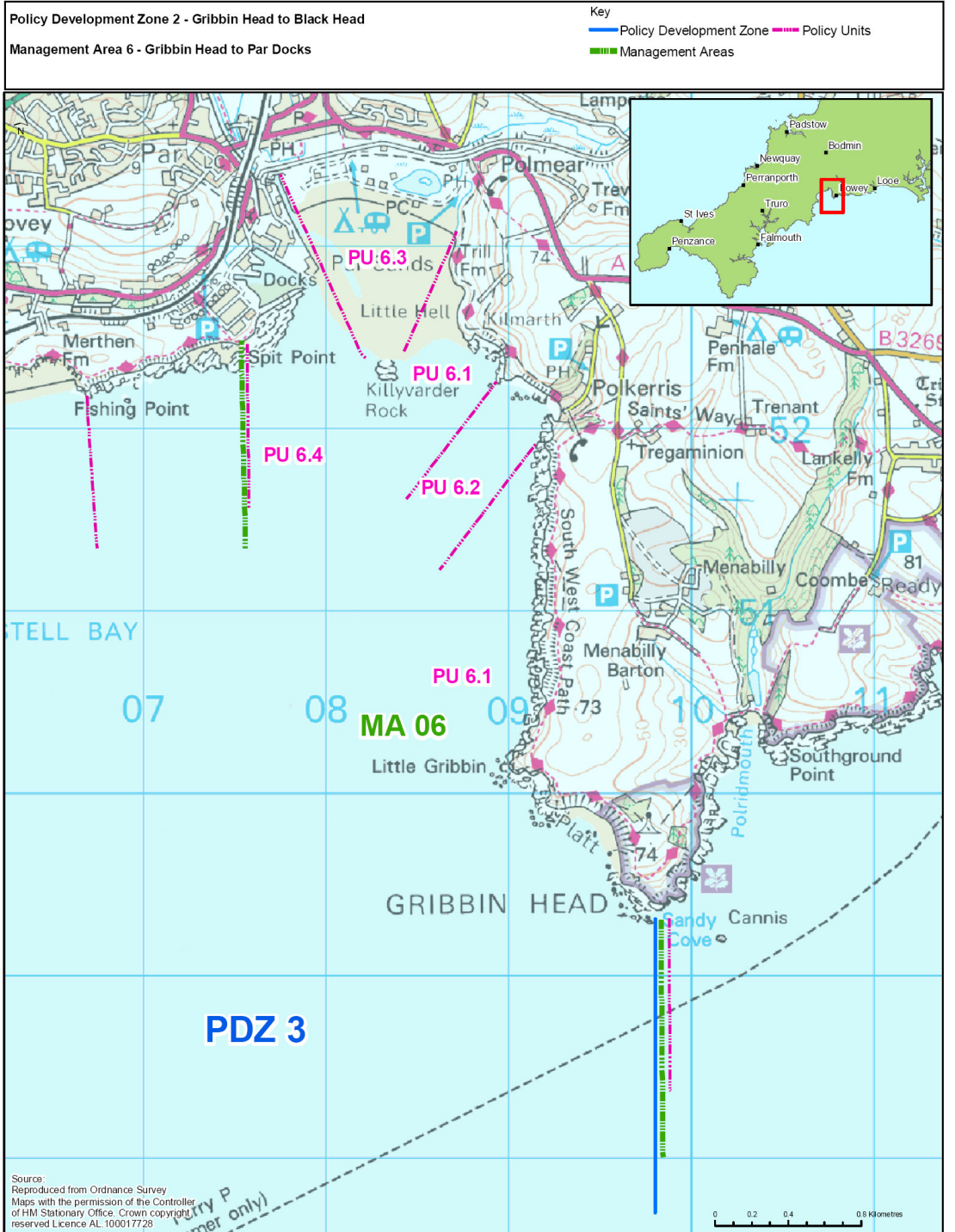


Location reference: Gribbin Head to Par Docks
Management Area reference: MA06
Policy Development Zone: PDZ3



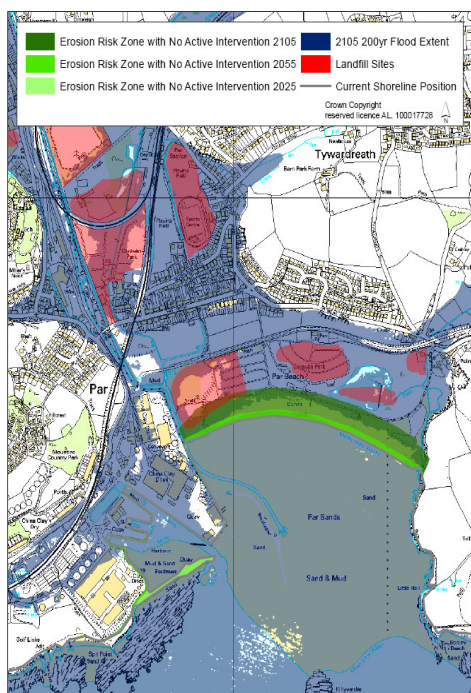
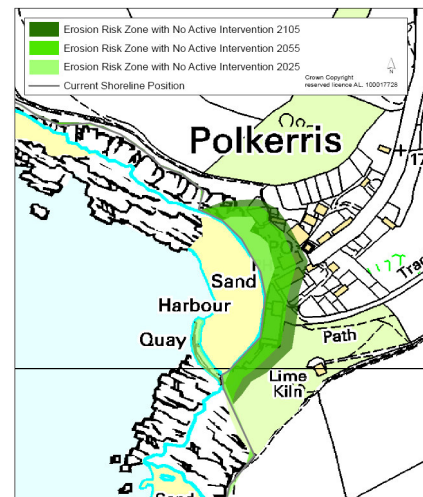
Cornwall & Isles of Scilly Shoreline Management Plan Review	

DISCUSSION AND DETAILED POLICY DEVELOPMENT

The entire undefended coastal section from Gribbin Head to Par Sands (including the settlement of Polkerris) is designated as both AONB and Heritage Coast. It is the intention of the plan to satisfy the objectives for this area (with the exception of Polkerris) with a no active intervention policy. The anticipated continuation of the South West Regional Coastal Monitoring Programme's collection of both directly and remotely sensed data for the beaches, cliffs, nearshore sea bed and hydrodynamic climate (waves and tides) should remain the only management intervention.

At **Polkerris**, The Heritage Coast and AONB designations are augmented with a designated conservation area. The assessment of erosion and flood risks has shown that a significant part of the settlement, including the Grade II listed Rashleigh Inn, and the adjacent No.15 and adjoining fish curing cellars are at risk from erosion within 50 years (see inset map, below). Much of the settlement and harbour walls (which are also listed structures) are owned by the Duchy of Cornwall. Although relatively sheltered within St Austell Bay itself, Polkerris still has significant exposure to the dominant south-westerly wave climate which dictates considerable expenditure to hold the line.

A future strategy which allows the roll back of the shoreline position and realignment of the harbour-side area may prove to be the most beneficial and cost effective approach in the longer term.



Therefore an over-arching policy of realignment in the longer term is preferred, but this would not preclude local management intervention by the Duchy in order to manage risks to property and life, particularly during the short to medium term. The impacts of realignment over the longer terms could significantly impact the Conversation Area and a strategy should be put in place to manage the impact.

A benefit cost ratio of 4.60 suggested by the economic appraisal indicates that there is likely to be financial justification for an interventional managed realignment approach at Polkerris (though private funding required).

As noted, the coastal change impacts are considered significant to the community and as

such the Local Development Framework should identify Polkerris as a Coastal Change Management Area to support community adaptation against climate change.

The already significant tidal flood risks at **Par** are exacerbated through the epochs due to sea level rise. The assessment of future flood and erosion risks has indicated that by 2025, some 407 properties will be at risk during a 0.5% tidal flood event. This increases to 487 by 2055 and 590 by 2105 (see inset map, left).

The magnitude of this risk in one of Cornwall's more deprived areas indicates that preferred policy must manage the risks to both life and property and in addition give direction to a sustainable community regeneration strategy. Possible erosion and recession of the mean high water position may reach 100m by 2105, which would affect the Par Sands Caravan Park. Depending on how the dunes are allowed to roll back in response to sea level rise, there would also be implications for the natural flood defence currently provided by the beach and dunes. The Cornwall Sand Dune Study concluded that careful management of the dune system would be necessary in order to prevent inundation of the low-lying land behind and that the current position of the caravan park could constrain natural movement of the dunes. It also concluded however that the beach in its current condition was likely to be able to adapt to climate change without showing significant problems in the short to medium term.

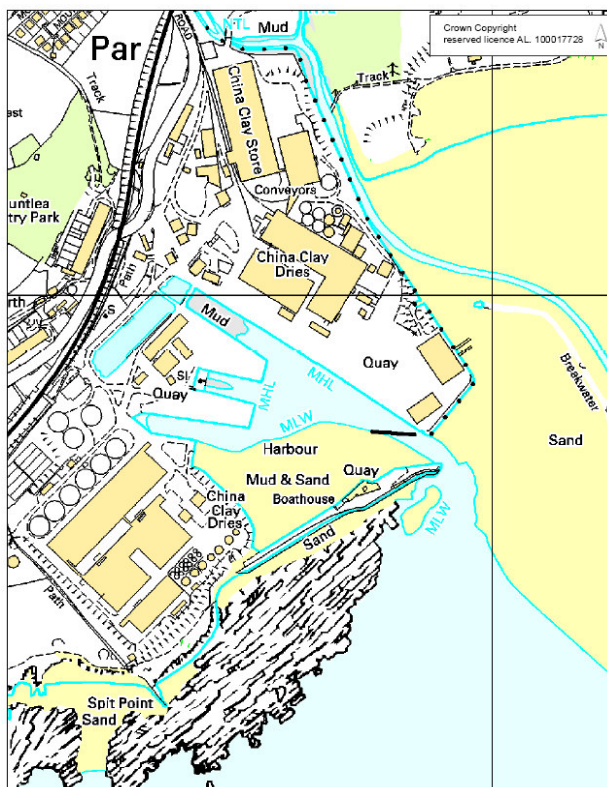
With landward migration of the dunes by up to 100m in 2105 potentially impacting on the Caravan Park and hence the economy of Par, the Local Development Framework should consider whether to identify this area as a Coastal Change Management Area. Certainly it should provide direction on the future adaptation of Par and St Blazey from increased flood risks due to climate change. This should include reference to any Par and St Blazey Flood Risk Management Strategy.

The current policy at Par is Do Nothing – the very significant flood risks suggest that as a minimum, the risks to life and property could be managed through a policy of managed realignment. The primary rationale behind moving to MR at Par would be to facilitate the natural roll back of the dunes in response to sea level rise. The nature of land use behind the dunes dictates that this would need to be at least a partially managed process. The Land Use Planning System will need to consider the value of the holiday park in situ versus the constraints it will place upon a natural migration of the dune system. The value of the area as UK BAP habitat must be acknowledged and potential enhancement of the site could be achieved through expanding the area which is available for the dunes to migrate within.

An additional consideration at Par is the presence of significant historic landfill sites close to the back face of the dunes (shown in the inset map, above). At the western end of the dunes, the largest area of landfill is indicated to be possibly impacted upon by erosion by 2105. Due to the presence of the landfill and the nature of land use behind the dunes, it is preferable to undertake no active intervention during epoch 1, whilst ascertaining the level of risk posed by the landfill and a suitable strategy for adaptation and roll back of the dunes and immediate hinterland. The presence of the Imerys haulage route into Par Docks will require further consideration but it is possible it could dictate the position of a future defensive line. Alternatively it may require re-routing

within the 50–100 year epoch, but this would depend on the nature of its future use, given the changing role that the docks will play as part of the local regeneration strategy.

Par Docks as indicated above and shown in the inset map, below, are currently undergoing a change in their purpose and utilisation. Within recent history, Par Docks have been the main point of exit for the majority of the china clay mined in the St Austell area. With the principal port operations now moving to Fowey, the docks at Par have been undergoing gradual wind down. A recent boost for the docks has been the go-ahead received for the St Austell Eco Town. Emerging plans for the docks include redevelopment for residential units, commercial units, hotel and marina. As a key part of the regeneration process within the area, the docks and their future use must help to dictate the policy locally. Any regeneration plans should be guided towards a long-term sustainable frontage and therefore any holding of the current defence line is no longer supported. The preferred approach will be a period of managed realignment during epoch 1, followed by a no active intervention approach during epochs 2 and 3. In terms of coastal processes there is thought to be insignificant sediment connectivity with the adjacent units and the preferred policy here will have limited impacts to either side, however the docks themselves provide a level of control over the geomorphology of the western end of Par Sands. There is no significant historical interest within the dock area.



SUMMARY OF PREFERRED PLAN RECOMMENDATIONS AND JUSTIFICATION PLAN:

Location reference:	Gribbin Head to Par Docks
Management Area reference:	MA06
Policy Development Zone:	PDZ3

PREFERRED POLICY TO IMPLEMENT PLAN:	
From present day (0-20 years)	NAI along undefended cliff sections. MR at Polkerris. NAI at Par Sands. MR at Par Docks
Medium term (20-50 years)	NAI along undefended cliff sections. MR at Polkerris. MR at Par Sands. NAI at Par Docks.
Long term (50 -100 years)	NAI along undefended cliff sections. NAI along undefended cliff sections. MR at Polkerris. MR at Par Sands. NAI at Par Docks.

SUMMARY OF SPECIFIC POLICIES

Policy Unit		Policy Plan			Comment
		2025	2055	2105	
6.1	Undefended cliffs	NAI	NAI	NAI	Continuation of existing policy from SMP1. Meets objectives relating to the AONB and Heritage coast designations.
6.2	Polkerris	MR (with localised HTL)	MR (with localised HTL)	MR (with localised HTL)	MR is subject to land-use planners agreeing that a roll back policy is best option for Polkerris. Policy does not preclude landowner of defences and properties (Duchy of Cornwall) from maintaining harbour and defences in current position in short-medium term but HTL may become unsustainable in long term.
6.3	Par Sands	NAI	MR	MR	Investigate landfill risks and identify possible strategy for MR & dune roll back into hinterland. Identification of this area as a 'Coastal Change Management Area' within the land use planning system may be necessary.
6.4	Par Docks	MR	NAI	NAI	Strategic importance of docks to sustainable regeneration of local area. However some realignment to allow for sea level rise & to improve longer term sustainability should be considered in line with Par Sands and to move toward a non-interventional frontage.
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 plan between Gribbin Head to Par Docks is for NAI across the undefended sections of the coastline with MR used selectively at settlements to maintain current standards of defence. The NAI policy will allow natural processes to prevail benefiting the Cornwall AONB and heritage coast and MR will continue to provide protection to residential and commercial properties and assets and the following key features: Polkerris Harbour; Par Sands Caravan Park; Mainline Railway and station; Par Harbour; No 15 and Adjoining Fish Curing Cellars (LB); Rashleigh Inn (LB); Harbour Pier (LB); Cottage North East of Rashleigh (LB); No 24 (LB); Remains of Fish Cellars and Net Lofts (LB); and Lime Kiln (LB).

However, the policy of MR will seek to provide an over-arching roll back of the shoreline and realignment which will require close monitoring to ensure no long-term impacts occur to the development and infrastructure associated with this management area in particular Par Sands and Little Hell Cove and Polkerris Beach. The policy of MR may also have an impact upon the saline lagoon BAP priority habitat located near Par Sands in that the policy may influence the chemical composition of the lagoon and lagoon extents in response to MR which will require roll back of the near by dunes. Contaminated soils / landfill may also be a concern along this section of the coast.

Habitats Regulation Assessment (HRA):

HTL policies are proposed at Par Docks, Charlestown, and Porthpean, with MR proposed at Polkerris, Charlestown, and Porthpean. These policy locations are an extensive distance (at least 6km) from all Sites and therefore no direct or indirect effects 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)	2882.9	2003.3	714.9	5601.2
	Preferred Plan Damages (£k PV)	0.0	1224.1	815.0	2039.1
	Benefits of preferred plan (£k PV)	2882.9	779.3	-100.1	3562.1
	Costs of Implementing plan £k PV	662	87	26	775
				Benefit/Cost ratio of preferred plan	4.60