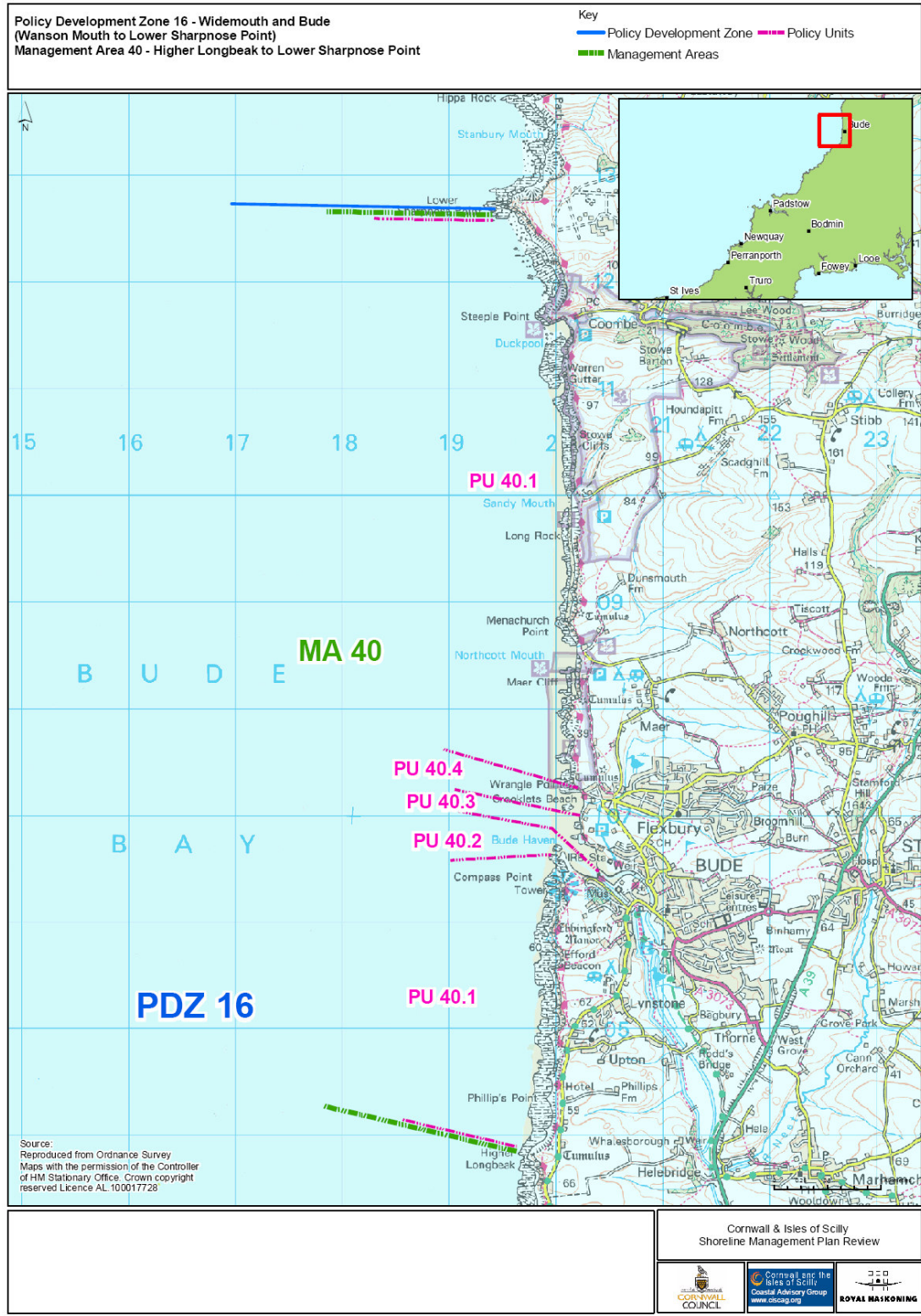


**Location reference: Higher Longbeak to Lower Sharpnose Point**  
**Management Area reference: MA40**  
**Policy Development Zone: PDZ16**



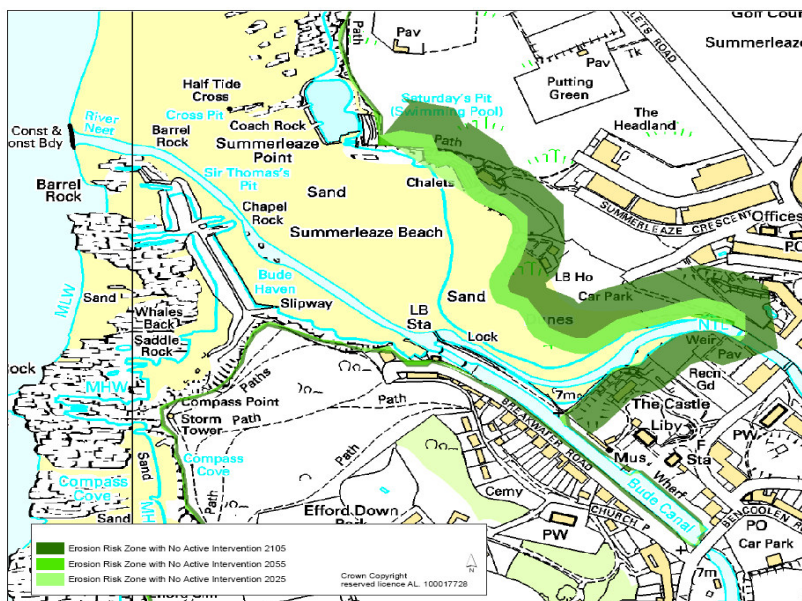
## DISCUSSION AND DETAILED POLICY DEVELOPMENT

The coast from Lower Longbeak to Lower Sharpnose Point is around 10km in length and includes the frontage of Bude, the largest significant settlement on the open coast north of Newquay.

The Tintagel-Marsland-Clovelly Coast SAC covers the Bude frontage from Efford Down to Maer High cliff (the Maer Down and High Cliff area is owned and managed by the National Trust). The Bude Coast SSSI designation covers the same extent. The Bude frontage is not covered by the Cornwall AONB or the Heritage Coast designations. Both of these designations finish to the east at Wanson mouth and commence again at Northcott Mouth, around 1.5km to the north of Crooklets.

The undefended cliffs of to the north and south of Bude are an actively eroding frontage, albeit at generally slow rates. It is unlikely that any areas will experience greater than 5-10m erosion by 2105 (discounting the very infrequent massive cliff slip events which could exceed that distance inland on a local basis). These areas are all currently managed under a do nothing policy. The preferred plan would be to continue with this, through no active intervention. This would meet the objectives relating to the AONB and Heritage Coast in the northern part of the management area. The AONB has identified concerns relating to the impacts of car parking at both Sandymouth and Duckpool to the north of Bude. It is very unlikely that shoreline recession rates will impact the current car parking arrangements at either location but use of these sites and their general impact on the landscape may need to be monitored (this is potentially an action for the National Trust to pick up – see Chapter 6).

Although it is an open coast settlement, much of the residential and commercial development is set well back from the cliffs and beaches. There are assets adjacent to the shoreline around the **Bude Canal, Summerleaze and Crooklets**. The assessment of erosion risks shows some of these to be at risk under the no active intervention



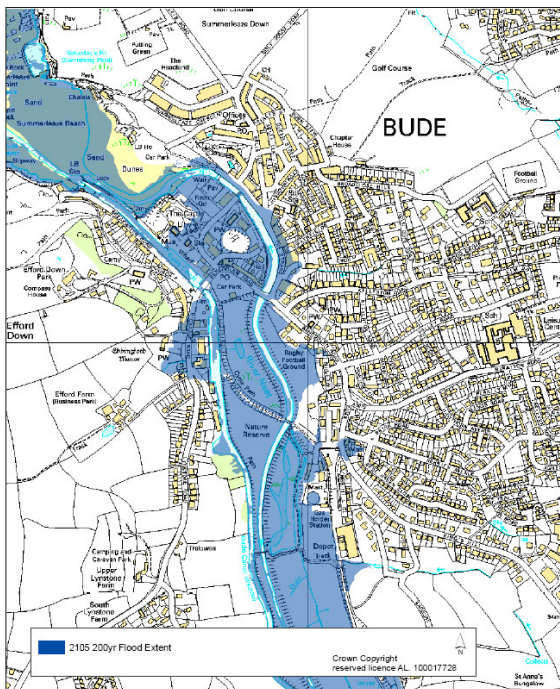
scenario and there is also a significant flood risk at Bude (see inset maps, left and below).

The greater part of Bude is designated as a conservation area. There are a number of listed buildings within the areas at risk and historical interest is centred on the canal, with the Grade II listed Bude Castle located just to the north-east of

the canal and the Grade II listed sea lock, lock gates and hand winches at the mouth of the canal. The Breakwater at Bude Haven, which is a significant coast protection

structure providing shelter to Summerleaze beach and the River Neet and Bude Canal from the worst of the westerly wave energy (see inset photo, below ), is also a Grade II listed structure.

The combination of erosion and flood risk is complex at Bude. There is the risk of coastal squeeze where the dunes are prevented from migrating landward by the presence of car parks along the north-eastern flank and the channel of the River Neet along the south-eastern and south-western flanks.



To allow the flood risks to property and life to increase along the Bude frontage is not seen as acceptable and these need to be managed, at the same time it must be recognised that there is some pressure on the frontage and that allowances and adaption will inevitably need to be made to provide some absorption of the likely impacts of climate change and sea level rise.

It is envisaged that defences and an appropriate standard of protection (from flooding) would need to be maintained at Bude Haven and adjacent to the canal. This would entail maintaining the Breakwater, the sea walls at property at the end of Breakwater Road, the canal and its lock gates and the sloped revetment and training wall alongside the River Neet. To the north of the

canal and seaward of the dunes, the area where there are currently rock revetments defending beach huts and other tourist related facilities, the preferred plan would be to encourage a more natural evolution of the upper beach. This would ideally move towards re-establishing a healthy and robust dune system along this entire part of the frontage, to provide a more robust natural defence to the Bude frontage. Management practice which encouraged dune building and the gradual removal of defences and the repositioning of tourist facilities further away from the area of erosion risk would be the preferred way forward. This would have the advantage of improving the natural defensive quality of the beach, improving the landscape quality and re-instating valuable dune habitat. It would provide an important buffer zone and more naturalised area which would more effectively be able to respond to sea level rise.



There are potential flood risks along the floodplain which exists upstream of the main Bude settlement. In addition, increasing salinity levels may pose a threat to freshwater or brackish habitats. Increasing sea level may dictate that the return periods of tide heights sufficient to inundate the floodplain become sufficiently low as to provide some opportunity for creation of intertidal habitat (grazing marsh).

The sea pool is not believed to be detrimental to the Summerleaze and Crooklets beaches in terms of influencing natural processes. It is likely that its presence is holding Summerleaze Point slightly forward of where it would be naturally but that in itself should not prevent the improvement of the dune system. It is likely to continue to provide a focus point for wave energy.

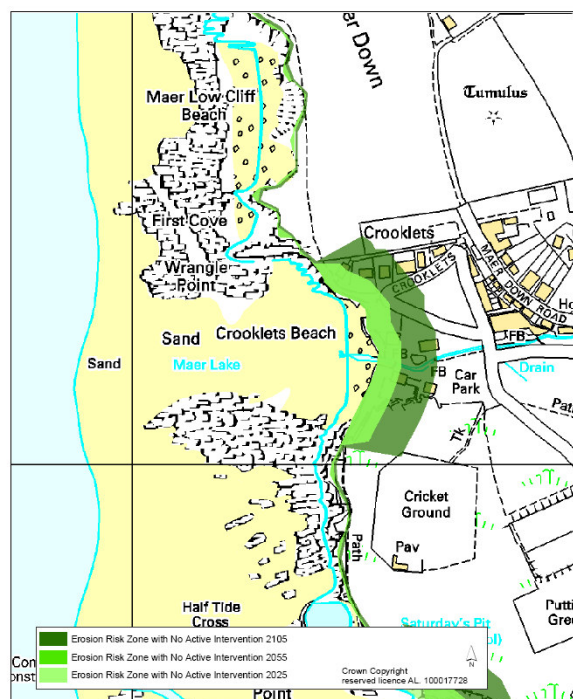
The shoreline at Crooklets could potentially recede by up to 75 metres, under the NAI scenario (inset map, right). This provides evidence of the pressure under which the frontage is likely to come. The current defences will constrain any natural movement of the beach or response to sea level rise. Given the lack of residential housing behind the main beach front, it is proposed that a managed realignment approach as described for Summerleaze would also be appropriate at Crooklets.

Currently there are no dunes at Crooklets but historically they are likely to have existed as they do at Summerleaze. Re-establishing dunes along the rear of the beach

and looking to roll back and re-position tourism and recreational related facilities away from the erosion risk zone would help to develop a more sustainable shoreline position and provide a more cost effective, natural defence, which could respond and adapt to changing coastal conditions. It would also have the advantage of improving the landscape quality and re-instating valuable UK BAP dune habitat, thereby supporting and improving biodiversity.

It is recognised that in particular, the beach huts are an important asset at Crooklets and the intent would be to retain the presence of beach huts, albeit probably in a rolled-back position, under any realignment proposals. The current car parking facilities immediately behind Crooklets beach also need to be considered as part of realignment and it is accepted that some parking area would be lost, however the present day overflow car park provides additional space which could be utilised on a more regular basis in the future.

The managed approach at both Crooklets and Summerleaze could include dune building and stabilisation measure such as netting and marram planting. Importantly by



re-establishing large and less constrained dune systems at both beaches, the potential sand available to be exchanged between beach and dunes is increased significantly. This would allow the whole area to respond more naturally to climate change and provide better natural defence during storm events.

The combination of hold the line and managed realignment policies at Bude Haven, Summerleaze and Crooklets would inevitably have some impact on the Bude Coast SSSI and the Tintagel-Marsland-Clovelly Coast SAC. In some areas the effects should be positive, where MR policy introduces improvement of dune areas. Where defences are held in their current positions, the shoreline features and habitats will continue to be modified and constrained by the presence of the structures, producing a negative impact on the designated areas. The overall impact should not change beyond that which has historically been experienced due to the presence of defences. Accelerating sea level rise would enhance the effects of a constrained shoreline however, potentially resulting in greater magnitude of impact on the foreshore and intertidal areas.

The economic assessment for Management Area 40 provides a narrowly positive benefit / cost ratio of 1.17 to support the combination of hold the line and managed realignment policies as the preferred plan at Bude. See the Economics Summary Table below and Appendix H for more detail.

To the north of Crooklets there are three further locations which regularly attract visitors, Northcott Mouth, Sandymouth and Duckpool. All three have associated tourist facilities such as car parking adjacent to the coast, but they are small-scale and limited in extent. It is preferred to manage these locations in line with the undefended cliffs, under a no active intervention policy. There is some potential erosion risk to the access road and property which are adjacent to the shoreline at Northcott Mouth. There are some defensive structures at Northcott Mouth and access steps at Sandymouth and the NAI approach would not preclude privately funded local management to maintain these.

**SUMMARY OF PREFERRED PLAN RECOMMENDATIONS AND JUSTIFICATION PLAN:**

<b>Location reference:</b>	<b>Higher Longbeak to Lower Sharpnose Point</b>
<b>Management Area reference:</b>	<b>MA40</b>
<b>Policy Development Zone:</b>	<b>PDZ16</b>

PREFERRED POLICY TO IMPLEMENT PLAN:	
<b>From present day (0-20 years)</b>	NAI along undefended cliffs and smaller tourist areas. HTL at Bude Haven and in canal area, primarily addressing increasing flood risk. MR at Summerleaze beach. MR at Crooklets beach.
<b>Medium term (20-50 years)</b>	NAI along undefended cliffs and smaller tourist areas. HTL at Bude Haven and in canal area, primarily addressing increasing flood risk. MR at Summerleaze beach. MR at Crooklets beach.
<b>Long term (50 -100 years)</b>	NAI along undefended cliffs and smaller tourist areas. HTL at Bude Haven and in canal area, primarily addressing increasing flood risk. Move to NAI at Summerleaze beach. Move to NAI at Crooklets beach.

**SUMMARY OF SPECIFIC POLICIES**

Policy Unit		SMP1 Policy	SMP2 Policy Plan			Comment
		50 yrs	2025	2055	2105	
40.1	Undefended cliffs (including Northcott Mouth, Sandymouth and Duckpool)	Do nothing to maintain geological exposures and coastal habitats.	NAI	NAI	NAI	Recession of cliffs continues to provide sediment to frontage. NAI would meet AONB and Heritage Coast objectives. NAI does not preclude local maintenance of structures at Northcott and Sandymouth.
40.2	Bude Haven & Canal area	Hold existing line along natural and built defences. Do nothing along undeveloped stretch with relocation of coastal footpath.	HTL	HTL	HTL	Maintain the structures providing coast protection and/or flood defence function (breakwater, revetments, sea walls, canal walls and locks).
40.3	Summerleaze beach	Hold existing line along natural and built defences. Do nothing along undeveloped stretch with relocation of coastal footpath.	MR	MR	NAI	Objective is to reduce risks by establishing more robust natural defence and naturally responding buffer zone by Improvement of dunes and moving tourist based infrastructure and commercial development away from the erosion and flood risk zones.
40.4	Crooklets beach	Hold existing defence line for developments backing Crooklets beach.	MR	MR	NAI	Objective is to reduce risks by establishing more robust natural defence and naturally responding buffer zone by Improvement of dunes and moving tourist based infrastructure and commercial development away from the erosion and flood risk zones.
Key: HTL - Hold the Line, A - Advance the Line, NAI – No Active Intervention MR – Managed Realignment						

## ENVIRONMENTAL ASSESSMENT

### Strategic Environmental Assessment (SEA):

For this stretch of coastline, the long-term policy plan of NAI will provide essential geological exposure to maintain or promote favourable condition of such sites as the Duckpool to Furzey Cove SSSI, Steeple Point to Marsland Mouth SSSI, however the same policy will potentially impact upon the integrity of historic sites through erosion including Bude Canal Sea Lock (SM) and commercial properties and assets between Crooklets to Hartland Point.

The other long-term policy associated with this management area of HTL will continue to maintain current standards of defence for the settlement of Bude Haven & Canal area, although this policy will prevent natural processes / adaptation of the Bude Coast SSSI. The Tintagel-Marsland-Clovelly Coast SAC may also be negatively affected at Bude. Constraint of the shoreline at Bude Haven may result in impacts on the foreshore and intertidal areas, under a scenario of accelerating sea level.

### Habitat Regulations Assessment (HRA):

HTL is proposed at Bude Haven and Canal, whilst MR is proposed for Epochs 1 and 2 at Black Rock / south Widemouth, North Widemouth, Summerleaze beach, and Crooklets Beach. These policies occur close to (within 10m) or some distance (up to 300m) from the Site boundary, however, no direct loss or disturbance is expected on Site features, and due to the localised nature of hydrodynamic effects coupled with the MR policies moving away from the Site boundary, no indirect effects on Site features are expected.

## IMPLICATION WITH RESPECT TO BUILT ENVIRONMENT

Economics Summary		by 2025	by 2055	by 2105	Total £k PV
Property	Potential NAI Damages (£k PV)	916.4	844.7	458.9	2220.0
	Preferred Plan Damages (£k PV)	195.8	309.0	170.9	675.6
	Benefits of preferred plan (£k PV)	720.6	535.7	288.0	1544.3
	Costs of Implementing plan £k PV	1109	155	57	1322
				Benefit/Cost ratio of preferred plan	1.17