
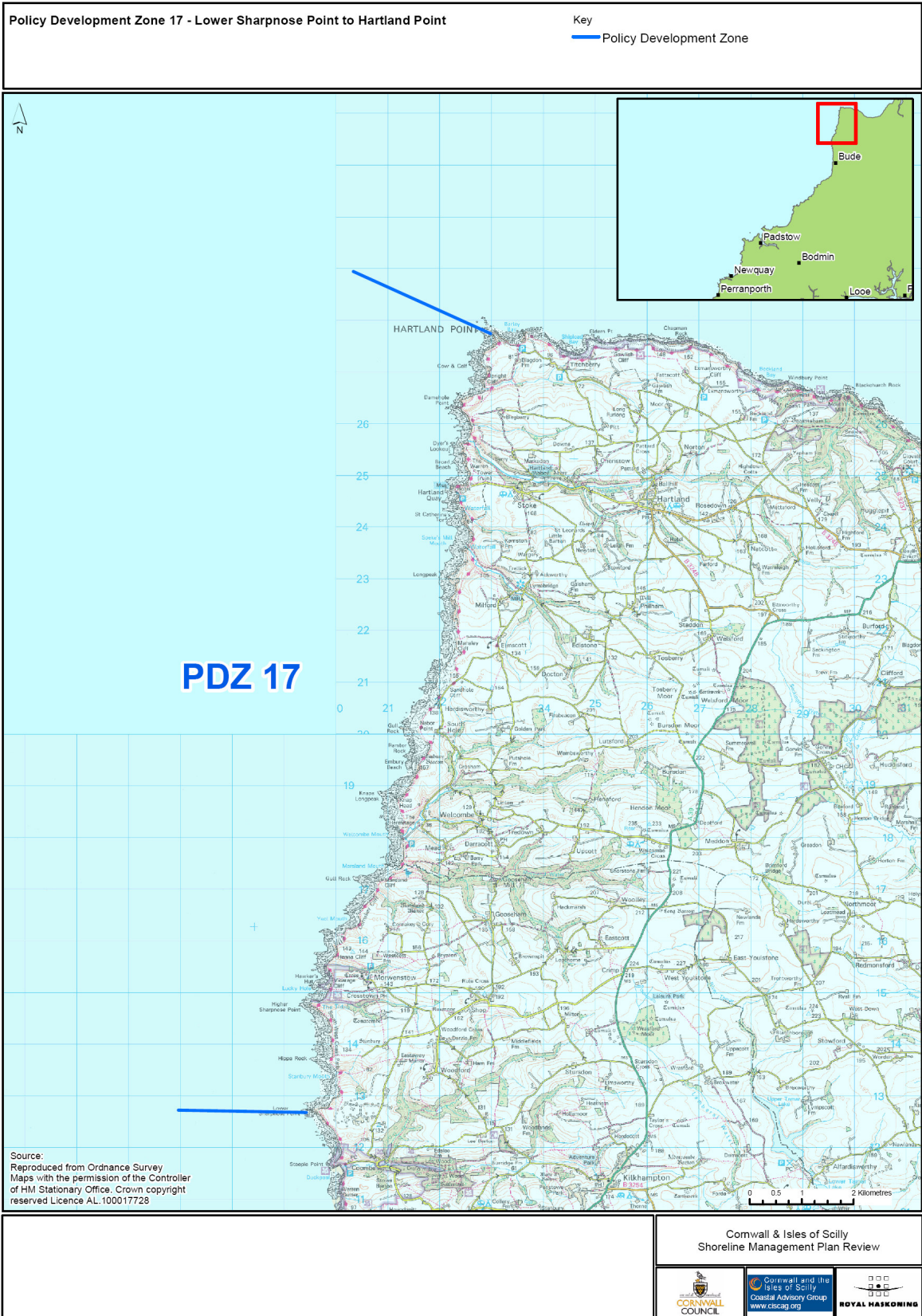
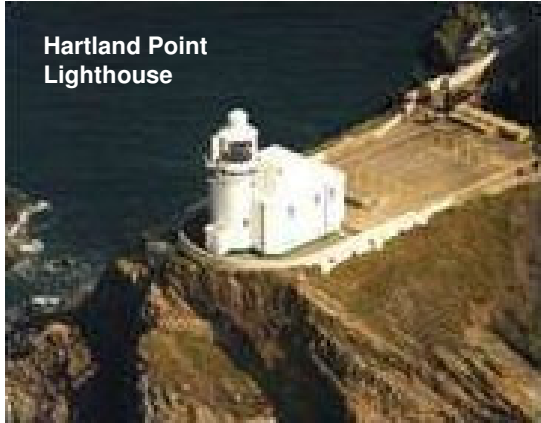


PDZ: 17	Lower Sharpnose Point to Hartland Point	Management Area 41
		
<p>Lower Sharpnose Point to Hartland Point</p> <p>The final local area unit on the north coast extends from Lower Sharpnose Point, just north of Duckpool, to Hartland Point. A small section of the north Devon coastline is included in this final unit, as the boundary between Cornwall and Devon is situated just north of Morwenstow.</p> <p>This is an area of steep and rocky coastline which is very rural in nature. There is very little development, which is a reflection of the wild and exposed nature of this coastline. Access to the shoreline by road is very limited as the scattered settlements are set back from the immediate frontage, with Welcombe Mouth and Hartland Quay the main access points.</p>		



General Description	
Built Environment	
<p>This stretch of coastline is almost entirely undeveloped; there are no coastal settlements and only a very limited number of fixed assets along the coastline. Cliff top agriculture is the dominant land use.</p> <p>At Hartland Quay there is car parking and a small number of commercial assets (Hotel, museum) with associated quay structures and defences. Hartland Point is home to Hartland Point Lighthouse (photo, right).</p> <p>Odd isolated properties exist adjacent to the shoreline in the near hinterland, e.g. Blackpool Cottage at Blegberry Beach.</p>	 <p>Hartland Point Lighthouse</p>
Heritage	
<p>There are a small number of historic features including Embury Beacon Camp and a Romano-British metalworking site at Duckpool, and a Hawkers Hut balanced on the cliffs at Morwenstow. Hartland Point Lighthouse, built in 1874 under the direction of Sir James Douglass, is a Grade II listed building as is the Hartland Quay Hotel and its nearby historic well head.</p>	
Environment and Nature Conservation	
<p>Conservation designations on this land are significant with the cliffed coastline all designated as part of the Tintagel-Marsland-Clovelly Coast SAC. This designation is related to the actively and uninterrupted eroding nature of the coastline. The Steeple Point to Marsland Mouth SSSI and Marsland to Clovelly Coast SSSI are both also within this PDZ. The entire area is also classed as an AONB and as a Heritage Coast area.</p>	
Recreation and Amenity	
<p>Although the immediate frontage is accessible using the SW coast path, the general feeling of the area is of remoteness and the use of the area by tourists is significantly less than elsewhere in the study area. The unspoilt nature of a coastline entirely unmodified by human intervention is of course highly valued. Visitor numbers tend to be restricted by the absence of settlements with amenities and accommodation.</p>	
Key Values and Drivers	
<p>The key value of this area is the mobile and actively eroding nature of the frontage that means it is highly valued for both its natural landscape, geological and ecological interests.</p> <ul style="list-style-type: none"> The key driver of this area is the extremely remote and unspoilt nature of the coastal environment which supports a range of environmental designations including the Tintagel-Marsland-Clovelly Coast SAC that is European importance. 	
PDZ Management Intent	
<p>The overarching management principle is therefore to allow the natural evolution of the</p>	

coast, with the National Heritage Coast objectives felt to appropriately define the key values and management principles:

- Conserve, protect and enhance the natural beauty of the coasts, their marine flora and fauna, and their heritage features.
- Facilitate and enhance their enjoyment, understanding and appreciation by the public.
- Maintain and improve the health of inshore waters affecting Heritage Coasts and their beaches through appropriate environmental management measures.
- Take account of the needs of agriculture, forestry and fishing, and of the economic and social needs of the small communities on these coasts

This exposed and resistant stretch of coastline is entirely natural in its response to the prevailing conditions. It is the least developed, most sparsely populated and highly natural stretch of coastline within the limits of the SMP review. The only substantial manmade structure along this coastline is at Hartland Quay, with no settlements of any size adjacent to the coast.

The coastline is orientated due west and is fully exposed to the westerly-dominated wave climate and weather systems of the Atlantic. The mobile and actively eroding nature of the frontage means that it is highly valued for both its natural landscape, geological and ecological interests. There are a number of archaeological sites and scheduled monuments identified.

TIDE AND WATER LEVELS (mODN)

	1:1	1:10	1:25	1:50	1:100	1:200	1:500	1:1000
Extremes(mODN)								
Location:								
Bude	4.82	5.04	5.15	5.22	5.34	5.42	5.52	5.62

Wave Climate

This stretch of coast is west facing and therefore exposed to extremes in North Atlantic wave height and energy. The annual 10% exceedance wave height is 2.5m – 3m (Futurecoast, 2002), with a 1 in 50 year extreme offshore wave height of 20m.

Wave buoy recordings (at Perranporth) have demonstrated that significant wave heights frequently exceed 5m during the winter months and wave periods of 15 seconds and higher are not uncommon. These values can be taken as representative for the whole of the north coast of Cornwall.

Tidal Flow

Residual tidal currents are generally weak, although locally stronger around the headlands. Tidal flow has little influence of shoreline evolution.

PROCESSES

Control Features:

The steep and rocky coastline of cliffs and wave cut platforms formed from Carboniferous sandstone cliffs dominates all of this section of coastline. Numerous headlands occur which are formed from sections of the more resistant sandstone cliffs, but it is the overall resistant nature of the geology which principally controls the evolution of this coastline, rather than the location of headlands.

Existing Defences:

The only significant coastal structures present within the policy development zone are associated with Hartland Quay (quay structures and seawalls) and Hartland Point Lighthouse (retaining walls). There are relic defensive masonry walls at Welcombe Beach.

Processes:

Sediment transport is mostly limited to movement across the shoreface profile in response to storms and general variation in the wave climate. Alongshore transport via littoral drift is insignificant and generally blocked by the presence of the rocky shore platforms.

Unconstrained Scenario:

The cliffs and rock platform throughout this unit will experience the continued slow erosion, which has been demonstrated over the past century. Actual rates of cliff retreat will vary dependant upon local geological factors, but nowhere is this expected to exceed 10m over the next century. The beaches are likely to maintain their current form, with continued inputs of cliff and carbonate material offsetting any losses (Futurecoast 2002).

POTENTIAL BASELINE EROSION RATES

Base rates have been assessed from monitoring and historical data. The range of potential erosion is assessed in terms of variation from the base rate and sensitivity in potential sea level rise. The base rates provided below are taken as an average based on historical records. The rates are a composite value based on erosion of the toe and recession of the crest of the cliff and reflect the erosion rates following failure of defences.

(Sea Level Rise assumed rates: 0.06m to year 2025; 0.34m to year 2055; 0.96m to year 2105.)

Location	Historic recession rate (lower) (m/100 yr)	Historic recession rate (upper) (m/100 yr)	Projected 100 year erosion rate (lower) (m)	Projected 100 year erosion rate (upper) (m)	Notes
Mead - Milford Common	0	3	0	5.4	
Milford Common - Hartland Quay	0	3	0	5.4	
The Warren - Hartland Point	0	3	0	5.4	

BASELINE MANAGEMENT SCENARIOS

PRESENT MANAGEMENT

Present Management is taken as that policy defined by SMP1, modified by subsequent strategies or studies. It should be noted that both in the case of SMP1 and that of many of the strategies undertaken before 2005, the period over which the assessment was carried out tended to be 50 years.

SMP1		
MU	LOCATION	POLICY
7B-3	Crooklets to Hartland Point	Do nothing policy. Continued maintenance of existing structures at Hartland Quay.

Economic Assessment

The following table provides a brief summary of damages determined by the SMP2 analysis for the whole PDZ. Further details are provided in Appendix H. Where further, more detailed information is provided by studies, this is highlighted. The table aims to provide an initial high level assessment of potential damages occurring under the two baseline scenarios. The damages for each epoch are current values. These are discounted to give present values in the final column.

ASSESSMENT OF EROSION DAMAGES

Epoch	0 -20 year		20 – 50 years		50 – 100 years		Total	
No Active Intervention	Number of properties	Present Value x £1000	Number of properties	Present Value x £1000	Number of properties	Present Value x £1000	Number of properties	Present Value Damages (£x1000)
<i>Location</i>								
	0	0	0	0	0	0	0	0

ASSESSMENT OF POTENTIAL FLOOD RISK

Epoch	Flood risk tidal 2025		Flood risk tidal 2055		Flood risk tidal 2105		Total	
No Active Intervention	Number of properties	Present Value x £1000	Number of properties	Present Value x £1000	Number of properties	Present Value x £1000	Number of properties	Present Value Damages (£x1000)
<i>Location</i>								
	0	0	0	0	0	0	0	0

PDZ 17: Lower Sharpnose Point to Hartland Point

Management Area Statements

Management Areas

PDZ17 has been sub-divided into 1 principal management areas, this being:

MA41 – Lower Sharpnose Point to Hartland Point

Covering previous SMP1 management units:

7B-3	Crooklets to Hartland Point
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Within these areas a summary of policy is provided below. Management Areas statements are provided in the following sheets.