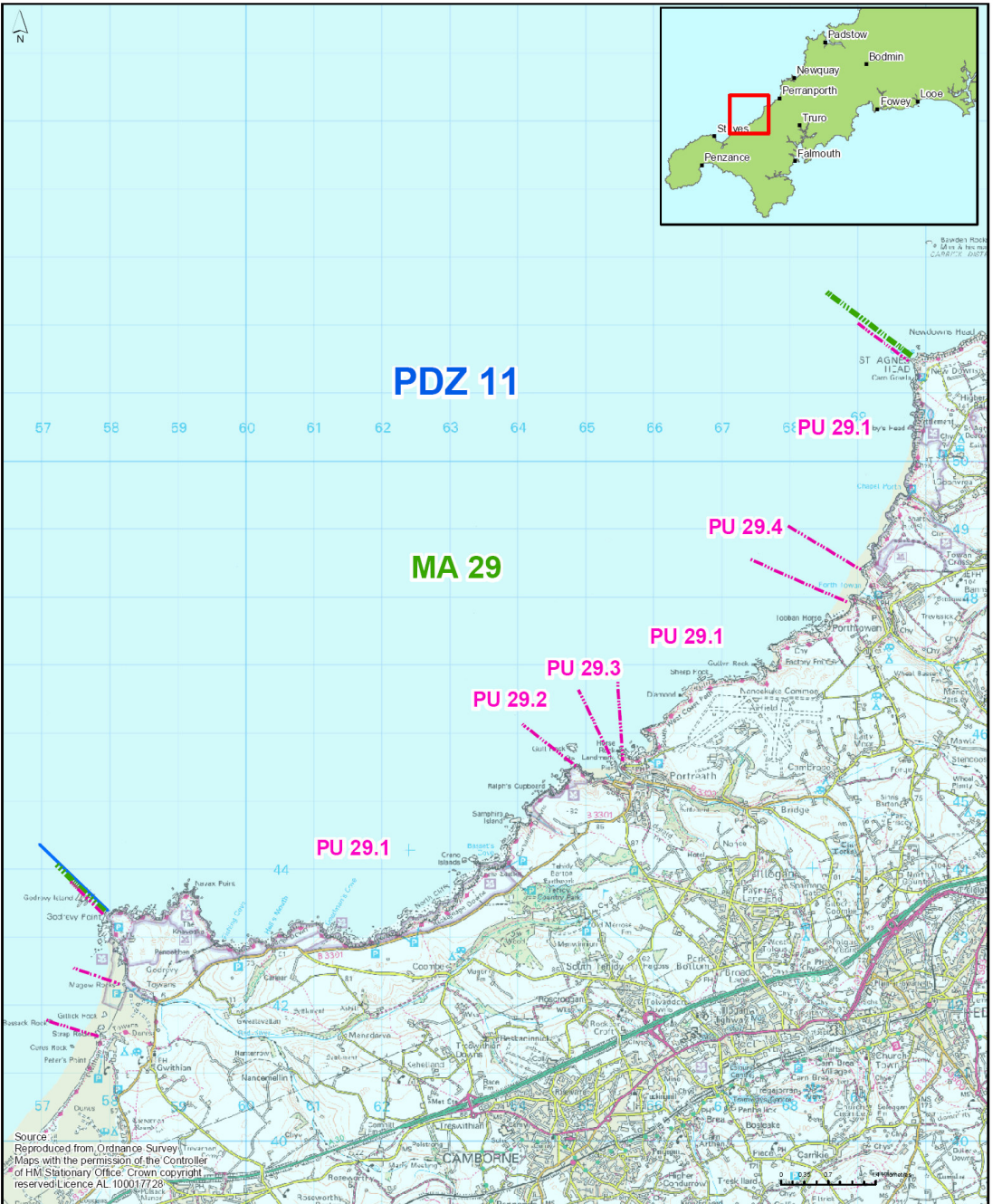


Location reference: **Godrevy Point to St Agnes Head**  
 Management Area reference: **MA29**  
 Policy Development Zone: **PDZ11**

Policy Development Zone 11 - North Cliffs  
 Management Area 29 - Godrevy Point to St Agnes Head

Key  
 Policy Development Zone (blue line)  
 Policy Units (pink dashed line)  
 Management Areas (green shaded area)



Cornwall & Isles of Scilly  
 Shoreline Management Plan Review



CORNWALL COUNCIL  
 Cornwall and the Isles of Scilly Coastal Advisory Group  
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## DISCUSSION AND DETAILED POLICY DEVELOPMENT

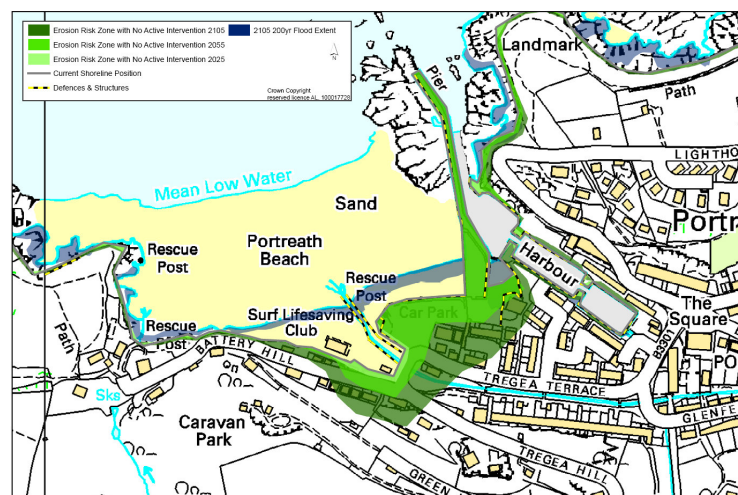


North cliffs

Along the undefended coastline of the **North Cliffs** from Godrevy Point to St Agnes Head an ongoing no active intervention policy should meet high level objectives and satisfy AONB and heritage coast criteria. NAI would not preclude maintenance of the National Trust owned wall at Chapel Porth to maintain existing lifeguard facilities as required. Along the entire undefended frontage there are archaeological sites eroding out of the cliffs and a number at risk

including the Carvannel Cliff Castle scheduled monument, close to Bassets Cove. The B3301 road running from Hayle to Portreath runs close to the cliff edge in places, particularly at Hell's mouth and Derrick Cove and this needs consideration, as will re-routing of the coastal footpath in several locations, continuing to provide spreading room and a buffer between the maritime coastal slope and agricultural cliff top land use.

At **Portreath**, the frontage will come under increasing pressure from sea level rise, with a real threat of coastal squeeze occurring. In the longer term this could lead to narrowing of the intertidal area with subsequent loss of sand and beach lowering, which in turn will increase pressure on defences and risk of structure failure. Therefore the current shoreline position as delimited by the outer edge of the car park does not appear to be technically sustainable in the longer term. It is unlikely therefore to be in the best long-term interests of the community to continue to hold the line indefinitely. Therefore some element of realignment in the medium to long term is suggested for the frontage running from Battery Hill to the Pier and this should be



coordinated with planning for future maintenance of the pier. Any realignment must however take account of the World Heritage site designation which covers Tregua Terrace as well as the Pier and Harbour. The designation does not cover the car park area or commercial development behind it. The car parking area provides some width which would be central to any future realignment but there is limited scope to significantly increase the intertidal width and part of any scheme would include consideration of the type of structures employed to provide defence, e.g. structures which provide more attenuation of wave energy as opposed to reflection of wave energy

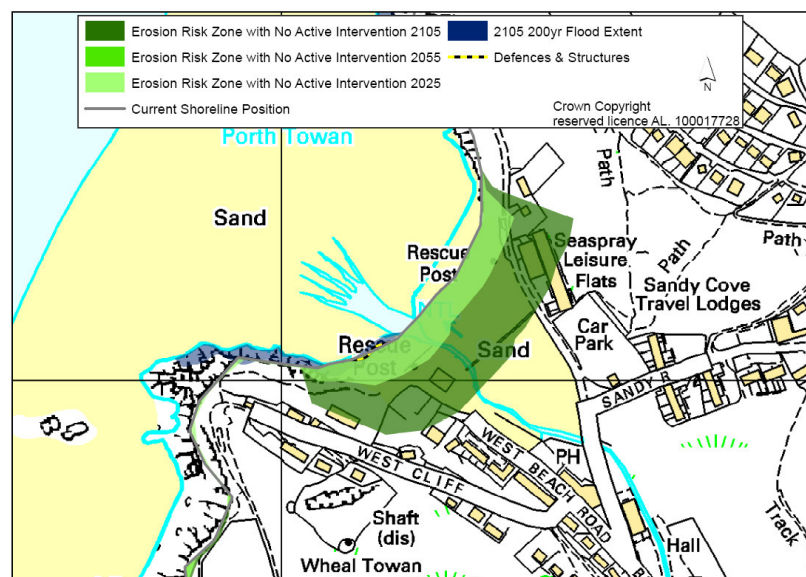
may assist in reducing scour and erosion of the upper beach face. Any such attempts at managed realignment would require the support of the Land Use Planning system. The overall scale of change may be extensive enough in terms of the community to mark out Portreath as a coastal change area. This would need to be confirmed following more detailed study.

Holding the pier at least partly in its current position would be an integral part of a longer term intention to hold the line and maintain the inner harbour and provide defence against both coastal wave driven flooding and erosion to the wider community. The pier acts to greatly reduce wave energy entering the Harbour. The Pier and Harbour are listed Grade II structures and form part of the World Heritage Site. The pier also provides some protection to the small promontory of Lighthouse Hill including the road and a number of properties. A better understanding of the role of the pier in both preventing wave driven flooding and erosion is required as an initial technical consideration. This information could then feed into a wider management strategy for the beach frontage. An appropriate action is include within Chapter 6 (Action Plan) referencing this need.

The high level economic appraisal for Management Area 29 provides a very negative benefit / cost ratio of 0.26 (refer to Economics Appraisal Summary Table below and Appendix H). This is based upon the very significant costs of maintaining the breakwater at Portreath relative to the assets protected. A part of the strategy to undertake some realignment at Portreath would need to consider how to possibly reduce these costs.

To the north-east, **Porthtowan** is located in a steep-sided river valley with a wide north-west facing beach exposed to the prevailing westerly wave climate. The beach is backed by a small dune system although it does not currently extend the full width of the river valley mouth due to the encroachment of development. The dune system is therefore constrained on three sides by local development but appropriate management techniques have been employed historically to stabilise sand accumulations and encourage dune growth, in order to prevent excessive wind-blown sand accumulating further up the valley. There are some informal defences employed (gabions and low masonry wall) at the rear of the beach directly south of the dunes. These defences are unlikely to prevent excessive erosion occurring in their current guise. The assessment of erosion risks indicates that by 2105 the possible landward extent of erosion could be up to 90m under a no active intervention scenario (see inset map below).

An important historical consideration at Porthtowan is its inclusion as part of the World Heritage Site (although this should help to discourage any more inappropriate development or encroachment of the dunes). Also





important is the presence of a submerged submarine forest on the upper foreshore which needs to be considered under the preferred approach. The likely future requirement for improvement of the lifeguard facilities should also take consideration of the stability of the dune area and any design should not be detrimental to further dune growth.

The preferred plan at Porthtowan would be to manage the frontage under a managed realignment policy across the three epochs. This would accommodate the natural variability of this area and allow priority to be given to enhancement of the natural dune system as a UK priority BAP Habitat. It would allow a limited intervention approach based on dune stabilization and enhancement rather than engineered defences. It would also provide an effective yet less costly way of limiting the extent of erosion indicated by the NAI scenario and ultimately a healthy wide dune system will provide the most effective natural defence to Porthtowan.

It is likely that there will be some limited impacts on property directly adjacent to the beach under the preferred plan in the medium to longer term (beyond 20 years). This location could potentially be seen as a coastal change area, given the nature of the community development likely to be affected (lifeguard station, retail outlets, bar/restaurant, holiday flats, parking) and therefore may need support from the Land Use Planning system. The great majority of the residential area would be unaffected by change however, and the preferred policy should help to limit the impacts or erosion on those assets at risk.

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

<b>Location reference:</b>	<b>Godrevy Point to St Agnes Head</b>
<b>Management Area reference:</b>	<b>MA29</b>
<b>Policy Development Zone:</b>	<b>PDZ11</b>

PREFERRED POLICY TO IMPLEMENT PLAN:	
<b>From present day (0-20 years)</b>	NAI along undefended cliff and coves. HTL at Portreath Beach. HTL at Portreath Harbour. MR at Porthtowan.
<b>Medium term (20-50 years)</b>	NAI along undefended cliff and coves. MR at Portreath Beach. HTL at Portreath Harbour together with the MR option. MR at Porthtowan.
<b>Long term (50 -100 years)</b>	NAI along undefended cliff and coves. MR at Portreath Beach. HTL at Portreath Harbour together with the MR option. MR at Porthtowan.

**SUMMARY OF SPECIFIC POLICIES**

Policy Unit		SMP1 Policy 50 yrs	SMP2 Policy Plan			Comment
			2025	2055	2105	
29.1	Undefended cliffs (including cove at Chapel Porth)	Do nothing	NAI	NAI	NAI	No active intervention will meet high level objectives and satisfy AONB and heritage coast criteria. NAI would not preclude maintenance of the National Trust owned wall at Chapel Porth.
29.2	Portreath Beach	Hold the line	HTL	<b>MR</b>	<b>MR</b>	This frontage will come under increasing pressure from sea level rise; with a real threat of coastal squeeze occurring. In the longer term this could lead to narrowing of the intertidal area. It is unlikely to be in the best long-term interests of the community to continue to hold the line in the long term. Therefore some element of realignment in the medium to long term is suggested for the frontage running from Battery Hill to the Pier.
29.3	Portreath Harbour (including Pier)	Hold the line	HTL	<b>HTL/MR</b>	<b>HTL/MR</b>	Holding the pier at least partly in its current position would be an integral part of a longer term intention to hold the line and maintain the inner harbour and provide defence against both coastal flooding and erosion to the wider community.
29.4	Porthtowan	Hold the line	<b>MR</b>	<b>MR</b>	<b>MR</b>	The preferred approach at Porthtowan would be to manage the frontage under a managed realignment policy. This would accommodate the natural variability of this area and allow priority to be given to enhancement of the natural dune system as a UK priority BAP Habitat
Key: HTL - Hold the Line, A - Advance the Line, NAI – No Active Intervention MR – Managed Realignment						

## ENVIRONMENTAL ASSESSMENT

### Strategic Environmental Assessment (SEA):

The long-term policy for Godrevy Point to St Agnes Head is NAI across the undefended cliffs and a policy of MR. The policy of NAI will provide essential natural processes to prevail for such interest features as Godrevy Head to St Agnes SAC, Godrevy Head to St Agnes SSSI, heritage coast, Cornwall ANOB, Portreath RIG site and Kerriack Cove RIG site. However, this policy will potentially impact upon the following key historic sites: Godrevy Towans - complex of prehistoric sites (SM); and Carvannel cliff castle (SM). Monitoring should be undertaken.

The MR and to a lesser extent NAI, will maintain current standards of defence or not influence change in defence standards, however the MR policy will impact upon the Portreath RIG site.

### Habitat Regulations Assessment (HRA):

HTL is proposed in Epoch 1 followed HTL/MR at Portreath, and MR is proposed for all three epochs at Porthtowan. These policy locations are at least 3.5km from the nearest Natura 2000 Site. No direct or indirect effects are expected given the distances combined with the localised nature of any hydrodynamic effects resulting from the policy choices.

## IMPLICATION WITH RESPECT TO BUILT ENVIRONMENT

Economics Summary		by 2025	by 2055	by 2105	Total £k PV
Property	Potential NAI Damages (£k PV)	268.1	264.9	628.0	1161.1
	Preferred Plan Damages (£k PV)	0.0	100.8	44.8	145.6
	Benefits of preferred plan (£k PV)	268.1	164.1	583.3	1015.5
	Costs of Implementing plan £k PV	2705	1170	0	3875
Benefit/Cost ratio of preferred plan					0.26

### Notes

Below unity B/C ratio is largely due to the high costs of maintaining the breakwater at Portreath and this distorts the overall picture for other locations. At Portreath the benefits provide by the pier in terms of preventing wave driven flooding also need to be established in order to provide true B/C ratio for Portreath. Likely that alternative funding/justification investigation is also required to take account of amenity and heritage/historic status.