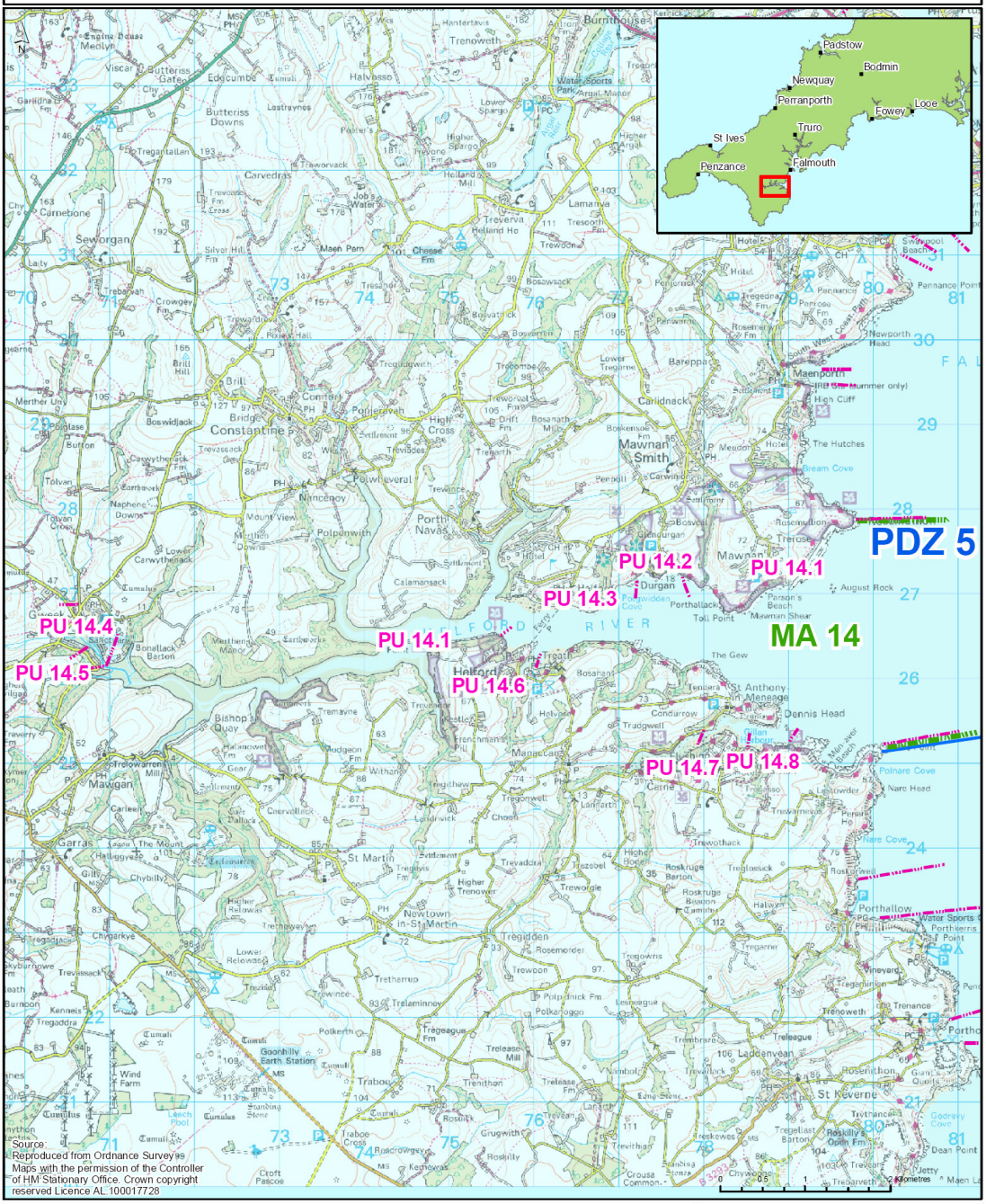
Location reference:	**Helford**
Management Area reference:	**MA14**
Policy Development Zone:	PDZ5

Policy Development Zone 5 - Zone Point to Nare Point

Management Area 14 - Helford

Key
Policy Development Zone
Policy Units
Management Areas



Cornwall & Isles of Scilly Shoreline Management Plan Review

DISCUSSION AND DETAILED POLICY DEVELOPMENT

Adopting a no active intervention policy along the **undefended estuary banks** meets the wider scale objectives of the Fal & Helford SAC. Some small-scale flooding risks exist at Porth Navas, St Anthony in Meneage. Managed realignment in the Gweek area (excluding Gweek Quay) could provide valuable intertidal habitat creation opportunities.


Helford River at Gweek

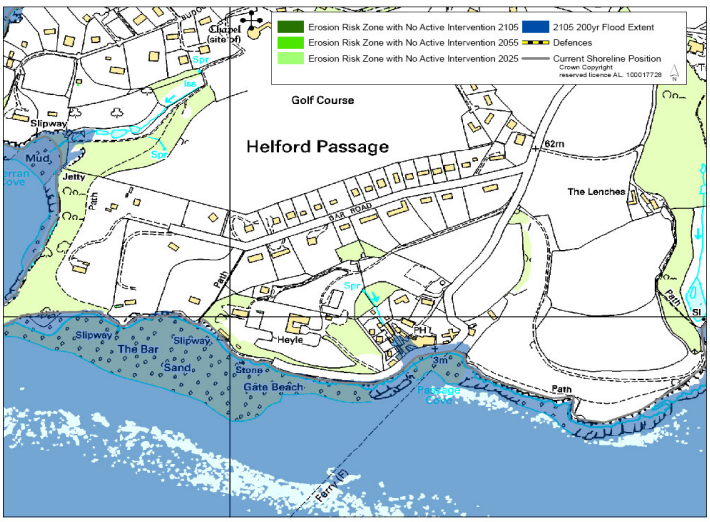
There are numerous historic sites across the undefended parts of the estuary which may potentially be adversely impacted or ultimately lost under a no active intervention approach. Recreational use would generally be unaffected by the plan.

Generally it is felt the application of a broad-scale NAI approach will support the unspoilt beauty and tranquility which exists across the whole estuary. Locations where some intervention is necessary are therefore the exception and only in response to localised risks. The designated habitats of the SAC (which includes sandbanks, mudflats and sandflats, large shallow inlets and bays and Atlantic salt meadows) are provided with the best chance to naturally adapt to sea level rise through the NAI approach. Natural topography, sediment availability and changes in the tidal prism will influence exactly how these habitats adapt and over what extent.

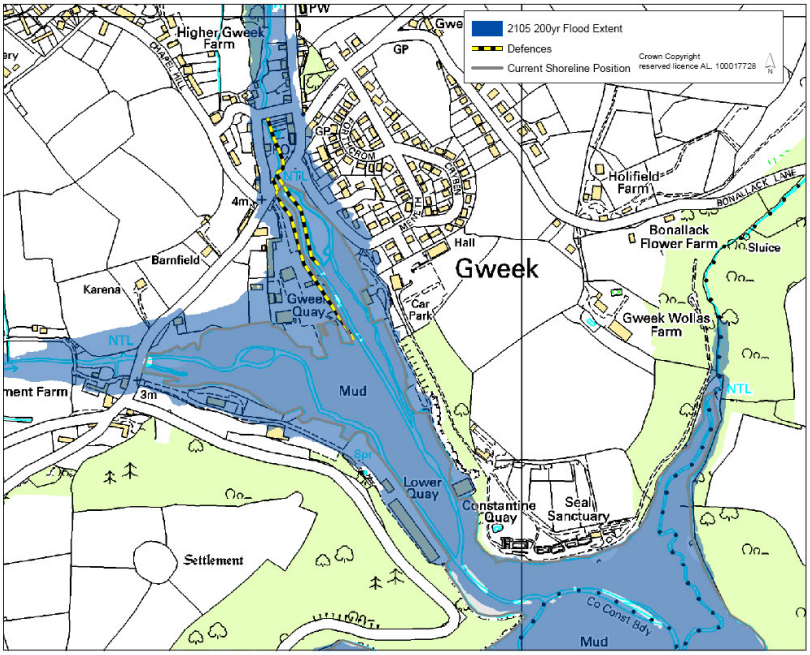
At **Durgan,** several listed properties are indicated to be at risk. The settlement is principally owned by the National Trust. The approach here would be not to constrain natural processes, to invoke non-interventional approach and to allow property to be lost over time. The preferred plan for a non-interventional approach will generally support the core objectives of the Fal & Helford SAC and prevent loss of intertidal area. The preferred plan will support the landscape value and the AONB designation. Old School House and Quay walls could be lost in the longer term. Recreational use would generally be unaffected by the plan although loss of quays in longer term may be detrimental.

Helford Passage (inset map, below) - Some small-scale flooding and possible erosion is indicated at this location. The quayside road, slipways and pontoons are likely to be affected, along with some quayside property including the 300 year old Ferryboat Inn. This location is unlikely to justify any investment but continuing to monitor shoreline evolution and water levels during extreme events will be an important aspect of local management and adjustment of the frontage to the increasing flood risks. Improvements to the flood warning service may assist at Helford Passage (including the use of more

community based warnings) but ultimately some adjustment and increased resilience measures will be necessary. The preferred plan for a non-interventional approach will generally support the core objectives of the Fal & Helford SAC and prevent loss of intertidal area through coastal squeeze. Several historical features including, coastguard station, boat house, lime kiln, Helford Passage Public House and pillbox may potentially be affected by increasing flood risk through time. Recreational use would generally be unaffected by the plan although loss of quays in longer term may be detrimental.



At **Gweek Quay**, holding the line along the existing quay defence lengths will assist in managing future increase in flood risks due to sea level rise, which is quite extensive around the quay area (see inset map, below right). A hold the line approach which applies only to the north Gweek Quay and the Lower (south) quay would help to sustain important socio economic benefits that link to the village. Historical interest in the quay structures and walls would be maintained through HTL.



It is important to note that the HTL policy only covers the consented extent of the quays. An un-consented section at the southern most end of the north quay is not covered and the SMP Review recommends its removal and re-instatement of the natural intertidal habitat under the MR approach for the remainder of Gweek.

The managed realignment policy preferred for the more extended **Gweek** frontage away from the quays will provide good opportunity for the creation of new intertidal habitat and it will also provide the basis for adaptation and improved resilience of the Gweek village frontage. . The shoreline and its habitats will continue to be modified by the Gweek Quay structures and natural processes constrained in that area. Preferred plan will generally support the landscape value and the AONB designation and the managed

realignment element will be beneficial to nature conservation objectives. However the Habitat Regulations Assessment has identified that some loss of intertidal habitat may result from the hold the line policy which is preferred for the quay frontages. A variety of historical features and listed buildings in the Quay area would be safeguarded under the plan.

No significant risks are indicated at **Helford**. A no active intervention approach is preferred. This plan should not preclude local maintenance of small sections of Council owned walls if required.

Flushing - Limited erosion risk exists. Flood risk is slight. NAI would not preclude local management of the private defences which defend 1 or 2 properties and the road. A number of historical sites exist close to waters edge but none significantly affected by the preferred plan. Recreational use would generally be unaffected by the plan although ongoing sea level rise may be detrimental in longer term.

Gillan - Limited erosion risk exists. Flood risk is slight. NAI would not preclude local management of the private defences which defend 1 or 2 properties and the road. A number of historical sites exist close to waters edge, including submarine ancient forest but none significantly affected by the preferred plan.

The economic assessment for Management Area 14 provides a narrowly positive benefit / cost ratio of 1.16. There is therefore sensitivity to increasing or decreasing costs (see the Economic Summary Table below and Appendix H). The majority of costs for this frontage relate to the defences along the quaysides at Gweek (but the assessment has not included the unconsented section of the main quay). Modest costs for the implementation of managed realignment along the Gweek village frontage are also included within the benefit / costs analysis for Management Area 14 and supported through the analysis.

SUMMARY OF PREFERRED PLAN RECOMMENDATIONS AND JUSTIFICATION PLAN:

Location reference:	**Helford**
Management Area reference:	**MA14**
Policy Development Zone:	PDZ5

PREFERRED POLICY TO IMPLEMENT PLAN:	
From present day (0-20 years)	NAI along undefended estuary banks and at small settlements. NAI at Durgan. NAI at Helford Passage. HTL at Gweek Quay. NAI at Helford. NAI at Flushing. NAI at Gillan.
Medium term (20-50 years)	NAI along undefended estuary banks and at small settlements. NAI at Durgan. NAI at Helford Passage. HTL at Gweek Quay. NAI at Helford. NAI at Flushing. NAI at Gillan.
Long term (50 -100 years)	NAI along undefended estuary banks and at small settlements. NAI at Durgan. NAI at Helford Passage. HTL at Gweek quay. NAI at Helford. NAI at Flushing. NAI at Gillan.

SUMMARY OF SPECIFIC POLICIES

Policy Unit		**SMP1 Policy**	**SMP2 Policy Plan**			
		50 yrs	**2025**	**2055**	**2105**	**Comment**
14.1	Undefended Estuary Banks (and including undefended estuary communities)	***Not considered in SMP1***	NAI/MR	NAI/MR	NAI/MR	Meets the wider scale objectives of the Fal & Helford SAC. Some small-scale flooding risks exist at Porth Navas, St Anthony in Meneage
14.2	Durgan	***Not considered in SMP1***	NAI	NAI	NAI	Several listed properties indicated to be at risk.
14.3	Helford Passage	***Not considered in SMP1***	NAI	NAI	NAI	Manage flood risks to people through improvements to flood warning service.
14.4	Gweek Quays (north & south quays)	***Not considered in SMP1***	HTL	HTL	HTL	It is important to note that the HTL policy only covers the consented extent of the quay. An un-consented section at the southern most end of the north quay is not covered and the SMP Review recommends its removal and re-instatement of the natural intertidal habitat under the MR approach for the remainder of Gweek. Refer to policy mapping.
14.5	Gweek	***Not considered in SMP1***	MR	MR	MR	Managed realignment along the banks of the estuary adjacent to the Gweek Quay frontages could provide some valuable habitat creation opportunities.
14.6	Helford	Hold the line	NAI	NAI	NAI	No significant risks are indicated. NAI approach should not preclude local

Policy Unit		SMP1 Policy	SMP2 Policy Plan			
		50 yrs	2025	2055	2105	Comment
						maintenance of small sections of Council owned walls if required.
14.7	Flushing	***Not considered in SMP1***	NAI	NAI	NAI	Limited erosion risk exists. Flood risk is slight. NAI would not preclude local management of the private defences.
14.8	Gillan	***Not considered in SMP1***	NAI	NAI	NAI	Limited erosion risk exists. Flood risk is slight. NAI would not preclude local management of the private defences.
Key: HTL - Hold the Line, A - Advance the Line, NAI – No Active Intervention MR – Managed Realignment						

ENVIRONMENTAL ASSESSMENT

Strategic Environmental Assessment (SEA):

In general, the long-term policy plan for the Helford Estuary is for NAI along undefended estuary banks and at small settlements with HTL used selectively at the settlement of Geek to maintain current standards of defence. Key environmental interest features to benefit the no active intervention policy include Lower Fal & Helford Intertidal SSSI, Meneage Coastal Section SSSI, Merthen Wood SSSI, Rosemullion SSSI and Cornwall AONB.

However a policy of no active intervention may impact upon historic sites such as Promontory Fort and Civil War Battery, Little Dennis Head (SM) and various Listed Buildings associated with Quays (see Annex 1), while HTL will have a minor negative impacts on the Fal & Helford SAC. This will generally occur through constraints to the expansion of intertidal mudflat around Gweek as a response to sea level rise and resulting coastal squeeze. In addition, there is a potential for reduced exposure of intertidal mudflats as a result of sea level rise, however, in the area of HTL, natural topography would provide the same constraint as the existing quay edge, such that no noticeable loss of migration space would occur to the naturally constrained intertidal habitat that is affected by coastal squeeze. Consequently, the policy along the quay edge results in the same effect as that with natural change, and therefore no decline in favourable condition of this element of the mudflats and sandflats conservation objectives would arise.

Habitat Regulations Assessment (HRA):

MR is proposed for Gweek with HTL at Gweek Quays. HTL at Gweek Quay Quays could result in constraints to the expansion of intertidal habitat as a response to sea level rise and resulting coastal squeeze. The amount of potential intertidal habitat loss is not currently known due to a number of factors, not least the estuary wide response to sea level rise in the form of intertidal accretion rates. As HTL only occurs along the existing consented quays which is outside the SAC Site, erosion of **0.05ha** of land would occur immediately downstream of the quay, which would not be constrained by the quay or the policy. There is also a potential for reduced exposure of intertidal mudflat habitat as a result of sea level rise, however, in the area of HTL, natural topography would provide the same constraint as the existing quay edge, such that no noticeable loss of migration space would occur to the naturally constrained intertidal habitats that are affected by coastal squeeze. Furthermore, intertidal habitat migration will also be able to occur outside the Site within the estuary. Consequently, the policy along

the quay results in the same effect as that with natural change, and does not prevent intertidal expansion elsewhere within the estuary or adjacent to the Site, therefore no decline in favourable condition of the intertidal mudflat habitats would arise, and no adverse effect on integrity of the Site is expected.

IMPLICATION WITH RESPECT TO BUILT ENVIRONMENT

Economics Summary		by 2025	by 2055	by 2105	Total £k PV
Property	Potential NAI Damages (£k PV)	402.0	290.0	163.0	855.0
	Preferred Plan Damages (£k PV)	194.9	114.2	49.8	358.9
	Benefits of preferred plan (£k PV)	207.1	175.8	113.2	496.1
	Costs of Implementing plan £k PV	213	107	106	426
			Benefit/Cost ratio of preferred plan		1.16

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