

# South Devon and Dorset Coastal Authorities Group

## Durlston Head to Rame Head SMP2

### Technically Feasible Options to Test - DRAFT

NAI	No Active Intervention
HTL	Hold The Line
MR	Managed Realignment
ATL	Advance The Line
Blue values = CFMP Policy	

Date Updated: 13th November 2008

**Scenario A** Initial Starting Point for appraisal based on what could be most appropriate policy scenario best on technical, economic, environmental and social grounds.

**Scenario B** Modification of Scenario A, assuming primary driver is a return to more natural situation.

**Scenario C** Modification of Scenario A, assuming primary driver is to protect most assets, so greater armouring of coast.

Related Process Unit	Possible Policy Unit		SMP1 Policy	Scenario A			Scenario B				Scenario C						
				0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments		
DURLSTON HEAD TO WHITE NOTHE	1.	1	Durlston Head to St Alban's Head	Do Nothing	NAI	NAI	NAI		NAI	NAI	NAI		NAI	NAI	NAI		
	1.	2	St Alban's Head to Kimmeridge Bay	Do Nothing	NAI	NAI	NAI		NAI	NAI	NAI		NAI	NAI	NAI		
	1.	3	Kimmeridge Bay (defended length)	Do Nothing/Retreat	NAI	NAI	NAI	Largely undefended section with only small localised defences at Kimmeridge Bay and Lulworth Cove.	MR	MR	MR		HTL	HTL	HTL		
	1.	4	Kimmeridge Bay (undefended) to Worbarrow Tout	Do Nothing	NAI	NAI	NAI	It is unlikely that these structures would attract public funds, but if alternative funding were to be found, their continued presence is unlikely to have any wide-spread process implications. Therefore, assume NAI for these areas under the 'best guess' scenario.	NAI	NAI	NAI	Assume existing structures will be moved back as and when necessary to accommodate sea level rise.	NAI	NAI	NAI	Further to Scenario A, test implications of holding structures at Kimmeridge Bay and Lulworth Cove to demonstrate that doing so will have no widespread impact.  NB: already tested as part of WPM scenario.	
	1.	5	Worbarrow Tout to Lulworth Cove (East)	Do Nothing	NAI	NAI	NAI		NAI	NAI	NAI		NAI	NAI	NAI		
	1.	6	Lulworth Cove (undefended)	Do Nothing	NAI	NAI	NAI		NAI	NAI	NAI		NAI	NAI	NAI		NAI
	1.	7	Lulworth Cove (defended length)	Retreat	NAI	NAI	NAI		MR	MR	MR			HTL	HTL		HTL
	1.	8	Lulworth Cove (West) to White Nothe	Do Nothing	NAI	NAI	NAI		NAI	NAI	NAI		NAI	NAI	NAI		

Related Process Unit	Possible Policy Unit		SMP1 Policy	Scenario A			Scenario B				Scenario C					
				0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	
WHITE NOTHE TO PORTLAND BILL	2.	1	White Nothe to Ringstead Bay (defended length east)	Do Nothing	NAI	NAI	Largely undefended section with only small localised defences in the middle of Ringstead Bay.	NAI	NAI	NAI		NAI	NAI	NAI		
	2.	2	Ringstead Bay (defended length)	Hold	HTL	HTL	HTL	It is unlikely that the continued presence of these defences will have any wide-spread impacts, though they are likely to be outflanked in the medium to long-term.	MR	NAI	NAI	Assumes that it is uneconomical to retain defences in the long term as they become outflanked, so realign defences in the short term to move assets away from risk area and allow natural functioning coast to develop.	HTL	MR	MR	Continue defence maintenance for life of mid-90s scheme, then plan and implement MR.
	2.	3	Ringstead Bay (defended length west) to Redcliff Point	Do Nothing Retreat (at Osmington)	NAI	NAI	NAI	This situation would need to be monitored and action taken as and when appropriate.	NAI	NAI	NAI		NAI	NAI	NAI	

Related Process Unit	Possible Policy Unit		SMP1 Policy	Scenario A			Scenario B				Scenario C						
				0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments		
WHITE NOTHE TO PORTLAND BILL	3.	1	Redcliff Point to Bowleaze Cove (Gabions)	Do Nothing	NAI	NAI	NAI		NAI	NAI	NAI		NAI	NAI	NAI		
	3.	2	Bowleaze Cove (Gabions) to Furzy Cliff	Retreat	HTL	HTL	HTL	Need to consider as a whole system. Impact of Portland Harbour breakwaters is key - though even if they do fail, it is likely that they will still have some effect on the whole area.	HTL	MR	MR	Defences at Preston Beach and Bowleaze Cove would become technically unsustainable in their present position due to climate change effects and outflanking by adjacent eroding cliffs. There is more space to adapt landwards at Preston Beach than at Bowleaze Cove.	HTL	HTL	HTL		
	3.	3	Furzy Cliff	Retreat	NAI	NAI	NAI		NAI	NAI	NAI			HTL	HTL		
	3.	4	Furzy Cliff to Preston Beach (Rock Groyne)	Hold	HTL	HTL	HTL		HTL	MR	HTL			HTL	HTL		HTL
	3.	5	Preston Beach (Rock Groyne) to Weymouth (Stone Pier) (includes Weymouth Harbour)	Hold	HTL	HTL	HTL	For Small Mouth to Osprey Quay, the key access route to Portland will need to be retained, though it is likely that whilst HTL is stipulated as policy, this may require limited work. This policy is dependent upon that for Chesil Beach.	HTL	HTL	HTL		HTL	HTL	HTL	Scenario influenced by EMF comments >>> desire to protect cliff top assets at Furzy Cliff and Portland Harbour NW shore.	
	3.	6	Weymouth (Stone Pier) to Portland Harbour (North Breakwater)	Hold	HTL	HTL	HTL	Portland Harbour to Small Mouth, it is likely that in the long-term it is not viable technically, environmentally or economically to provide defence, however, there is a need to provide space and time in which assets on top of the cliff can be moved away from the risk area, probably by introducing temporary stabilisation measures.	HTL	HTL	HTL		HTL	HTL	HTL		
	3.	7	Portland Harbour (North Breakwater) to Small Mouth	Retreat	MR	MR	MR		NAI	NAI	NAI		HTL	HTL	HTL		
	3.	8	Small Mouth to Osprey Quay (Portland Harbour)	Hold	HTL	HTL	HTL		HTL	HTL	HTL		HTL	HTL	HTL		
	3.	9	Osprey Quay (Portland Harbour) to Grove Point	Hold Retreat (towards Grove Point)	HTL	HTL	HTL		HTL	HTL	HTL		HTL	HTL	HTL	In Portland Harbour, assumes that the north-west shore is not protected in anyway.	
	3.	10	Grove Point to Portland Bill	Do Nothing Retreat (at Church Ope Cove)	NAI	NAI	NAI		NAI	NAI	NAI		NAI	NAI	NAI		



Related Process Unit	Possible Policy Unit			SMP1 Policy	Scenario A				Scenario B				Scenario C			
					0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments
EYPE TO BEER HEAD	6.	1	Axe Estuary (Haven Cliff to Seaton North)	N/A	MR	MR	MR	The Axe Estuary has had policies determined as part of the CFMP. It is proposed to adopt these into the SMP.  The spit is largely undefended, with defences only at the western end where it attaches to the land. These defences would be maintained, but the spit would be allowed to function naturally, rolling back into the estuary in response to sea level rise, but retaining overall form.  The defences along Seaton vary. The seawall protects lower lying land and rock revetment protects against cliff erosion. Retention of these defences would protect cliff top assets, but result in loss of beach.	MR	MR	MR	Under this scenario, it is proposed to allow the defences towards Seaton Hole to be removed to allow supply of material to the beach in front of Seaton in the long term.	MR	MR	MR	Test impact of holding the defences between Seaton (West) and Seaton Hole, along with the short length of defence at Beer.
	6.	2	Axe Estuary (Seaton East) Seaton West	N/A	HTL	HTL	HTL		HTL	HTL	HTL					
	6.	3	Axe Estuary (Spit)	Selectively Hold The Line	NAI	NAI	NAI		NAI	NAI	NAI					
	6.	4	Axe Estuary (Spit) to Seaton (West)	Selectively Hold The Line	HTL	HTL	HTL		HTL	HTL	HTL					
	6.	5	Seaton (West) to Seaton Hole	Selectively Hold The Line	MR	MR	MR		MR	NAI	NAI					
	6.	6	Seaton Hole to Beer Head	Selectively Hold The Line	NAI	NAI	NAI	NAI	NAI	NAI	HTL	HTL	HTL			

Related Process Unit	Possible Policy Unit			SMP1 Policy	Scenario A				Scenario B				Scenario C			
					0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments
BEER HEAD TO OTTERTON LEDGE	7.	1	Beer Head to Salcombe Hill	Do Nothing	NAI	NAI	NAI	This section is largely undefended and natural functioning.	NAI	NAI	NAI					
	7.	2	River Sid	Hold The Line	HTL	HTL	HTL		HTL	MR	MR					
	7.	3	Sidmouth	Hold The Line	HTL	HTL	HTL		HTL	HTL	HTL					
	7.	4	Chit Rocks to Big Picket Rock	Do Nothing	NAI	NAI	NAI	NAI	NAI	NAI						
	7.	5	Big Picket Rock to Otterton Ledge	Do Nothing	NAI	NAI	NAI	NAI	NAI	NAI	NAI		NAI			

Related Process Unit	Possible Policy Unit			SMP1 Policy	Scenario A				Scenario B				Scenario C			
					0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments
OTTERTON LEDGE TO STRAIGHT POINT	8.	1	Otter Estuary (Otterton Ledge to Budleigh Salterton East)	N/A	MR	MR	MR	CFMP policy for the Otter Estuary to be adopted for this SMP.								
	8.	2	Otter Estuary (Spit)	Do Nothing	NAI	NAI	NAI		NAI	NAI						
	8.	3	Budleigh Salterton (East) to Budleigh Salterton (West)	Selectively Hold The Line	HTL	HTL	HTL	The spit is largely undefended, with defences only at the western end where it attaches to the land. These defences would be maintained, but the spit would be allowed to function naturally, rolling back into the estuary in response to sea level rise, but retaining overall form.								
	8.	4	Budleigh Salterton (West) to Straight Point	Do Nothing	NAI	NAI	NAI		Defences in front of Budleigh Salterton (promenade underlain with gabions) would be retained, helped by continued sediment supply from cliff erosion to the west.							

Scenarios for Process Unit 9 are informed by the Exe Estuary Coastal Management Study

Related Process Unit	Possible Policy Unit		SMP1 Policy	Scenario A				Scenario B				Scenario C				
				0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	
STRAIGHT POINT TO HOLCOMBE	9.	1	Straight Point to Orcombe Rocks	Do Nothing	NAI	NAI	NAI						NAI	NAI	NAI	
	9.	2	Orcombe Rocks to Maer Rocks	Selectively Hold The Line	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	3	The Maer	Selectively Hold The Line	HTL	MR	MR						HTL	HTL	HTL	
	9.	4	Octagon to Exmouth slipway	Selectively Hold The Line	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	5	Exmouth Spit	Selectively Hold The Line	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	6	Exe Estuary - Exmouth (west)	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	7	Exe Estuary - Exmouth (west) to Lymptstone	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	8	Exe Estuary - Lymptstone	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	9	Exe Estuary - Nutwell Park	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	10	Exe Estuary - Lymptstone Commando	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	11	Exe Estuary - Exton	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	12	Exe Estuary - Exton to Lower Clyst	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	13	Exe Estuary - Clyst Bridge to Railway	N/A	MR	MR	MR	Scenarios A and C for the Exe Estuary (Straight Point to Langstone Rock) are from the Exe Estuary Coastal Management Study.					MR	MR	MR	
	9.	14	Exe Estuary - Topsham	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	15	Exe Estuary - M5 (east) to St James' Weir	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	16	Exe Estuary - Topsham Sludge beds	N/A	HTL	HTL	HTL	It is unlikely that, even if the railway were to be re-routed inland, that anything other than HTL would occur along the Dawlish frontage south-west of Langstone Rock.					HTL	HTL	HTL	
	9.	17	Exe Estuary - St James' Weir to M5 (west)	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	18	Exe Estuary - M5 (west) to Turf Lock	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	19	Exe Estuary - Turf Lock to Powderham	N/A	HTL	MR	MR						HTL	HTL	HTL	
	9.	20	Exe Estuary - Powderham (south)	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	21	Exe Estuary - Starcross	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	22	Exe Estuary - Cockwood	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	23	Exe Estuary - Cockwood to The Warren	N/A	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	24	Dawlish Warren ( East - distal end)	Selectively Hold The Line	HTL	MR	MR						HTL	HTL	HTL	
	9.	25	Dawlish Warren (Central - gabion defences)	Selectively Hold The Line	HTL	MR	MR						HTL	HTL	HTL	
	9.	26	Dawlish Warren (West - hard defences)	Selectively Hold The Line	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	27	Langstone Rock to Coryton Cove	Selectively Hold The Line	HTL	HTL	HTL						HTL	HTL	HTL	
	9.	28	Coryton Cove to Holcombe	Selectively Hold The Line	HTL	HTL	HTL						HTL	HTL	HTL	



Related Process Unit	Possible Policy Unit			SMP1 Policy	Scenario A				Scenario B				Scenario C						
					0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments			
BERRY HEAD TO START POINT	12.	1	Berry Head to Sharkham Point	Do Nothing	NAI	NAI	NAI	Within the Dart Estuary, CFMP policy is effectively HTL. However, there are areas where there are no defences and as such, these have been defined as NAI for the SMP. Defences will continue to be provided where they exist as CFMP policy of HTL in these areas is adopted by the SMP. This would be the same for very small lengths of private defences in the Dart Estuary - they would just not attract public funding.											
	12.	2	Sharkham Point to Kingswear (South)	Do Nothing	NAI	NAI	NAI												
	12.	3	Dart Estuary - Kingswear (South) to Waterhead Creek	N/A	HTL	HTL	HTL												
	12.	4	Dart Estuary - Waterhead Creek to Greenway Viaduct	N/A	HTL	HTL	HTL												
	12.	5	Dart Estuary - Greenway Viaduct to Totnes South (east bank)	N/A	HTL	HTL	HTL												
	12.	6	Dart Estuary - Totnes	N/A	HTL	HTL	HTL												
	12.	7	Dart Estuary - Totnes South (west bank) to Dartmouth (North)	N/A	HTL	HTL	HTL		On the open coast, there are no defences and it is a natural system. This would not change.										
	12.	8	Dart Estuary - Dartmouth (North) to Halfide Rock	N/A	HTL	HTL	HTL												
	12.	9	Dart Estuary - Halfide Rock to Blackstone Point	N/A	HTL	HTL	HTL												

Related Process Unit	Possible Policy Unit			SMP1 Policy	Scenario A				Scenario B				Scenario C				
					0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	
BERRY HEAD TO START POINT	13.	1	Blackstone Point to Stoke Fleming	Selectively Hold The Line	NAI	NAI	NAI	HTL at Blackpool Sands and Beesands will lead to loss of beach in the long term as a result of coastal squeeze. It is likely that pro-active realignment of the defences would allow more beach material to be retained to provide amenity and defence function in the long term.  This proactive approach to realignment is already preferred at Slapton Sands as a result of the recent coastal zone management study. This seeks to realign the road in stages until such time as it is unsustainable, after which time it will be accepted that the road will be closed.  Defences around Torcross would be retained.	NAI	NAI	NAI						
	13.	2	Stoke Fleming to Blackpool Sands	Selectively Hold The Line	NAI	NAI	NAI		NAI	NAI	NAI						
	13.	3	Blackpool Sands	Selectively Hold The Line	HTL	MR	HTL		MR	NAI	NAI						
	13.	4	Blackpool Sands to Strete	Selectively Hold The Line	NAI	NAI	NAI		NAI	NAI	NAI						
	13.	5	Strete to Torcross North (Slapton Sands)	Selectively Hold The Line	HTL	HTL	MR		MR	NAI	NAI						
	13.	6	Torcross North to Limpet Rocks	Selectively Hold The Line	HTL	HTL	MR		MR	NAI	NAI						
	13.	7	Limpet Rocks to Tinsey Head	Selectively Hold The Line	HTL	MR	NAI		MR	NAI	NAI						
	13.	8	Tinsey Head to Start Point	Selectively Hold The Line	NAI	NAI	NAI		NAI	NAI	NAI						

Related Process Unit	Possible Policy Unit			SMP1 Policy	Scenario A				Scenario B				Scenario C				
					0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	0-20 year	20-50 year	50-100 year	Comments	
START POINT TO RAME HEAD	14.	1	Start Point to Prawle Point	Do Nothing	NAI	NAI	NAI	This is a largely undefended open coast, and as such NAI is proposed. There is a small section of defence at Lannacombe which would be unlikely to attract public funds, however, if alternative funds are found, then there is no reason not to allow this defence to be retained in the long term.  CFMP HTL policy for defended areas are adopted for the SMP.  HTL may lead to loss of small pocket beaches in the long term, where backed by defences.	NAI	NAI	NAI	HTL	HTL	HTL			
	14.	2	Prawle Point to Limebury Point	Selectively Hold The Line	NAI	NAI	NAI		NAI	NAI	NAI						
	14.	3	Salcombe Harbour (Limebury Point to Kingsbridge Estuary - Scoble Point)	Selectively Hold The Line	HTL	HTL	HTL		HTL	NAI	NAI	NAI	HTL	HTL	HTL		
	14.	4	Kingsbridge Estuary East (Scoble Point to Kingsbridge)	Selectively Hold The Line	HTL	HTL	HTL		NAI	NAI	NAI	HTL	HTL	HTL			
	14.	5	Kingsbridge Estuary - Kingsbridge	Selectively Hold The Line	HTL	HTL	HTL		HTL	HTL	HTL	HTL	HTL	HTL			
	14.	6	Kingsbridge Estuary West (Kingsbridge to Snapes Point)	Selectively Hold The Line	HTL	HTL	HTL		NAI	NAI	NAI	HTL	HTL	HTL			
	14.	7	Salcombe (Snapes Point to Splat Cove Point)	Selectively Hold The Line	HTL	HTL	HTL		HTL	MR	MR	HTL	HTL	HTL			
	14.	8	Splat Cove Point to Bolt Head	Do Nothing	NAI	NAI	NAI		NAI	NAI	NAI	NAI	NAI	NAI			

Test effect of holding very short lengths of private defence along the eastern end of this section



