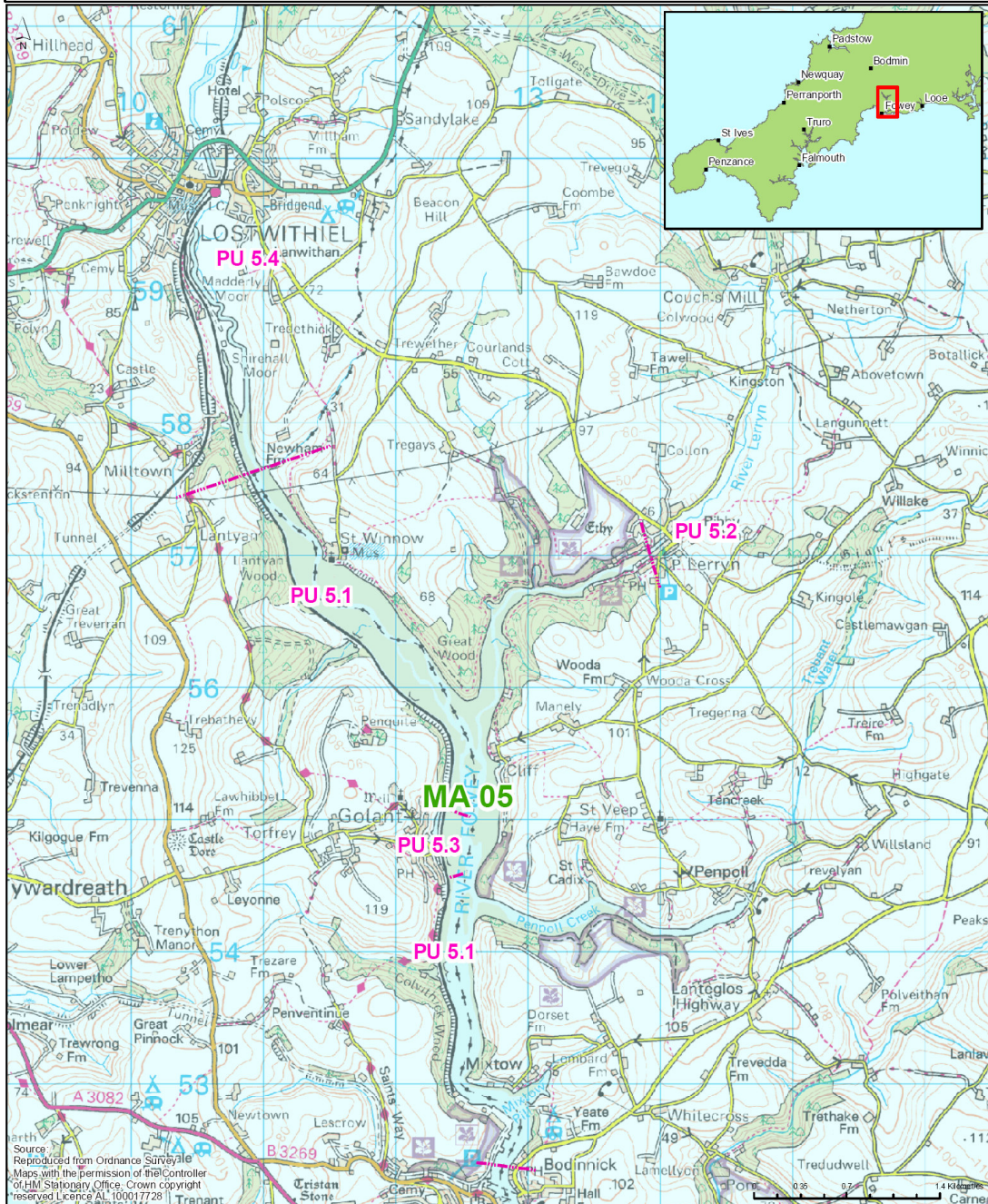




**Location reference:** Fowey Estuary (above Mixtow) including tributaries  
**Management Area reference:** MA05  
**Policy Development Zone:** PDZ2

Policy Development Zone 2 - Pencarrow Head to Gribbin Head  
 Management Area 5 - Fowey Estuary

Key  
 — Policy Development Zone    Policy Units  
 Management Areas



Cornwall & Isles of Scilly  
Shoreline Management Plan Review

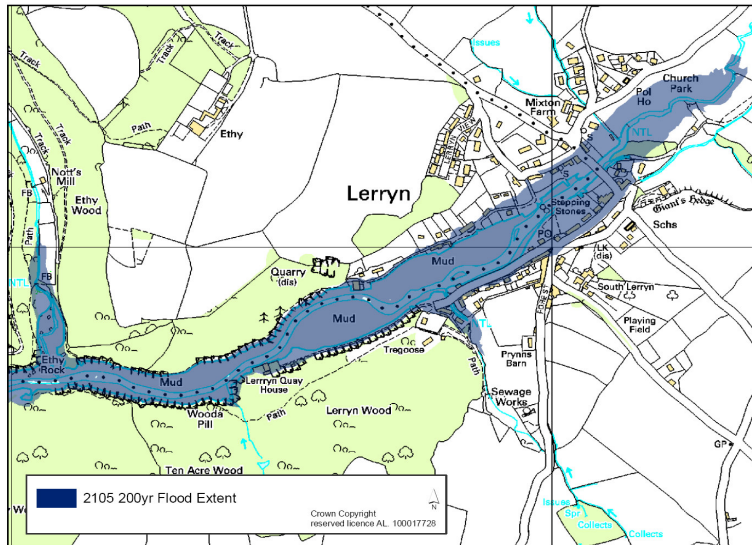






## DISCUSSION AND DETAILED POLICY DEVELOPMENT

**Undefended intertidal estuary** – much of the undefended and unpopulated shoreline of the upper estuary is steep-sided with a lack of associated flood risk. There are a number of discrete and historic waterfront quays and hamlets located within the upper estuary, away from the settlements of Lostwithiel, Golant and Lerryn. The intention of the plan is to allow these sections of the estuary to continue

to be managed under a policy of no active intervention.



**Lerryn** – the small settlement of Lerryn has a number of listed buildings and is a designated conservation area. Current flood risks exist with around 30 properties at risk by 2105 (see inset map, left). There are no existing defences at Lerryn so the intention here is to manage

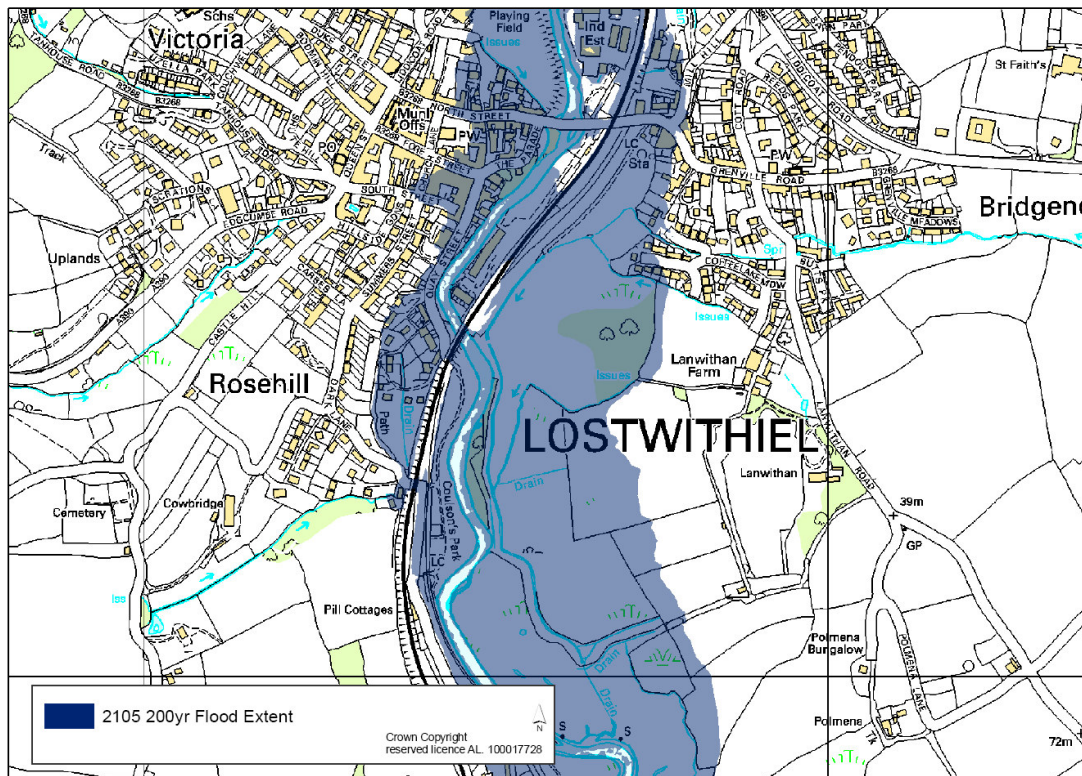
flood risk by increasing resilience and continuing to provide the Environment Agency tidal flood warning service. Improvement of this service to provide a community tailored service will be an important element of increasing resilience.



**Golant** – on the right hand bank of the estuary, Golant is partly defended by the defacto defence formed by the railway embankment. There is some present-day flood risk to the road which runs alongside the estuary (Water Lane) but limited risk to property. Flood risk by 2105 is not likely to increase significantly – the intention is to continue with the existing management regime (effectively a non-intervention policy, accepting that the railway embankment will be maintained by Network Rail) whilst Golant should continue to be served by the Environment Agency's

tidal flood warning service. Improvement of this service to provide a community tailored service will be an important element of increasing resilience.

**Lostwithiel** – The existing flood risk at Lostwithiel (which is already significant) is set to increase considerably through to 2105, by which point it is likely in excess of 250 residential and commercial properties will be at risk during a 1 in 200 year event. The existing combination of earth embankments, masonry walls and concrete channels will need to be maintained and upgraded if the present standard of defence is to be maintained.



The intended plan is to manage the flood risk through a policy of hold the line, with localised managed realignment being brought in to assist in adapting the frontage to sea level rise. This intent should make reference to the statement of management set out for Lostwithiel within the East Cornwall CFMP. The economic appraisal for Management Area 5 produced a benefit to cost ratio of 0.37 (as presented in the Economic Assessment Summary Table below and in Appendix H). Whilst this well below unity figure is a function of the long stretches of river side defence through the town, it is likely that actual maintenance would not be required on all defences concurrently and actual costs would be kept lower in this way, through a process of gradual improvement (and realignment where required).

There are also potential opportunities for habitat creation through realignment of the flood banks immediately south of Lostwithiel. These opportunities are to be looked at in more detail as part of a tidal flood scheme study for Lostwithiel, planned to be undertaken by 2014. This study will also form a basis for implementation of defence improvements to maintain current standards of protection. Implementing a policy of hold the line within the town itself should satisfy the heritage objectives to protect the

extensive conservation area, large numbers of listed buildings, Lostwithiel's historic bridge and railway line.

## SUMMARY OF PREFERRED PLAN RECOMMENDATIONS AND JUSTIFICATION

### PLAN:

<b>Location reference:</b>	<b>Fowey Estuary (above Mixtow) including tributaries</b>
<b>Management Area reference:</b>	<b>MA05</b>
<b>Policy Development Zone:</b>	<b>PDZ2</b>

PREFERRED POLICY TO IMPLEMENT PLAN:	
<b>From present day (0-20 years)</b>	No active intervention across the wider estuary with hold the line policy used selectively at settlements to maintain current standards of defence where necessary.
<b>Medium term (20-50 years)</b>	No active intervention across the wider estuary with hold the line policy used selectively at settlements to maintain current standards of defence where necessary. Selective use of MR at Lostwithiel to facilitate habitat creation.
<b>Long term (50 -100 years)</b>	No active intervention across the wider estuary with hold the line policy used selectively at settlements to maintain current standards of defence where necessary. Selective use of MR at Lostwithiel to facilitate habitat creation.

### SUMMARY OF SPECIFIC POLICIES

Policy Unit		Policy Plan			Comment
		2025	2055	2105	
5.1	Undefended intertidal areas	NAI	NAI	NAI	Retain natural and unspoilt characteristics. Some possible impacts on historic environment.
5.2	Lerryn	NAI	NAI	NAI	Flood risk will increase with sea level rise. Community resilience important. Tailored tidal flood warning service required. NAI policy does not preclude private investment in maintaining defacto defences.
5.3	Golant	NAI	NAI	NAI	Allows for maintenance of the railway embankment as defacto defence.
5.4	Lostwithiel	HTL	HTL/ MR	HTL/ MR	Majority of town protected, some MR possible in southern approaches to Lostwithiel.
Key: HTL - Hold the Line, A - Advance the Line, NAI – No Active Intervention MR – Managed Realignment					

### ENVIRONMENTAL ASSESSMENT

#### Strategic Environmental Assessment (SEA):

For the Fowey Estuary (above Mixtow) including tributaries, the long-term policy is for NAI across the wider estuary with NAI policy used selectively at settlements to maintain current standards of defence through resilience. The NAI policy will benefit the lowland woodland BAP priority habitats. Managing flood risk by increasing resilience and continuing to provide the Environment Agency tidal flood warning service will continue to provide protection to the settlements of Lostwithiel and Lerryn including the conservation area.

#### Habitats Regulations Assessment (HRA)

HTL policies are proposed at Polruan, Fowey, Readymoney Cove, Lerryn, and Lostwithiel. These policy locations are an extensive distance (at least 15km) from all Sites with the exception of the Polruan to Polperro SAC. However, no HTL policy occurs within this SAC, rather HTL at Polruan is the closest to the Site boundary but would not result in indirect hydrodynamic effects that would affect the Site features.



**IMPLICATION WITH RESPECT TO BUILT ENVIRONMENT**

Economics Summary		by 2025	by 2055	by 2105	Total £k PV
<b>Property</b>	Potential NAI Damages (£k PV)	1074.7	677.8	357.6	2110.1
	Preferred Plan Damages (£k PV)	537.4	338.9	178.8	1055.1
	Benefits of preferred plan (£k PV)	537.4	338.9	178.8	1055.1
	Costs of Implementing plan £k PV	1417	712	708	2838
		Benefit/Cost ratio of preferred plan			0.37

**Notes**

High cost of defence management in the vicinity of Lostwithiel results in B/C ratio below unity, particularly as costs increase with sea level rise and the need to continue to protect the low lying town.

=0=0=0











