • Absence of landward constraints. • Structure and composition of rock, influencing the species and plant communities that can develop.	Maritime slopes and cliffs throughout the site are characterised by steep, rapidly eroding cliffs with pioneer species to less steep slopes and landslips with limited recent movement and associated vegetation, dependent upon allowing natural geomorphological and coastal processes. The interface between each community is considered to be in equilibrium according to levels of natural erosion and disturbance. Changes in the frequency and abundance of characteristic species would be indicative of changes in overall hydrography and functioning of the communities. Landward constraints would affect the overall structure of these communities by preventing the ability to modify distribution in response to natural dynamic coastal processes.	These interest features are dependent on active site processes (i.e. allowing dynamic processes to proceed freely). Management activities should avoid interfering with natural processes. A broad and integrated approach to management should be undertaken to ensure that both direct and indirect effects are considered. Activities that may cause a direct effect include the construction of structures and defences, the removal of material, and changes in drainage patterns. Activities that may cause indirect effects include cliff protection elsewhere that may starve a beach of sediment or may accelerate cliff retreat elsewhere. Agricultural land management needs to	Where a 'hold the line' policy applies natural processes of erosion and deposition will continue to be impeded. However, this policy is restricted to Osprey Quay (5g22) for all epochs, Bowleaze Cove (5g13) and Ringstead Bay defended length (5g10) in the short term. In the medium to long-term, a 'managed realignment' policy will apply to 5g13 and a 'no active intervention' policy will apply to 5g10. These policies will allow active site processes and associated habitats and communities to re-establish where they have been previously interrupted and has the potential to enhance the value of the designated site.	**Uncertain** A 'hold the line' (HTL) policy applies only to Osprey Quay (5g22), for all epochs. Defence structures are already in place and it is considered that any impact on this interest feature will be localised and will not significantly affect the integrity of the site. A HTL policy in the short-term at 5g10 and 5g13, may adversely affect the site in the short-term but in the medium to long-term, managed realignment or no active intervention will be beneficial to the management of the site. A 'hold the line' policy also applies to Policy Units 5g15 to 5g17, which lie to the west of the European site. Where new defences are constructed or existing defences are improved, it is considered that there may be potential for the policy to increase the erosion rate of adjacent cliff habitat within the SAC.	**Uncertain** The impact of each 'hold the line' policy on the integrity of cliff habitats within the Isle of Portland to Studland Cliffs SAC will depend upon the implementation of the policy. Where there is no change to the existing situation, impacts are likely to be localised with limited impact on the overall status of the site. Without detailed investigation, the potential impact of new/improved defences or the implementation of defence activities in Policy Units 5g15 to 5g17 is uncertain.

[1] Where potentially significant impacts were identified in the HR01

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
				allow for the natural erosion of cliffs faces to limit the effects of squeeze on cliff habitats and communities. Grazing may be required, particularly in the management of calcareous grassland habitats (i.e. to control scrub). Appropriate grazing, combined with erosion through natural processes, maintains open vegetation and promotes a varied habitat structure. Trampling pressure as a result of site access and recreation may also require active management.			
• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Shorter / longer duration of inundation	1210 - Annual vegetation of drift lines (not primary reason for site selection)	The favourable condition target for Annual vegetation of drift lines is based on: • Extent. • Absence of landward constraints. • Frequency and abundance of characteristic species – *Beta vulgaris maritime* and *Atriplex* community. • Frequency and abundance of characteristic species – *Honkenya peploides* and *Cakile maritima* community.	The interface between each community is considered to be in equilibrium according to levels of natural erosion and disturbance. Changes in the frequency and abundance of characteristic species would be indicative of changes in overall hydrography and functioning of the communities. Landward constraints would affect the overall structure of these communities by preventing the ability to modify distribution in response to natural dynamic coastal processes.	This interest feature is dependent on active natural processes. Management activities should avoid interfering with natural processes and ensure that landward rollback can take place in response to sea-level rise. A broad and integrated approach to management should be undertaken to ensure that both direct and indirect effects are considered. Activities that may cause a direct effect include the construction of structures and defences, the removal of material, and changes in drainage patterns. Activities that may cause indirect effects include cliff protection elsewhere that may starve a beach of	Where a 'hold the line' policy applies this will result in the progressive loss or modification of intertidal habitat due to coastal squeeze. There may also be physical loss of habitat within the footprint of flood defence structures. This policy is restricted to Osprey Quay (5g22) for all epochs, and Bowleaze Cove (5g13) and Ringstead Bay defended length (5g10) in the short term. In the medium to long-term, a 'managed realignment' policy will apply to 5g13. This will allow active site processes and associated habitats and communities to re-establish where they have been previously interrupted and has the potential to enhance the value of the designated site. This may also help to mitigate for the effects of coastal squeeze in the short-term. There may be temporary adverse effects during the managed realignment process, for example through	**Yes** A 'hold the line' policy applies only to Osprey Quay (5g22), for all epochs. Defence structures are already in place and it is considered that any impact on this interest feature will be localised and will not adversely affect the integrity of the site.	**No**

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
				sediment or may accelerate cliff retreat elsewhere. Management activities should also avoid or minimise surface disturbance, especially in more open communities. This may require management, for example, where recreation and access is causing trampling and associated surface disturbance.	disturbance where engineered structures are removed or modified, or during the likely 'settling in' period after realignment, where new habitats establish and, potentially, some localised areas of habitat are lost where water flow patterns change. No active intervention in the medium to long-term at 5g10 and in other policy units, which fall within the European site, should enable natural processes, including the roll back of habitats where sea level rise results in the loss of intertidal areas. However, this may not be the case where habitats are constrained by natural features, such as hard cliffs. In this case, there may be a net loss of intertidal habitats, but it is not considered that this would be the result of SMP policy.		
Chesil Beach and The Fleet SAC Applicable policies: 5g21 (Small Mouth to Osprey Quay (Portland Harbour)): 'hold the line' (unchanged from SMP1). 6a02 (Chiswell to Chesil Beach): 'hold the line'. SMP1 policy was 'selectively hold the line'. 6a03 (Chesil Beach (to Wyke Narrows)): 'managed realignment' to allow intervention after storm events only to restore the defence function of the beach. SMP1 policy was 'selectively hold the line'. 6a09 (Freshwater Beach): 'managed realignment' to provide beach management to control the rate at which the beach moves landward as sea levels rise. SMP1 policy was 'do nothing' (no active intervention). 6a11 (West Bay (East Beach to eastern pier)): 'hold the line' by beach recharge in the short and medium term; 'managed realignment' in the long term. The SMP1 policy was 'hold the line'. Condition assessment: Portland Harbour Shore SSSI – 74% favourable; 23% unfavourable no change Chesil Beach and The Fleet SSSI – 93% favourable; 6% unfavourable recovering; 1% unfavourable no change West Dorset Coast SSSI – 82% favourable; 17% unfavourable recovering; 1% unfavourable no change							
• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Shorter / longer duration of inundation	1210 - Annual vegetation of drift lines 1220 - Perennial vegetation of stony banks 1420 - Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*) 1330 - Atlantic salt meadows *Glauco-*	For each of these interest features, the favourable condition target is based on extent and absence of landward constraints. The favourable condition target for Annual vegetation of drift lines is also based on: • Frequency and abundance of characteristic species – *Beta vulgaris maritime* and *Atriplex* community. • Frequency and abundance of characteristic species –	The interface between each community is considered to be in equilibrium according to levels of natural erosion and disturbance. Changes in the frequency and abundance of characteristic species would be indicative of changes in overall hydrography and functioning of the communities. Landward constraints would affect the overall structure of these communities by preventing the ability to modify distribution in response to	These interest features are dependent on active natural processes. Management activities should avoid interfering with natural processes and ensure that landward rollback can take place in response to sea-level rise. A broad and integrated approach to management should be undertaken to ensure that both direct and indirect effects are considered. Activities that may cause a direct effect include the	Where a 'hold the line' policy applies this will result in the progressive loss or modification of intertidal habitat due to coastal squeeze. There may also be physical loss of habitat within the footprint of flood defence structures. This policy is mainly restricted to areas of human habitation, and localised impediment to natural processes as a result of existing coastal defence structures is recognised (e.g. 6a11) but is not considered to significantly affect the overall status of the site. However, intervention associated with 6a02 has potential to increase	**Uncertain** Habitat loss due to coastal squeeze can be mitigated by the creation of new habitat through managed realignment, although in some cases it may not possible to achieve like-for-like replacement. Progressive implementation of managed realignment policies would reduce the potential effects of sudden changes to water flow and geomorphology. The potential for HTL policies to cause adverse effects is uncertain at this stage. It is considered, however, that given the limited extent of units that lie	**Uncertain** Where intertidal habitat may be squeezed against hard defences, a study to quantify the potential habitat losses and gains will be carried out and this action is included in the SMP Action Plan.

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
	Puccinellietalia maritimae (not a primary reason for selection)	*Honkenya peploides* and *Cakile maritime* community. The favourable condition target for Mediterranean and thermo-Atlantic halophilous scrubs is also based on: • Frequency and abundance of characteristic species – *Suaeda vera*. These interest features are largely in favourable condition.	natural dynamic coastal processes.	construction of structures and defences, the removal of material, and changes in drainage patterns. Activities that may cause indirect effects include cliff protection elsewhere that may starve a beach of sediment or may accelerate cliff retreat elsewhere. Management activities should also avoid or minimise surface disturbance, especially in more open communities. This may require management, for example, where recreation and access is causing trampling and associated surface disturbance. Selective grazing for the conservation of salt meadows may be necessary.	the likelihood of human intervention, disrupting natural processes with implications locally and potentially elsewhere. Where a 'managed realignment' policy applies, this will allow new intertidal habitat to be created and may allow natural processes to re-establish where there have been previously interrupted. This may also mitigate for the effects of coastal squeeze, and has the potential to enhance the value of the designated site. There may be temporary adverse effects during the managed realignment process, for example through disturbance where engineered structures are removed or modified, or during the likely 'settling in' period after realignment, where new habitats establish and, potentially, some localised areas of habitat are lost where water flow patterns change.	within the European site where HTL is applicable, in relation to the extent of the designated site, the potential to adversely impact upon the interest features of the site is minimal. Should further human intervention be required to 'hold the line', then detailed modelling and investigation would be undertaken at the project level to identify and mitigate any potential adverse effects.	
Sidmouth to West Bay SAC Applicable policies: 6a12 (West Bay (West Beach from eastern pier) to West Cliff (East) (includes West Bay Harbour)): 'hold the line' (unchanged from SMP1). 6a15 (Seatown): 'hold the line' in the short term and 'no active intervention' in the medium and long term. The SMP1 policy was 'selectively hold the line'. 6a16 (Seatown (West) to Golden Cap): 'no active intervention' [all epochs]. The SMP1 policy was 'selectively hold the line'. 6a18 (Charmouth): 'hold the line' in the short term and 'managed realignment' in the medium and long term. The SMP1 policy was 'selectively hold the line'. 6a20 (East Cliff (Lyme Regis) to Broad Ledge (Lyme Regis): 'hold the line' [all epochs] (unchanged from SMP1). 6a21 (Broad Ledge (Lyme Regis) to The Cobb (Lyme Regis): 'hold the line' [all epochs] (unchanged from SMP1). 6a22 (Monmouth Beach) 'hold the line' in the short term, 'managed realignment' in the medium term and 'hold the line' of the realigned defence in the long term. The SMP1 policy was 'do nothing' (no active intervention). 6a25 (Axe Estuary (Mouth Breakwater to Axmouth North): 'hold the line' [all epochs]. This area was not included in SMP1. 6a30 (Seaton (West) to Seaton Hole): 'hold the line' in the short, and 'managed realignment' in the medium and long term. SMP1 policy was 'selectively hold the line'. 6a32 (Beer): 'hold the line' [all epochs]. The SMP1 policy was 'selectively hold the line'. 6a35 (River Sid and East Sidmouth): 'managed realignment' [all epochs]. This unit straddles two previous SMP1 units for which the policy was a mix of 'hold the line' and 'do nothing'. Condition assessment: Sidmouth to Beer Coast SSSI – 89% favourable; 8% unfavourable recovering; 2% unfavourable declining West Dorset Coast SSSI – 82% favourable; 17% unfavourable recovering; 1% unfavourable no change Axmouth to Lyme Regis Under Cliffs SSSI – 6% favourable; 94% unfavourable recovering						
• Habitat loss • Changes in physical regime	1230 - Vegetated sea cliffs of the Atlantic and	Favourable condition is dependent on: • Extent, distribution and	Maritime slopes and cliffs throughout the site are characterised by steep, rapidly	These interest features are dependent on active site processes (i.e.	Where a 'hold the line' policy applies natural processes of erosion and deposition will continue to be	**Uncertain** In the long-term, a 'hold the line' policy	**Uncertain**

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
• Physical damage • Habitat and community simplification • Disturbance	Baltic Coasts 9180 - *Tilio-Acerion* forests of slopes, screes and ravines (Priority feature).	composition of habitats and communities. • Presence of critical / notable species. • Absence of landward constraints. • Structure and composition of rock, influencing the species and plant communities that can develop.	eroding cliffs with pioneer species to less steep slopes and landslips with limited recent movement and associated vegetation, dependent upon allowing natural geomorphological and coastal processes. The interface between each community is considered to be in equilibrium according to levels of natural erosion and disturbance, with associated colonisation and succession allowing habitats and communities to adjust to changing cliff morphology. Changes in the frequency and abundance of characteristic species would be indicative of changes in overall hydrography and functioning of the communities. Landward constraints, such as inappropriate land management, would affect the overall structure of these communities by preventing the ability to modify distribution in response to natural dynamic coastal processes.	allowing dynamic processes to proceed freely). Management activities should avoid interfering with natural processes. A broad and integrated approach to management should be undertaken to ensure that both direct and indirect effects are considered. Activities that may cause a direct adverse effect include the construction of structures and defences, the removal of material, and changes in drainage patterns. Activities that may cause indirect adverse effects include cliff protection elsewhere that may starve a beach of sediment or may accelerate cliff retreat elsewhere. Agricultural land management needs to allow for the natural erosion of cliffs faces to limit the effects of squeeze on cliff habitats and communities. Grazing and rotational scrub management may be required, particularly in the management of calcareous grassland habitats (i.e. to control scrub). Appropriate grazing / scrub control, combined with erosion through natural processes, maintains open vegetation and promotes a varied habitat structure. Maintenance of scrub habitats depends on a combination of	impeded. There may also be physical loss of habitat within the footprint of flood defence structures. This policy is mainly restricted to areas of human habitation and localised impediment to natural processes as a result of existing coastal defence structures is recognised (e.g. 6a12) but is not considered to significantly affect the overall status of the site. However, intervention associated with 6a25 has potential to increase the likelihood of human intervention, disrupting natural processes with implications locally and potentially elsewhere. Where a 'managed realignment' policy applies, this will allow new intertidal habitat to be created and may allow natural processes to re-establish where they have been previously interrupted. This may also help to mitigate the effects of coastal squeeze that would otherwise occur within these units and has the potential to enhance the value of the designated site. There may be temporary adverse effects during the managed realignment process, for example through disturbance where engineered structures are removed or modified, or during the likely 'settling in' period after realignment, where new habitats establish and, potentially, some localised areas of habitat are lost where water flow patterns change.	applies to some policy units within this site. This policy applied to some policy units during SMP1 and the impact of each policy has been monitored. At Sidmouth (Policy Unit 6a36), the construction of new defences during SMP1 has increased erosion rates in the first 100-200m of the SAC to the east. It is considered that the affected cliff habitat in Policy Unit 6a34 and 6a35 should be considered unfavourable given that recent activities are affecting the cliff's natural geomorphology. There is potential that local impacts will occur elsewhere (for example, adjacent to Policy Unit 6a32 at Beer) where efforts are made to improve existing defences. The policy for 6a22 Monmouth Beach has been changed from Do Nothing in SMP1 to Hold the Line in SMP2.	The impact of each 'hold the line' policy on the integrity of the vegetated cliff habitats within Sidmouth to West Bay SAC will depend upon the implementation of the policy and the extent to which hold the lines reduces erosion of the cliffs.. Where there is no change to the existing situation or defences, impacts on the overall status of the site are likely to be limited. However, raising or strengthening defences to cater for sea level rise may cause additional impacts such as loss of cliff face habitat. Stabilisatiion of otherwise mobile cliffs will also cause long-term change in their vegetation composition. Without detailed investigation, the potential impact of new/improved defences or the implementation of defence activities is **uncertain.**

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
				natural factors including erosion, salt spray, wind and grazing. Woodland establishing on landslips should be left unmanaged. Recreational pressure may also require active management.			
• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Shorter / longer duration of inundation	1210 - Annual vegetation of drift lines (not primary reason for selection)	The favourable condition target for Annual vegetation of drift lines is based on: • Extent. • Absence of landward constraints. • Frequency and abundance of characteristic species – *Beta vulgaris maritime* and *Atriplex* community. • Frequency and abundance of characteristic species – *Honkenya peploides* and *Cakile maritime* community.	The interface between each community is considered to be in equilibrium according to levels of natural erosion and disturbance. Changes in the frequency and abundance of characteristic species would be indicative of changes in overall hydrography and functioning of the communities. Landward constraints would affect the overall structure of these communities by preventing the ability to modify distribution in response to natural dynamic coastal processes.	This interest feature is dependent on active natural processes. Management activities should avoid interfering with natural processes and ensure that landward rollback can take place in response to sea-level rise. A broad and integrated approach to management should be undertaken to ensure that both direct and indirect effects are considered. Activities that may cause a direct effect include the construction of structures and defences, the removal of material, and changes in drainage patterns. Activities that may cause indirect effects include cliff protection elsewhere that may starve a beach of sediment or may accelerate cliff retreat elsewhere. Management activities should also avoid or minimise surface disturbance, especially in more open communities. This may require management, for example, where recreation and access is	Where a 'hold the line' policy applies this will result in the progressive loss or modification of intertidal habitat due to coastal squeeze. There may also be physical loss of habitat within the footprint of flood defence structures. This policy is mainly restricted to areas of human habitation. Where a 'managed realignment' policy applies, this will allow new intertidal habitat to be created and may allow natural processes to re-establish where they have been previously interrupted. This may also help to mitigate for the effects of coastal squeeze, and has the potential to enhance the value of the designated site. There may be temporary adverse effects during the managed realignment process, for example through disturbance where engineered structures are removed or modified, or during the likely 'settling in' period after realignment, where new habitats establish and, potentially, some localised areas of habitat are lost where water flow patterns change.	**Yes** In the long-term, a 'hold the line' policy applies to some policy units within this site. This policy also applied to these locations during SMP1 and has not been identified as detrimental to the status of the site designation. The application of a 'hold the line' policy at Axe Estuary (6a25) is new and was not included in SMP1. This policy unit area is considered to be very small in relation to the overall area of the designated site and, therefore it is unlikely to adversely affect the integrity of the site.	**No**

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
				causing trampling and associated surface disturbance.			
Dawlish Warren SAC Applicable policies: 6b19 (Dawlish Warren – landward side): 'no active intervention' in the short term. Policy to be determined for other epochs. 6b20 (Dawlish Warren – east distal end): 'hold the line' in the short term. Policy to be determined for other epochs. 6b21 (Dawlish Warren – central gabion defences): 'hold the line' in the short term. Policy to be determined for other epochs. 6b22 (Dawlish Warren – west hard defences): 'hold the line' in the short term. Policy to be determined for other epochs. Condition assessment: 6% favourable; 33% unfavourable recovering; 47% unfavourable no change; 14% unfavourable declining							
• Habitat loss / physical damage • Changes in physical regime • Habitat and community simplification • Disturbance • Changes in sediment supply • Shorter / longer duration of inundation	2190 - Humid dune slacks 2120 - Shifting dunes along the shoreline with *Ammophilia arenaria* 'white dunes' (not primary reason for selection) 2130 - Fixed dunes with herbaceous vegetation 'grey dunes' (not primary reason for selection) 1395 - Petalwort *Petalophyllum ralfsii*	- Management should maintain the range of habitats and associated species reflecting the different stages of succession by maintaining, or restoring where necessary, the natural processes and dynamics of dune development and succession. - Selective scrub management and grazing or mowing may be necessary. - Management should aim to promote the creation of new slacks and avoid the artificial stabilisation of dunes. In particular, the areas of bare ground associated with the early successional dune slacks on this site are important for a number of plant species including petalwort.	Maintenance of natural processes is critical in maintaining the quality and extent of dune habitats within the site, and the species that they support (including petalwort).	- Currently, dune habitats within the site are considered to be in 'unfavourable declining' or 'unfavourable recovering' condition. Where 'unfavourable declining' assessments have been made, this is due to the presence of sea defences that constrain natural processes and sediment supply. - Condition is also affected by the presence of non-native species and excessive scrub. - Dune vegetation can be vulnerable to erosion from trampling or other disturbance.	Where a 'hold the line' policy applies, the continued presence of defences at Dawlish Warren will sustain the 'unfavourable' condition of the site. This applies to the seaward parts of the Warren in the short term. A policy for medium and long-term epochs has not yet been determined, pending further discussions with Natural England and the development of the Exe Estuary Strategy.	**No – short-term** Continued loss of dune habitats at the east distal end, central gabion defences and west hard defences policy unit. **Potentially – medium and long-term** The Exe Estuary Strategy will seek to find an acceptable solution that allows the dune habitats to behave in a dynamic and natural way in the medium to long-term. Further assessment will be required as part of that process. Current SMP1 'hold the line' policies are considered to be damaging to the interest features of the SAC, and continuation of 'hold the line' policies in the short term are likely to prolong the effect.	**Yes** in the short term Compensatory dune habitat will be considered through the Regional Habitat Creation Programme. **No** in the medium- and long term. Any potentially adverse effects in the medium and long term should be considered and avoided during the preparation of the Exe Estuary Strategy.
Exe Estuary SPA and Ramsar site Applicable policies: 6a44 (Orcombe Rocks to Maer Rocks): 'hold the line' [all epochs]. SMP1 policy was 'selectively hold the line'. 6a45 (The Maer): 'hold the line' in the short term, 'managed realignment' in the medium term and 'hold the line' of the realigned defence in the long term. 6a46 (Harbour View to Exmouth Pier): 'hold the line' [all epochs]. SMP1 policy was 'selectively hold the line'. 6a47 (Exmouth Spit): 'hold the line' [all epochs]. SMP1 policy was 'selectively hold the line'. 6b01 (Exe Estuary – Exmouth (West)): 'hold the line' [all epochs]. This area was not included in SMP1. 6b02 (Exe Estuary – Exmouth (West) to Lympstone): 'hold the line' [all epochs]. This area was not included in SMP1 6b03 (Exe Estuary – Lympstone): 'hold the line' [all epochs]. This area was not included in SMP1. 6b04 (Exe Estuary – Nutwell Park): 'hold the line' [all epochs]. This area was not included in SMP1. 6b05 (Exe Estuary – Lympstone Commando): 'hold the line' [all epochs]. This area was not included in SMP1. 6b06 (Exe Estuary – Exton): 'hold the line' [all epochs]. This area was not included in SMP1. 6b07 (Exe Estuary – Exton to Lower Clyst): 'hold the line' [all epochs]. This area was not included in SMP1. 6b08 (Exe Estuary – Lower Clyst): 'managed realignment' [all epochs]. This area was not included in SMP1.							

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6b09 (Exe Estuary – Topsham): 'hold the line' [all epochs]. This area was not included in SMP1. 6b10 (Exe Estuary – M5 (east) to St James' Weir): 'hold the line' [all epochs]. This area was not included in SMP1. 6b12 (Exe Estuary – St James' Weir to M5 (west)): 'hold the line' [all epochs]. This area was not included in SMP1. 6b13 (Exe Estuary – M5 (west) to Turf Lock): 'hold the line' [all epochs]. This area was not included in SMP1. 6b14 (Exe Estuary – Turf Lock to Powderham): 'hold the line' in the short term, 'managed realignment' in the medium and 'hold the line' of the realigned defence in the long term. This area was not included in SMP1. 6b15 (Exe Estuary – Powderham (south): 'hold the line' [all epochs]. This area was not included in SMP1. 6b16 (Exe Estuary – Starcross): 'hold the line' [all epochs]. This area was not included in SMP1. 6b17 (Exe Estuary – Cockwood): 'hold the line' [all epochs]. This area was not included in SMP1. 6b18 (Exe Estuary – Cockwood to the Warren): 'hold the line' [all epochs]. This area was not included in SMP1. 6b19 (Dawlish Warren – landward side): 'no active intervention' in the short term. Policy to be determined for other epochs. 6b20 (Dawlish Warren – east distal end): 'hold the line' in the short term. Policy to be determined for other epochs. 6b21 (Dawlish Warren – central gabion defences): 'hold the line' in the short term. Policy to be determined for other epochs. 6b22 (Dawlish Warren – west hard defences): 'hold the line' in the short term. Policy to be determined for other epochs. Condition assessment: Exe Estuary SSSI: 90% favourable; 10% unfavourable recovering							
• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Watercourse modification • Shorter / longer duration of inundation	**Ramsar site** • Assemblages of international importance: 20263 waterfowl (5 year peak mean 1998/99 – 2002-03) • Species / population occurring at levels of international importance: dark-bellied brent goose, *Branta bernicla bernicla*, 1509 individuals representing 1.5% of the GB population (5 year peak mean 1998/99 – 2002/03) • Species / populations identified subsequent to designation for possible future consideration	Wintering and passage bird populations are dependent on an adequate supply of food and undisturbed areas where they can feed and roost during the tidal cycle. The following favourable condition targets are applicable: • No significant reduction in numbers or displacement of birds. • No decrease in the extent and distribution of all habitats. • No increase in obstruction to existing bird view lines. • Abundance and diversity of prey species, including surface and sub-surface invertebrates, should not change significantly. • Presence and abundance of food species (i.e. green algae, soft-leaved and seed-bearing plants and mud-surface plants) should not change significantly. • Vegetation cover should not alter significantly.	Each attribute contributes to the status of the designated site as follows: • Avocets and Slavonian grebes require feeding and roosting areas free from disturbance. • Avocets require a sufficiently large extent of mudflat and sandflat for feeding and saltmarsh for roosting. Slavonian grebes require a sufficiently large extent of shallow coastal water for feeding and coasting. • Avocets and other wader species require a view over >200m to allow early detection of predators when feeding / roosting. Dark-bellied brent geese require views >500m. • Avocets feed communally in shallow waters on a range of organisms. Slavonian grebe require an abundance of marine and freshwater fish and aquatic invertebrates. • All qualifying species require a sufficiently large extent of mudflat/sandflat for feeding and/or roosting. • Dark-bellied brent goose and wigeon require a	Human activities should be managed so that they do not cause deterioration or disturbance to habitats or species, through any of the following: • Physical loss through removal or loss of estuarine habitats. • Physical damage resulting from abrasion/siltation. • Noise or visual disturbance. • Increased synthetic toxic contamination. • Changes in nutrient and/or organic loading. • Biological disturbance through selective extraction of species which form important food sources.	A 'hold the line' policy applies to the majority of policy units in this European site, with existing coastal defences continuing to protect the coast from flooding and erosion risk. This is likely to result in the progressive loss of intertidal habitat due to coastal squeeze, which will result in the modification or physical loss of habitat used by feeding and roosting birds. There may also be noise and visual disturbance to birds during maintenance or construction of defence structures. Where the height of defences has to be increased to maintain the standard of defence, this may affect sight lines for feeding or roosting birds, and therefore reduce suitability for some species. A 'managed realignment' policy applies in the medium to long term in a small number of policy units (i.e. 6a45, 6b08 and 6b14). This will allow new intertidal habitat to be created, by allowing natural roll-back and adaptation to sea level rise. Intertidal habitat creation will provide new areas where birds can feed and/or roost. This can mitigate losses due to coastal squeeze that would otherwise occur in these units and has the potential to enhance the	**Uncertain** - Habitat loss due to coastal squeeze can be mitigated by the creation of new estuarine/intertidal habitat through managed realignment, although in some cases it may not be possible to achieve an exact like-for-like replacement. This will be informed by the Exe Estuary Strategy, which is due to be progressed by the Environment Agency shortly. - Disturbance during maintenance or construction can be avoided by timing works outside of key wintering / passage times for birds. - Progressive implementation of managed realignment policies would reduce the potential effects of sudden changes to water flow and geomorphology. For example, through creation of regulated tidal exchange initially (such as at Goosemoor), followed by full removal of defences. - The Environment Agency will deliver habitat replacement through the SW Regional Habitat Creation Programme, and will aim to keep pace with habitat loss on a 1 to 1 basis in the long term. This programme will seek to create intertidal habitat to compensate for	**Yes** It is considered that the HTL policies identified in this SMP, in combination, have potential to adversely affect the integrity of this site in the long-term as a result of intertidal habitat loss due to coastal squeeze. Although a 'managed realignment' policy applies within parts of the site, it is considered unlikely that the areas of new intertidal habitat created will be of sufficient area to mitigate for that lost to coastal squeeze. Compensatory habitat creation, through the SW Regional Habitat Creation Programme will therefore be

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	under Criterion 6: Species with peak counts in winter: black-tailed godwit, *Limosa limosa islandica*, 857 individuals representing 2.4% of the population (5 year peak mean 1998/99 – 2002/03) **SPA** Under Article 4.1 of the Directive (79/409/EEC): Overwinter: • Avocet *Recurvirostra avosetta*, 359 individuals representing at least 28.3% of the wintering population of GB (5 year peak mean1991/2 – 1995/6) • Slavonian Grebe *Podiceps auritus,* 20 individuals representing at least 5% of the wintering population in GB (5 year peak mean 1984/85 – 1988/89) Under Article 4.2 of the Directive (79/409/EEC): Over winter; Regularly		sufficiently large extent of saltmarsh and seagrass for feeding/roosting. • Oystercatcher, knot, and dunlin require a sufficiently large extent of intertidal/subtidal boulder and cobble scar for feeding/roosting. • Wader species feed on a range of organisms. • Dark-bellied brent geese and wigeon require an abundance of soft-leaved and seed-bearing plants for feeding. • Wader species require vegetation of <10cm throughout areas used for roosting or >80% cover of bare ground. • Dark-bellied brent geese and species like wigeon require an abundance of mud-surface plants. • Species like oystercatcher, knot and dunlin feed on a range of molluscs.		value of the designated sites. It is not likely to mitigate sufficiently for losses to coastal squeeze throughout the SAC. There may be temporary adverse effects during the managed realignment process, for example through noise and visual disturbance where engineered structures are removed or modified, or during the likely 'settling in' period after realignment, where new habitats establish and, potentially, some localised areas of habitat are lost where water flow patterns change.	habitat lost to coastal squeeze. This is accounted for when schemes are brought forward for consent to implement the SMP policies.	required to offset the intertidal habitat lost. Where intertidal habitat may be squeezed against hard defences, a study to quantify the potential habitat losses and gains will be carried out and this action is included in the SMP Action Plan.

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	supporting 23,513 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: Black-tailed godwit *Limosa limosa islandica,* Dunlin *Calidris alpina alpina,* Lapwing *Vanellus vanellus,* Grey Plover *Pluvialis squatarola,* Oystercatcher *Haematopus ostralegus,* Red-breasted merganser *Mergus serrator,* Wigeon *Anas penelope*, Dark-bellied Brent Goose *Branta bernicla bernicla,* Cormorant *Phalacrocorax carbo,* Avocet *Recurvirostra avosetta,* Slavonian Grebe *Podiceps auritus,* Whimbrel *Numenius phaeopus*						
Plymouth Sound and Estuaries SAC Applicable policies:	6c23 (Yealm Estuary (East Bank Passage House to Newton Ferrers North)): 'hold the line' [all epochs]. This area was not included in SMP1. 6c30 (Plym Estuary – Mount Batten Breakwater to Marsh Mills): 'hold the line' [all epochs]. SMP1 policy was 'selectively hold the line'. 6c31 (Tamar Estuary – Devil's Point to Tamerton Lake): 'hold the line' [all epochs]. This area was not included in SMP1. 6c32 (Tamar Estuary – Tamerton Lake to Gunnislake (upper Tamar Estuary East)): due to insufficient information to determine precise policies, the SMP suggests a more detailed study but broadly the policy should be 'no active intervention' with either 'hold the line' or 'managed realignment' in areas where defences are currently present. This area was not included in SMP1. 6c33 (Tamar Estuary – Gunnislake to Saltash North (upper Tamar Estuary West)): due to insufficient information to determine precise policies, the SMP suggests a more detailed study but broadly the policy should be 'no active intervention' with either 'hold the line' or 'managed realignment' in areas where defences are currently present. This area was not included in SMP1. 6c34 (Tamar Estuary – Saltash): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. 6c35 (Tamar Estuary – River Lynher): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. 6c36 (Tamar Estuary – Torpoint North (Jupiter Point) to Torpoint South (Landing Stage)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. 6c37 (Tamar Estuary – St John's Lake (Torpoint South (Landing Stage) to Millbrook (Mill Farm))): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs].					

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	This area was not included in SMP1. 6c39 (Tamar Estuary – St John's Lake (Millbrook (Hancocks's Lake) to Palmer Point)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. 6c40 (Tamar Estuary – Palmer Point to Mount Edgcumbe (Cremyll)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. In the Tamar Estuary, undefended areas will remain undefended. 6c42 (Fort Picklecombe): 'hold the line' [all epochs]. SMP 1 policy was 'selectively hold the line'. 6c44 (Kingsand / Cawsand): 'hold the line' [all epochs]. SMP 1 policy was 'selectively hold the line'. Condition assessment: Yealm Estuary SSSI – 100% favourable St, John's Lake SSSI – 46% favourable; 54% unfavourable recovering; Plymouth Sound Shores and Cliffs SSSI – 100% favourable Wembury Point SSSI – 82% favourable; 9% unfavourable no change; 9% unfavourable declining Rame Head and Whitsand Bay SSSI – 100% favourable Tamar-Tavy Estuary SSSI – 93% favourable; 7% unfavourable recovering						
• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Watercourse modification • Shorter / longer duration of inundation	1110 - Sandbanks which are slightly covered by seawater all of the time 1130 – Estuaries 1160 - Large shallow inlets and bays 1170 - Reefs 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) 1140 - Mudflats and sandflats not covered by seawater at low tide (not a primary reason for selection)	The desired condition (though subject to natural change) of the attributes of large shallow inlets and bays is as follows: • No decrease in extent. • Average light attenuation should not deviate significantly (from established baseline). • Average temperature / salinity should not deviate significantly. *Intertidal rock and shore boulder communities* • No decrease in littoral extent of range of rocky shore communities from an established baseline value. • Presence & abundance of composite species of low-shore boulder and rock pool communities should not deviate significantly. • Average % cover of *Sargassum* should not increase. *Kelp forest communities* • Presence & abundance of algal species composition should not deviate significantly. • Average density / ratio of	Large shallow inlets and bays: • Water clarity is important for maintaining extent and diversity of algal and plant dominated communities. • Changes in temperature and salinity influence the presence and distribution of species. *Intertidal rock and shore boulder communities* • Changes in the extent and distribution of characteristic communities may indicate long term changes in the physical condition of the site. • Changes in the composition of characteristic species may indicate, for example, cyclic change and possibly changes in hydrography, salinity and siltation. • Relative abundance of composite species of rock pools is an indication of quality. It is believed that an increase in *Sargassum* would be detrimental to favourable condition. *Kelp forest communities* • Changes in floral composition may serve as long-term indicators of change in water clarity,	These interest features depend on active natural processes to occur freely with no human intervention. It may be necessary to graze saltmarsh to maintain diversity. Deterioration/disturbance should not result from the following (as applicable to the SMP): • Removal of habitats. • Increased abrasion and/or siltation. • Increased synthetic and/or non-synthetic toxic contamination. • Nutrient/organic enrichment and/or increases in turbidity.	- A 'hold the line' policy is applied mainly to areas of human habitation where defences already exist. This is likely to result in the progressive loss or modification of intertidal habitat due to coastal squeeze and there is potential for scouring of sandbanks slightly covered by seawater all of the time. Policy Unit 6c23 proposes 'hold the line' with new defences to reduce the risk of flooding to the developed areas of Noss Mayo and Newton Ferrers. The estuarine habitat associated with this policy unit largely comprises subtidal sandbank and mixed muddy sediment communities with intertidal mud communities distributed towards Noss Mayo and Newton Ferrers. New/improved defences may result in direct loss of habitat within the footprint of the scheme and/or adverse indirect effects elsewhere as a result of human intervention. However, within this policy unit (6c23), the natural topography of the estuary, with its steep ria-like geomorphology, is considered likely to be a natural constraint to landward migration of intertidal habitat. -Where a 'no active intervention' or 'managed realignment' policy	**No – intertidal habitats** **Yes – sandbanks slightly covered by seawater all of the time** It is anticipated that new defences at scheme level can be designed to reduce their reflectivity to minimise scouring.	**Yes** It is considered that the HTL policies identified in this SMP, in combination, have potential to adversely affect the integrity of this site as a result of intertidal habitat loss due to coastal squeeze. Where intertidal habitat may be squeezed against hard defences, a study to quantify the potential habitat losses and gains will be carried out and this action is included in the SMP Action Plan.

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		Laminaria hyperborea: L. ochroleuca should not deviate significantly. • Average % cover & density of *Distomus variolosus* should not deviate significantly. *Subtidal mixed cobble and gravel communities* • Species abundance / composition should not deviate significantly. *Subtidal mud communities* • Presence / abundance of algal species should not deviate. The desired condition (though subject to natural change) of the attributes of estuaries: • No decrease in extent • Intra-and inter-estuarine Tidal Prism/Cross-Section ratio should not deviate significantly. • Horizontal boundary of saltmarsh/mudflat interface should not deviate significantly from long-term trend. • No significant deviation from phytoplankton concentration in summer. • Extent & distribution of characteristic biotopes should not deviate significantly. • No change in the extent of reedbed plant communities. *Saltmarsh communities* • Range and distribution of characteristic salt marsh communities. • No alteration of creek patterns. • Frequency & abundance of characteristic saltmarsh	temperature or wave exposure. Red algae acts as an indicator of the reductions in entire algal populations. The ratio L.hypeborea: L.ochroleuca may also indicate change. D.variolosus is sensitive to deviations in salinity and siltation. *Subtidal mixed cobble and gravel communities* • The presence of characteristic algal species is indicative of the unusual combination of light attenuation, tidal regime and lack of siltation conditions. *Subtidal mud communities* • The presence and relative abundance of characterising species gives an indication of quality and change in composition may indicate cyclic change/trend in sediment communities. Estuaries: • The relationship between Tidal Prism/Cross-section provides a measure of hydrodynamics. Substantial changes may indicate human influences. • Excessive growth of phytoplankton contributes to reduced water clarity. • Loss of intertidal and subtidal mud communities is likely to be detrimental to the structure of this feature. • Changes in the extent and distribution of characteristic biotopes may indicate long-term change in physical conditions. *Saltmarsh communities* • Creeks absorb tidal energy and assist with the delivery of sediment to saltmarshes.		applies, this should enable natural processes, including the roll back of habitats where sea level rise results in the loss of intertidal areas. However, this may not be the case where habitats are constrained by natural features, such as hard cliffs, or where other man-made features, such as urban areas are present. In these situations there may be a net loss of intertidal habitats, but it is not considered that this would be the result of the SMP policy.		

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		species should not deviate significantly. *Subtidal rocky reef communities* • Average distribution of characteristic limestone biotopes (SubSoAs and AlcByH.Hia) should not deviate significantly. • Presence & abundance of composite species from characteristic biotopes should not deviate significantly. The desired condition (though subject to natural change) of the attributes of sandbanks: • No decrease in extent. • Average particle size analysis (sediment characteristics) should not deviate significantly. • Depth distribution of sandbanks should not deviate significantly. • No decrease in extent eelgrass bed. • Water clarity – average light attenuation should not change significantly. • Average density of characteristic species – *Zostera marina* – should not change significantly. • Presence & abundance of epiphytic species. • No increase in extent of green algal mats. • Presence and abundance of characteristic biotope species.	They allow pioneer vegetation to be established along their higher banks into the saltmarsh system. • Greater range of community types is desirable. Species composition is an indicator of favourable condition. • Loss of reedbed would impact on other species. *Subtidal rocky reef communities* • These biotopes are key structural components of subtidal limestone reefs and are of particular nature conservation importance due to the unusual physical conditions. These biotopes have species rich communities, which contribute to the structure of the subtidal rocky reef communities. • The presence and abundance of characteristic species gives an indication of the quality of the biotope and changes in composition may indicate cyclic / trend changes in communities. Sandbanks: • Particle size varies across this feature and can indicate spatial distribution of sediment types, thus reflecting stability and underlying processes. • Depth and distribution reflects energy conditions and stability of the sediment, influencing communities. • Extent and distribution of seagrass beds provides a long-term integrated measure of environmental conditions. Water clarity is important in maintaining seagrass beds. The				

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			occurrence and frequency of epiphytes is indicative of quality and change in composition may be indicative of cyclic change/trend. • Increase in filamentous green algae may indicate eutrophication. • Presence/relative abundance of characteristic biotope species may indicate cyclic changes/trends.				
• Habitat loss • Changes in physical regime • Physical disturbance • Disturbance • Changes in sediment supply • Shorter / longer duration of inundation	1441 - Shore dock *Rumex rupestris*	The presence and abundance of shore dock will determine favourable condition.	This site is one of the chief rocky-shore strongholds on the UK mainland, comprising 15 colonies and 42 plants. At present the SSSI unit identified as supporting shore dock is in favourable condition.	The following factors are important in maintaining the status of the species: • Allowing natural processes, such as slumping and erosion, to occur freely, and allowing the species to move location to suitable habitat. • Maintain coastal flushes and seepages. • Avoid loss of individuals / populations through human intervention (such as construction of defences, recreational pressure, etc.).	- A 'hold the line' policy is applied mainly to areas of human habitation where defences already exist. This is likely to result in the progressive loss or modification of suitable intertidal habitat due to coastal squeeze and will continue to prevent natural coastal processes from occurring freely. Policy Unit 6c23 proposes 'hold the line' with defences to reduce the risk of flooding to the developed areas of Noss Mayo and Newton Ferrers. In the short term, new/improved defences may result in direct loss of plants within the footprint of the scheme, depending upon the distribution of shore dock within this policy unit. With sensitive design informed by detailed species-specific surveys to confirm distribution of shore dock, this can be mitigated. In the long-term, the natural topography of the estuary, with its steep ria-like geomorphology, is considered likely to be a natural constraint to natural processes such as landward migration in response to sea level rise.	**Yes**	**No**

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
					-Where a 'no active intervention' policy applies, this should enable natural processes, including slumping and erosion. However, this may not be the case where suitability of habitat is constrained by natural features, such as hard cliffs. In this case, there may be a net loss of suitable habitat, but it is not considered that this would be the result of the SMP policy. ('Managed realignment' policy is not applicable to this site.)		
Tamar Estuaries Complex SPA Applicable policies: 6c31 (Tamar Estuary – Devil's Point to Tamerton Lake): 'hold the line' [all epochs]. This area was not included in SMP1. 6c32 (Tamar Estuary – Tamerton lake to Gunnislake (upper Tamar Estuary East)): due to insufficient information to determine precise policies, the SMP suggests a more detailed study but broadly the policy should be 'no active intervention' with either 'hold the line' or 'managed realignment' in areas where defences are currently present. This area was not included in SMP1. 6c33 (Tamar Estuary – Gunnislake to Saltash North (upper Tamar Estuary West)): due to insufficient information to determine precise policies, the SMP suggests a more detailed study but broadly the policy should be 'no active intervention' with either 'hold the line' or 'managed realignment' in areas where defences are currently present. This area was not included in SMP1. 6c34 (Tamar Estuary – Saltash): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. 6c35 (Tamar Estuary – River Lynher): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. 6c36 (Tamar Estuary – Torpoint North (Jupiter Point) to Torpoint South (Landing Stage)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. 6c37 (Tamar Estuary – St John's Lake (Torpoint South (Landing Stage) to Millbrook (Mill Farm))): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. 6c40 (Tamar Estuary – Palmer Point to Mount Edgcumbe (Cremyll)): 'hold the line' of defences where they occur, but 'no active intervention' in currently undefended areas [all epochs]. This area was not included in SMP1. Undefended sections of the Tamar Estuary will remain undefended. Condition assessment: Tamar – Tavy Estuary SSSI – 93% favourable; 7% unfavourable recovering Lynher Estuary SSSI – 94% favourable; 6% unfavourable St. John's Lake SSSI - 46% favourable; 54% unfavourable recovering							
• Habitat loss • Changes in physical regime • Physical damage • Habitat and community simplification • Disturbance • Changes in sediment supply • Watercourse modification • Shorter / longer duration of	<u>Under Article 4.1 of the Directive (79/409/EEC):</u> *On passage:* • Little Egret *Egretta garzetta*, 72 individuals representing at least 9.0% of the population in Great Britain (Count as at 1993) Over winter: • Avocet	Wintering and passage bird populations are dependent on an adequate supply of food and undisturbed areas where they can feed and roost during the tidal cycle. The following are key targets in maintaining favourable condition: • No decrease in extent of intertidal sediment communities or saltmarsh. • Presence and abundance of prey species should not change significantly. • No significant reduction in the numbers or	Intertidal mudflat communities are important feeding areas, supporting suitable prey species. Saltmarsh communities are important roosting areas. Significant disturbance caused by human activities can result in reduced intake and / or increased energy expenditure and can be damaging to populations.	Deterioration/disturbance should not result from the following (as applicable to the SMP): • Removal or loss of estuarine habitats. • Noise and/or visual disturbance. • Increased synthetic and/or non-synthetic toxic contamination. • Nutrient/organic enrichment.	- Where a 'no active intervention' policy applies, this should enable natural processes, including the roll back of habitats where sea level rise results in the loss of intertidal areas elsewhere. However, this may not be the case where habitats are constrained by natural features, such as hard cliffs. In this case, there may be a net loss of intertidal habitats, but it is not considered that this would be the result of SMP policy. - Where a 'hold the line' policy applies this is likely to result in the progressive loss of intertidal habitat due to coastal squeeze. This will	**Partly** - Disturbance during maintenance or construction can be avoided by timing works outside of key wintering / passage times for birds. - The Environment Agency will deliver habitat replacement through the SW Regional Habitat Creation Programme, and will aim to keep pace with habitat loss on a 1 to 1 basis in the long term. This programme will seek to create intertidal habitat to compensate for habitat lost to coastal squeeze. This is accounted for when schemes are brought forward for consent to	**Yes** It is considered that the HTL policies identified in this SMP, in combination, have potential to adversely affect the integrity of this site as a result of intertidal habitat loss due to coastal squeeze in the Tamar Estuary. Where intertidal

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
inundation	*Recurvirostra avosetta*, 201 individuals representing at least 15.8% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6) • Little Egret *Egretta garzetta*, 42 individuals representing at least 8.4% of the wintering population in Great Britain (Count as at 1993)	displacement of birds.			result in the modification or loss of habitat used by feeding and roosting birds. There may also be disturbance to birds during maintenance or construction of defence structures. Where the height of defences has to be increased to maintain the standard of defence, this may affect sight lines for feeding or roosting birds, and therefore reduce suitability for some species. This policy is restricted mainly to areas of human habitation where defences already exist. - Where a 'managed realignment' policy applies (e.g. in policy units 6c32 and 33), this will allow new intertidal habitat to be created, providing new areas where birds can feed or roost. This can mitigate losses that would otherwise occur due to coastal squeeze in these units and has the potential to enhance the value of the designated sites. There may be temporary adverse effects during the managed realignment process, for example through disturbance where engineered structures are removed or modified, or during the likely 'settling in' period after realignment, where new habitats establish and, potentially, some localised areas of habitat are lost where water flow patterns change.	implement the SMP policies. - Habitat loss due to coastal squeeze can be mitigated by the creation of new estuarine/intertidal habitat through managed realignment in some areas, although in some cases it may not be possible to achieve an exact like-for-like replacement. Progressive implementation of managed realignment policies would reduce the potential effects of sudden changes to water flow and geomorphology.	habitat may be squeezed against hard defences, a study to quantify the potential habitat losses and gains will be carried out and this action is included in the SMP Action Plan.
Poole Bay to Lyme Bay Reefs cSAC Applicable policies: 5g10 (Ringstead Bay: defended length) 'hold the line' in the short term, 'no active intervention' in the medium to long term 5g22 (Osprey Quay: Portland Harbour, to King's Pier) 'hold the line' [all epochs] 6a09 (Freshwater Beach): 'managed realignment' involving beach management. SMP1 policy was 'do nothing' (no active intervention). 6a11 (West Bay (East Beach to eastern pier)): 'hold the line' in the short and medium term; 'managed realignment' in the long term. The SMP1 policy was 'hold the line'. 6a12 (West Bay (West Beach from eastern pier) to West Cliff (East) (includes West Bay Harbour)): 'hold the line' (unchanged from SMP1). 6a15 (Seatown): 'hold the line' in the short term and 'no active intervention' in the medium and long term. The SMP1 policy was 'selectively hold the line'. 6a18 (Charmouth): 'hold the line' in the short term and 'managed realignment' in the medium and long term. The SMP1 policy was 'selectively hold the line'. 6a20 (East Cliff (Lyme Regis) to Broad Ledge (Lyme Regis): 'hold the line' [all epochs] (unchanged from SMP1). 6a21 (Broad Ledge (Lyme Regis) to The Cobb (Lyme Regis): 'hold the line' [all epochs] (unchanged from SMP1). 6a22 (Monmouth Beach) 'hold the line' in the short term, 'managed realignment' in the medium term and 'hold the line' of the realigned defence in the long term. The SMP1 policy was 'do nothing' (no active intervention). 6a25 (Axe Estuary (Mouth Breakwater to Axmouth North): 'hold the line' [all epochs]. This area was not included in SMP1. 6a26 (Axe Estuary (Axmouth North to Seaton North): 'managed realignment' [all epochs]. This area was not included in SMP1.						

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
6a27 (Axe Estuary (Seaton East)): 'hold the line' [all epochs]. This area was not included in SMP1. 6a29 (Axe Estuary (Spit) to Seaton (West)): 'hold the line' [all epochs]. The SMP1 policy was 'selectively hold the line'. 6a30 (Seaton (West) to Seaton Hole): 'Managed realignment' in the short term. 'no active intervention' in the medium to long term. The SMP1 policy was 'selectively hold the line'. 6a32 (Beer): 'hold the line' [all epochs]. The SMP1 policy was 'selectively hold the line'. 6b41 (Petit Tor Point to Walls Hill): 'hold the line' [all epochs]. 6b46 (Meadfoot Beach): 'hold the line' [all epochs]. 6b48 (Beacon Cove to Torre Abbey Sands (Torquay Harbour)) to 6b49 (Torre Abbey Sands): 'hold the line' [all epochs]. 6b51 (Livermead Sands): 'hold the line' [all epochs]. 6b53 (Hollicombe Beach): 'hold the line' [all epochs]. 6b55 (Hollicombe Head to Roundham Head): 'hold the line' [all epochs]. 6b56 (Goodrington Sands): 'hold the line' in the short term, 'managed realignment' in the medium to long term. 6b58 (Broadsands): 'hold the line' in the short term, 'managed realignment' in the medium to long term. 6b60 (Churston Cove (East) to Shoalstone Point): 'hold the line' [all epochs]. 6b64 (Dart Estuary – Kingswear (South) to Waterhead Creek) to 6b70 (Dart Estuary – Halftide Rock to Blackstone Point): 'hold the line' [all epochs] only where existing defences are present. Condition assessment: n/a cSAC and SSSI boundaries do not coincide.							
• Habitat loss • Changes in physical regime • Physical damage • Shorter / longer duration of inundation	Submerged or partially submerged sea caves	Favourable condition is likely to be based on extent.	The presence, distribution and abundance of this interest feature are key to the status of the site designation.		These interest features are present where a hold the line policy is proposed in policy units 6b41, 6b55, 6b58 and 6b60. A 'hold the line' policy may result in the progressive loss or modification of partially submerged sea caves due to sea level rise and coastal squeeze. There may also be physical loss of habitat within the footprint of flood defence structures. The caves at Petit Tor (Policy Unit 6b41) are at the very northern end of this policy unit adjacent to the rocky headland where defence work is likely to be minimal (future defence is likely to be in the bay area of this policy unit). The caves are already submerged and are exposed to natural coastal processes, and therefore an adverse effect is not anticipated. A sea wall has already been built across caves at Hollicombe Head (Policy Unit 6b55) to slow down coastal erosion. Raising, reinforcement or reconstruction of this wall may adversely affect the feature. There is no survey information available for North Broadsands	**Yes** It is anticipated that there will not be a need to extend existing sea defences on sea caves and therefore there will be no adverse effects in PU 6b55, 6b58 and 6b60 where holding the line is proposed.	**No**

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
					Caves (Policy Unit 6b58) or Batter Gardens Sea Cave, Harbour Holes, Brixham Harbour Caves and Breakwater Beach Caves (6b60) and potential impacts associated with a 'hold the line' policy or a 'managed realignment' policy are uncertain.		
• Habitat loss • Changes in sediment supply	1170 - Reefs	The favourable condition targets are as follows (allowing natural succession/known cyclical change): • No reduction in extent of reef. • Maintain the full variety of biotopes identified for the site. • Maintain the natural distribution of biotopes. • No change in extent in the biotope(s). • No decline in biotope quality due to change in species composition or loss of notable species. • Maintain age/size structure of individual species populations.	Each attribute contributes towards the status of the site as follows: • Loss of extent may occur due to excessive smothering by sediment as part of natural coastal processes or anthropogenic activity. • Where a change in a biotope occurs outside of expected variation, or loss of conservation interest is identified, then condition considered unfavourable. • Changes in overall nature of reef communities, including mobile species may indicate deterioration in the condition of the biodiversity of the reef community.	The following operations may cause deterioration or disturbance: • Physical loss, through removal or smothering. • Physical damage due to siltation and abrasion. • Toxic contamination through introduction of synthetic and non-synthetic compounds. • Non-toxic contamination through changes in nutrient and organic loading. • Changes in turbidity. • Introduction of non-native species and translocation. • Selective abstraction of species.	- This interest feature coincides with a 'hold the line' policy within policy units 5g10, 5g22, 6a18, 6a20, 6a21, 6a22, 6a25 & 6a27. Of these, a long-term 'hold the line' policy applies to only two policy units (i.e. 6a25 & 6a27), elsewhere this policy applies in the short term only. Where a 'hold the line' policy applies this has the potential to affect reef habitats through the constraining effects on natural sediment supply. However, this policy applies along a small proportion of the coastline in the long term, and there is no evidence to suggest that this policy is affecting this feature at present. Therefore, no adverse effects are foreseen. Where a 'managed realignment' policy applies, this should promote natural processes and remove constraints that have previously existed. There is the potential that this could affect geomorphological processes, resulting in a change to sediment supply. However, such effects are likely to be localised and unlikely to be significant, particularly in the medium to long term.	**Yes** Progressive implementation of managed realignment policies would reduce the potential effects of sudden changes to water flow and geomorphology.	**No**

Prawle Point to Plymouth Sound and Eddystone cSAC

Applicable policies: 6c03 (Salcombe Harbour (Limebury Point to Kingsbridge Estuary – Scoble Point)) to 6c07 (Salcombe (Snapes Point to Splat Cove Point): 'hold the line' [all epochs] only where there are existing defences.
6c14 (Avon Estuary (Upstream section – Stadbury Farm to Stakes Hill)): 'managed realignment' [all epochs].
6c23 (Yealm Estuary (East Bank – Passage House to Newton Ferrers North)): 'hold the line' [all epochs].
6c28 (Plym Estuary – Mount Batten Breakwater to Marsh Mills) to 6c31 (Tamar Estuary – Devil's Point to Tamerton Lake): 'hold the line' [all epochs].
6c32 (Tamar Estuary – Tamerton Lake to Gunnislake (Upper Tamar Estuary East)) to 6c33 (Tamar Estuary – Gunnislake to Saltash (Upper Tamar Estuary West)): 'combination of hold the line, managed realignment and no active intervention' [all epochs].
6c34 (Tamar Estuary – Saltash) to 6c40 (Tamar Estuary – Palmer Point to Mount Edgcumbe (Cremyll)): 'hold the line' [all epochs] only where existing defences are present.
6c42 (Fort Picklecombe): 'hold the line' [all epochs].
6c44 (Kingsand /Cawsand): 'hold the line' [all epochs].

Condition assessment: n/a cSAC and SSSI boundaries do not coincide.

Hazard	Interest feature	Favourable condition target for relevant attribute[1] based on conservation objectives *(taken from underlying SSSI VAM plans or Regulation 33 advice)*	Contribution of attribute[1] to ecological structure and function of site	Contribution of management[2] or other unauthorised sources to attribute and /or feature condition	Adverse Effect of proposal alone and in-combination on attribute[1] and/or feature	Can adverse affects be avoided?	Adverse affect on integrity; long term, short term. Yes, No or uncertain?
• Habitat loss • Changes in sediment supply	1170 - Reefs	The favourable condition targets are as follows (allowing natural succession/known cyclical change): • No reduction in extent of reef. • Maintain the full variety of biotopes identified for the site. • Maintain the natural distribution of biotopes. • No change in extent in the biotope(s). • No decline in biotope quality due to change in species composition or loss of notable species. • Maintain age/size structure of individual species populations.	Each attribute contributes towards the status of the site as follows: • Loss of extent may occur due to excessive smothering by sediment as part of natural coastal processes or anthropogenic activity. • Where a change in a biotope occurs outside of expected variation, or loss of conservation interest is identified, then the condition considered unfavourable. • Changes in overall nature of reef communities, including mobile species may indicate deterioration in the condition of the biodiversity of the reef community.	The following operations may cause deterioration or disturbance: • Physical loss, through removal or smothering. • Physical damage due to siltation and abrasion. • Toxic contamination through introduction of synthetic and non-synthetic compounds. • Non-toxic contamination through changes in nutrient and organic loading. • Changes in turbidity. • Introduction of non-native species and translocation. • Selective abstraction of species.	Policy units 6c14 and 6c32, to which a 'managed realignment' policy applies in all epochs, will help to promote natural processes, and remove constraints that previously existed. There is the potential that this could affect geomorphological processes, resulting in a change to sediment supply. However, such effects are likely to be localised and sediment turbidity, dispersion and deposition is unlikely to change significantly from background levels; thus unlikely to adversely affect the reefs through smothering or exposing new substrate where reefs could develop.	**Yes** Progressive implementation of managed realignment policies would reduce the potential effects of sudden changes to water flow and geomorphology.	**No**

Notes:
1 ATTRIBUTE = Quantifiable aspects of interest features (subject to natural variation in some cases) that can be used to help define favourable condition for that feature. See Site Conservation Objectives
2 MANAGEMENT = in this context management refers to management of the European site
3 If uncertain consider time-limited consent, or other legally enforceable modifications

Stage 3 Environment Agency conclusion

Can it be ascertained that the plan will not adversely affect the integrity of the European site(s)?

No

This assessment had been carried out considering the likely effects of the implementation of policies identified in the draft South Devon and Dorset Shoreline Management Plan (SMP) alone and in-combination, on site integrity of a number of European sites. The policies, are, by their nature, high level and lack specific detail. However, in the absence of mitigation there is the potential that interest features, and hence the integrity of some European sites, may be adversely affected.

The following table summarises the European sites that may be adversely affected by SMP policy implementation: -

European Site	Potential for Adverse Effect
Potentially Adverse Effects	
Exe Estuary SPA and Ramsar site	Hold the line has the potential to result in the loss of intertidal habitat due to coastal squeeze
Plymouth Sound and Estuaries SAC	Potential for loss of intertidal habitat due to coastal squeeze and in footprint of works, in Yealm, Plym and Tamar Estuary.
Tamar Estuaries Complex SPA	Potential for loss of intertidal habitat due to coastal squeeze in Tamar Estuary
Dawlish Warren SAC (short-term)	Potential loss of dune habitats at east distal end, central gabion defences and west hard defences policy units.
Uncertain Effects	
Chesil Beach and the Fleet SAC	Potential for loss of intertidal habitat and perennial vegetation of stony banks
Sidmouth to West Bay SAC	Potential loss of vegetated cliff habitats in short sections
Isle of Portland to Studland Cliffs SAC	Potential loss of vegetated cliff habitats in short sections

In most cases, predicted adverse effects will be as a result of continued coastal squeeze against existing defences, resulting in the progressive loss of habitats and their associated species as a result of sea level rise against coastal defences. In some areas, these effects may be reduced through the implementation of mitigation measures. However, it cannot be ascertained at this stage that adverse effects can be avoided and this will have to be examined in detail at strategy and/or scheme level.

There also remains uncertainty about the potential effects of holding the line in some policy units on vegetated cliff habitats in short sections of the frontage and this will be largely dependent on the extent that a 'hold the line' policy reduces or prevents erosion of the cliff face. Again, it cannot be ascertained at this stage that adverse effects can be avoided and this will have to be examined at strategy and/or scheme level.

There is also the potential that existing up-drift defences may increase erosion of the cliff face in adjacent down-drift sections beyond natural rates, which would conflict with conservation objectives and potentially cause an adverse effect. Again, it cannot be ascertained at this stage that adverse effects can be avoided and this will have to be examined at strategy and/or scheme level.

Where potentially adverse effects have been identified, a study will be undertaken as soon as possible to quantify habitat losses and gains and this action will be carried forward by the SMP Action Plan. Compensatory intertidal and dune habitat will be sought through the Regional Habitat Creation Programme (RHCP) to retain the ecological functionality of the European sites (where possible).

Compensation for loss of cliff exposure will be provided by restoration (i.e. removal of defences) within or close to the designated sites, wherever possible.

This assessment at the plan level does not remove the need for an assessment at the project level.

This SMP has been signed off as setting the strategic direction for managing coastal flood risk, on the basis that it cannot be put into effect until more detailed appraisal and assessment has taken place on plans or projects arising out of this SMP to show it and they have met the requirements of the Habitats Regulations.

If a project is not consistent with the plan then a new Habitats Regulations Assessment may well be required. Furthermore, a project may be entirely consistent with this plan but still require further Appropriate Assessment as detail emerging at the scheme-design stage may identify additional impacts that have not been assessed here. Any project arising out of the plan will ensure any adverse effects on integrity of European site are avoided.

Name of EA officer undertaking appropriate assessment:
Signed: **Date:**

Endorsed by (if appropriate)

NE COMMENTS ON APPROPRIATE ASSESSMENT:
IS THERE AGREEMENT WITH THE CONCLUSION? YES/NO
(Please provide summary and explanation for answer given)

Signed: (NE local team manager) **Date:**

PART B: Final Appropriate Assessment Record

- South Devon and Dorset Coast Shoreline Management Plan
- AUGUST 2010

This is a record of the appropriate assessment required by Regulation 48 of the Habitats Regulations 1994, undertaken by the Environment Agency in respect of the above plan, in accordance with the Habitats Directive (Council Directive 92/43/EEC). Having considered that the plan would have potential to have a significant effect on Isle of Portland to Studland Cliffs SAC, Chesil Beach and the Fleet SAC, Sidmouth to West Bay SAC, Plymouth Sound and Estuaries SAC, Exe Estuary SPA and Ramsar Site, Tamar Estuaries Complex SPA, Poole Bay to Lyme Bay Reefs pSAC and Prawle Point to Plymouth Sound and Eddystone pSAC and that the plan was not directly connected with or necessary to the management of the sites for nature conservation, an appropriate assessment has been undertaken of the implications of the proposal in view of the site's conservation objectives.

Natural England was consulted under Regulation 48(3) on [date] and their representations, to which the Agency has had regard, are attached at Annex 1. The conclusions of this appropriate assessment ***are*** */* ***are not*** *in accordance with the advice and recommendations of Natural England".*

The assessment has concluded that, providing avoidance measures are put in place as set out in Table 3:

- The plan as proposed **can** be shown to have **no adverse effect** on the integrity of the following European sites: Prawle Point to Plymouth Sound and Eddystone cSAC, Poole Bay to Lyme Bay Reefs cSAC and Dawlish Warren SAC in the medium and long-term.
- The plan as proposed is shown to have an **uncertain effect** on the integrity of Isle of Portland to Studland Cliffs SAC, Chesil Beach and the Fleet SAC and Sidmouth to West Bay SAC.
- The plan as proposed is shown to have **a potentially adverse effect** on the integrity of Exe Estuary SPA and Ramsar site, Plymouth Sound and Estuaries SAC, Tamar Estuaries Complex SPA and Dawlish Warren SAC in the short-term.

Signed (relevant Area Management Team member) and date.

Our Reference: Durleston Head to Rame Head SMP
Your Reference:
Date: 1st November 2010

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Dear Graeme

DURLESTON HEAD TO RAME HEAD SMP

Habitat Regulations Assessment and case for Imperative Reasons of Overriding Public Interest

Natural England has worked closely with the client steering group and the consultants in undertaking the Habitat Regulations Assessment of this SMP. We are therefore in agreement with its conclusions that the policies the plan proposes in the short, medium and long term will have an adverse effect on the integrity (AEI) of the following European sites:

- Exe Estuary Special Protection Area (SPA) and Ramsar site.
- Plymouth Sound and Estuaries Special Area of Conservation (SAC).
- Tamar Estuaries Complex Special Protection Area (SPA)
- Dawlish Warren Special Area of Conservation (SAC)

We also agree with the assessment that adverse effects on the integrity (AEI) of the following sites are likely but uncertain as yet:

- Isle of Portland to Studland Cliffs SAC
- Chesil Beach and the Fleet SAC
- Sidmouth to West Bay SAC

As a consequence of the above conclusions of AEI Natural England has considered the case for Imperative Reasons of Overriding Public Interest (IROPI) which is to be put to the secretary of state and agrees with the conclusions of that assessment. The alternatives to the policies in the 55 policy units which will (or may) give rise to AEI of the European sites listed above have been considered and found to be unacceptable for economic or social reasons.

Natural England therefore endorses the Habitat Regulation Assessment and the case for Imperative Reasons of Overriding Public Interest.

Strategic Environmental Assessment environmental report and non-technical summary

One of our principle concerns regarding environmental impacts outside the scope of the Habitat Regulations Assessment was to ensure that the SMP would not affect the Dorset and East Devon Jurassic Coast World Heritage Site. The site is of 'outstanding universal value' but does not carry any statutory protection other than that afforded to it by the SSSI and AONB designations which underpin it. Through the SEA process opportunities to reduce or avoid impacts on the WHS have been incorporated into the management policies wherever possible or investigations are identified in the

action plan to address outstanding areas of concern. Natural England is satisfied that as a result of the SEA process the SMP will have minimal impact on the WHS.

Natural England agrees with the assessment in the Strategic Environmental Assessment (SEA) report that there will be only neutral or minor beneficial /negative impacts on the landscape of the 4 AONBs (Tamar, South Devon, East Devon and Dorset) as a result of the policies in this SMP.

Natural England therefore endorses the SEA environmental report and non-technical summary.

Yours sincerely

M. Carter.

MAT CARTER
Area Manager – Devon, Cornwall & Isles of Scilly