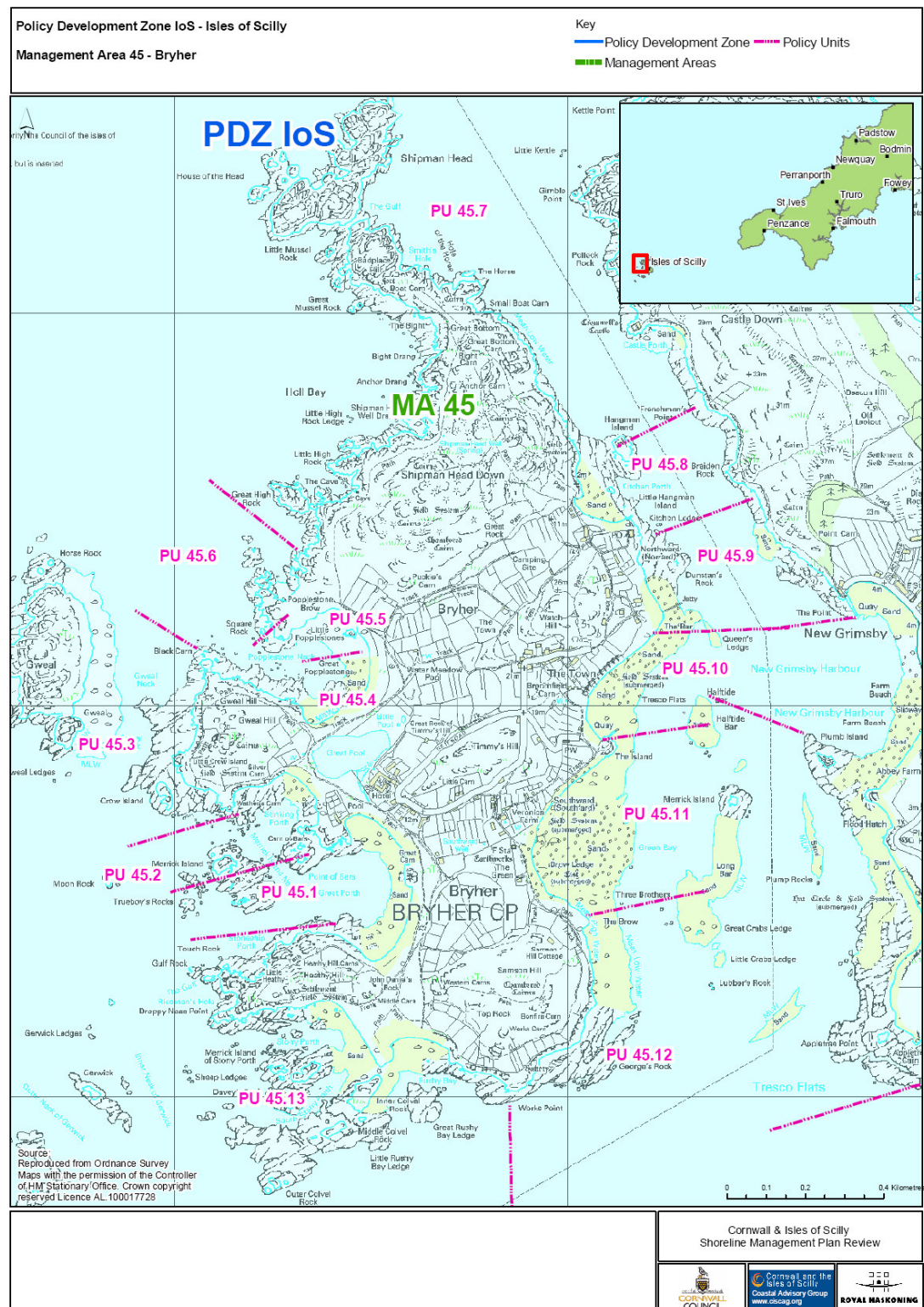


**Location reference: Bryher**  
**Management Area reference: MA45**  
**Policy Development Zone: PDZ18**



## DISCUSSION AND DETAILED POLICY DEVELOPMENT

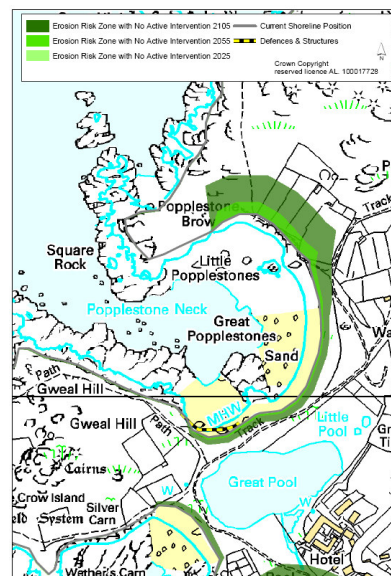
Bryher sits directly due west of Tresco, consequently its western flank is very exposed to prevailing Atlantic conditions, dictating that erosion issues dominate the risks. Its eastern flank in contrast is much more sheltered.

Recession at **Great Porth North** is predicted to be up to 35m over 100 years. There is currently a substantial area of upper beach around 35-40m wide above mean high water. HTL is preferred in epoch 1. It is intended however that the HTL policy only applies to the rock armour defence which is currently in place along the most northerly part of the shoreline.

There may be some risk to development if the defence were allowed to fail however a better understanding of the risks may be developed through monitoring of the rate of shoreline recession. In the medium to longer term the preferred intent of management would be to allow the wide upper beach and vegetated zone to be managed as a no active intervention area, providing a natural and responsive beach-dune system more able to adapt itself to sea level rise and coastal squeeze pressures. There may be some economic justification for continued holding the line beyond epoch 1 if ongoing rates of erosion were likely to pose substantial risk to the hotel and other development, given the significance of this to Bryher's economy. The inset map, (above right) shows the anticipated maximum extent of erosion and the ongoing measurement of this must inform subsequent reviews if the SMP.

No significant erosion risks are identified at **Stinking Porth**, although it may provide a route through for wave overtopping and inundation affecting the Great Pool. No active intervention would be preferred policy. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations.

No significant erosion risks are identified for **Gweal Hill**, the west-facing headland which separates Great Porth and Great Popplestones.





Therefore no active intervention would be the preferred plan and policy. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations.

Assessment of erosion risks at **Great Popplestones** indicates only a small amount of recession is likely adjacent to the Great Pool (see inset map, above). There are water resource issues related to the Great Pool and an initial hold the line policy should monitor the rate to test that a longer term aim to move to no active intervention is correct. This policy choice only applies to the area fronting the Great Pool.

Although erosion may exceed 50m at **Little Popplestones** (see inset map, above) there appears little justification for any continuation of a hold the line policy, with no assets or residential property at risk. The preferred policy therefore would be no active intervention, to allow natural process to continue to dictate evolution of the shoreline. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations.

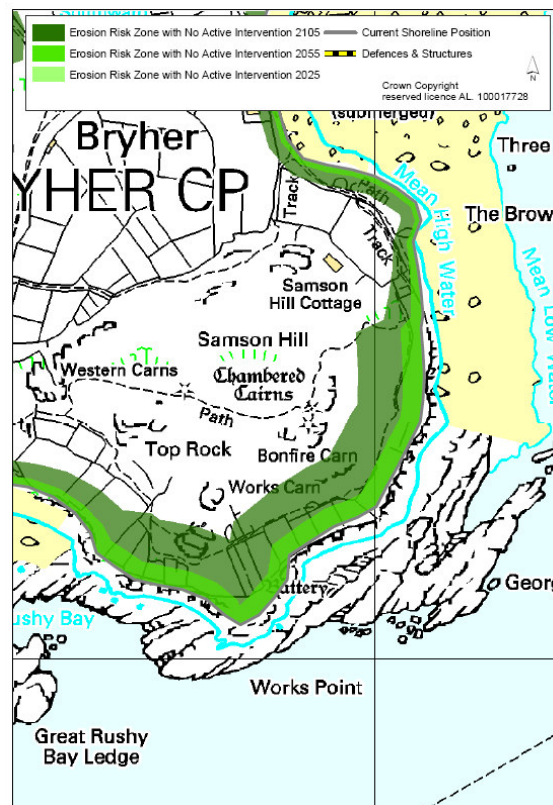
The remainder of the Bryher shoreline is generally undeveloped and sparsely populated. The low level of risk attached to the remainder of the shoreline dictates that no active intervention is the preferred plan across the three epochs for the remainder of the shoreline. The policy units established within SMP1 are briefly assessed below.

**Popplestone Brow** - No significant risks identified, shoreline is resistant and stable, erosion not expected to exceed 3m, no active intervention would be preferred policy. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations.

**Popplestone Brow to Hangman Island** - No significant risks identified, shoreline is resistant and stable, erosion not expected to exceed 3m, no active intervention would be preferred policy. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations.

**Kitchen Porth** - No significant risks identified, shoreline is generally stable although erosion may exceed 15m over 100 years and possibly affect some discrete properties in the very long term - no active intervention would be preferred policy. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations.

**Post Office to the Bar** - No significant risks identified, shoreline is generally stable although erosion may exceed 20m over 100 years and possibly affect some cliff top land use. No active intervention would be preferred policy. The no active



intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations. Some re-routing of coastal footpaths would be necessary.

**The Bar to the Quay** - No significant risks identified, shoreline is generally stable although erosion may exceed 20m over 100 years and possibly affect some cliff top land use. No active intervention would be preferred policy. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations. Some re-routing of coastal footpaths would be necessary.

**Southward** - No significant risks identified, although erosion may exceed 60m over 100 years and possibly affect some cliff top land use and possibly historic sites. No active intervention would be preferred policy. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations. Some re-routing of coastal footpaths would be necessary (see inset map, above).

**The Brow to Works Point** - No significant risks identified, shoreline is generally stable although erosion may exceed 20m over 100 years and possibly affect some cliff top land use. No active intervention would be preferred policy. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations. Some re-routing of coastal footpaths would be necessary.

**Works Point to Great Carn** - No significant risks identified, shoreline is generally stable although erosion may exceed 20m over 100 years in some areas around Rushy Bay and possibly affect some cliff top land use. No active intervention would be preferred policy. The no active intervention approach would satisfy the objectives relating to the AONB and Isles of Scilly SAC designations. Some re-routing of coastal footpaths would be necessary.

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

<b>Location reference:</b>	<b>Bryher</b>
<b>Management Area reference:</b>	<b>MA45</b>
<b>Policy Development Zone:</b>	<b>PDZ18</b>

<b>PREFERRED POLICY TO IMPLEMENT PLAN:</b>	
<b>From present day (0-20 years)</b>	NAI along all undefended cliff and cove shorelines. HTL at Great Porth North and Great Popplestones.
<b>Medium term (20-50 years)</b>	NAI along all undefended cliff and cove shorelines.
<b>Long term (50 -100 years)</b>	NAI along all undefended cliff and cove shorelines.

**SUMMARY OF SPECIFIC POLICIES**

<b>Policy Unit</b>		<b>SMP1 Policy</b>	<b>SMP2 Policy Plan</b>			<b>Comment</b>
		<b>50 yrs</b>	<b>2025</b>	<b>2055</b>	<b>2105</b>	
45.1	Great Porth North	Hold the line	HTL	<b>NAI (with localised HTL)</b>	<b>NAI (with localised HTL)</b>	Holding the line in epoch 1 would allow monitoring of the rate (predicted up to 35m over 100 years) of shoreline recession.
45.2	Stinking Porth	Do nothing	NAI	NAI	NAI	No significant risks identified.
45.3	Gweal Hill	Do nothing	NAI	NAI	NAI	No significant risks identified.
45.4	Great Popplestones	Hold the line	HTL	<b>NAI</b>	<b>NAI</b>	Initial hold the line should monitor rate to test, but longer term aim would be to move to NAI.
45.5	Little Popplestones	Hold the line	NAI	<b>NAI</b>	<b>NAI</b>	. The preferred policy therefore would be NAI, which should satisfy objectives relating to the AONB
45.6	Popplestone Brow	Do nothing	NAI	NAI	NAI	No significant risks identified
45.7	Popplestone Brow to Hangman Island	Do nothing	NAI	NAI	NAI	No significant risks identified
45.8	Kitchen Porth	Do nothing	NAI	NAI	NAI	No significant risks identified
45.9	Post Office to the Bar	Do nothing	NAI	NAI	NAI	No significant risks identified
45.10	The Bar to the Quay	Do nothing	NAI	NAI	NAI	No significant risks identified
45.11	Southward	Do nothing	NAI	NAI	NAI	No significant risks identified
45.12	The Brow to Works Point	Do nothing	NAI	NAI	NAI	No significant risks identified
45.13	Works Point to Great Carn	Retreat the line	<b>NAI</b>	<b>NAI</b>	<b>NAI</b>	No significant risks identified

Key: HTL - Hold the Line, A - Advance the Line, NAI – No Active Intervention  
MR – Managed Realignment

## ENVIRONMENTAL ASSESSMENT

### Strategic Environmental Assessment (SEA):

For the island of Bryher, the overall policies to be implemented include NAI along all undefended cliff and cove shoreline and HTL and MR used selectively to maintain current standards of defence for key assets including commercial / residential properties, beaches and tourist and recreational facilities and other infrastructure on the islands.

The policy of NAI will benefit the following designated sites: Isles of Scilly SPA; Isles of Scilly Ramsar; Isles of Scilly Complex SAC; Shipman Head & Shipman Down SSSI; Norrard Rocks SSSI; Pool of Bryher & Popplestone Bank SSSI; Rushy Bay & Heathy Hill SSSI; Samson SSSI; Pentle Bay, Merrick & Round Islands SSSI; Great Pool SSSI; St Helen's SSSI; and Isles of Scilly Heritage Coast.

However, the policy of NAI through erosion may cause disturbance or deterioration to historic sites and their settings.

### Habitat Regulations Assessment (HRA):

HTL is proposed for all Epochs at Great Porth North, whilst HTL for Epochs 1 and 2 followed by MR is proposed at Great Popplestones. These policies occur close to or some distance (up to 300m) from the Site boundary, however, no direct loss or disturbance is expected on the Sites' 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. Possible indirect disturbance effects may occur at Great Popplestones (Bryher). However, no loss of supporting habitat for the species for which the SPA is designated is expected provided appropriate preventative and mitigation measures are incorporated in various scheme proposals (such as following existing defence line, use of similar materials, etc). **These preventative and mitigation measures are included within the SMP Action Plan.**

### IMPLICATION WITH RESPECT TO BUILT ENVIRONMENT

Economics Summary		by 2025	by 2055	by 2105	Total £k PV
Property	Potential NAI Damages (£k PV)	0.0	0.0	6.2	6.2
	Preferred Plan Damages (£k PV)	0.0	0.0	6.2	6.2
	Benefits of preferred plan (£k PV)	0.0	0.0	0.0	0.0
	Costs of Implementing plan £k PV	60	0	0	60
			Benefit/Cost ratio of preferred plan	N/A	

### Notes

Initial HTL policy is not justified economically