

Seaforth to River Alt (I 1a 8)



Recommendations:

Overview:

The long term plan will be to manage erosion risk to property and infrastructure if and when threatened by erosion but as far as possible allow natural processes to continue. Through adoption of this approach, accretion could mean that little intervention is actually required. Elsewhere, for example at Hightown, localised defence could be acceptable, in conjunction with holding the river channel away from the beach to prevent erosion. By managing erosion risk, the majority of the social objectives are met. The limited intervention required in the majority of areas also supports many of the natural objectives by allowing the dune system to provide a natural means of defence.

Location (Policy Unit)	Policy and Approach (from 2010)			Justification		
	0-20 years	20-50 years	50-100 years	Social	Environmental	Economic
8.1 Seaforth to Mersey Estuary Pollution Alleviation Scheme (MEPAS) MEPAS pumping Station	Hold the Line – Only intervene where assets are at risk. Maintain existing defences to appropriate standard. Maintain Alt training walls.	Hold the Line – Only intervene where assets are at risk. Maintain existing defences to appropriate standard. Maintain Alt training walls.	Hold the Line – Maintain existing defences to appropriate standard. Maintain Alt training walls.	Manages risk to Crosby, Blundelsands and buried infrastructure. If buried infrastructure is relocated in the medium / long term, the long term policy of HTL should be reassessed.	Holding the line manages the risks from potential contamination issues along the golf club frontage.	The economic viability of the policy may depend on benefits that could accrue from avoiding pollution from erosion of landfill and alternative costs of relocating buried infrastructure.
8.2 Mersey Estuary Pollution Alleviation Scheme (MEPAS) pumping Station to Hightown	Managed Realignment - Allow natural processes to continue, with minimal intervention to maintain outfalls deflecting the Alt channel away from the shore.	Managed Realignment – Allow natural processes to continue, with minimal intervention to maintain outfalls deflecting the Alt channel away from the shore.	Managed Realignment – Only construct set back defences when assets within Hightown and / or railway justify. Allows natural processes to continue, outfalls deflecting the Alt channel away from the shore should be maintained.	Manages risk to assets at Hightown.	Maintains natural processes, natural development of dune system (part of Sefton Coast SAC) & helps support designated conservation areas, which are currently accreting.	Natural frontage, with no economic justification for intervention with formal defences.
8.3 Hightown to mouth of the River Alt (east bank)	Hold the Line – Through limited intervention and dune management. Maintain Alt training walls. Additional training walls may be required to deflect the Alt channel in the future.	Hold the Line – Through limited intervention and dune management. Maintain Alt training walls. Additional training walls may be required to deflect the Alt channel in the future.	Hold the Line – Through limited intervention and dune management. Maintain Alt training walls. Additional training walls may be required to deflect the Alt channel in the future.	Manages risk to assets at Hightown.	Maintains natural processes, natural development of dune system and helps support designated conservation areas.	The economic viability of the policy may depend on the inclusion of social benefits to Hightown and environmental benefits to the Sefton Coast SAC.
8.4 River Alt mouth (east and west banks) to the Alt pumping station	Hold the Line – Maintain channel training defences.	Hold the Line – Maintain channel training defences.	Hold the Line – Maintain channel training defences.	Manages risk to assets at Hightown and in large Altmouth catchment.	Maintains river channel position, helping manage erosion risks to the dunes.	The economic viability of the policy relates to the Altmouth pumping station managing flood risk to a large inland area.

Key assumptions made during development

Future behaviour of the shoreline will depend upon the discharge regime for the pumped River Alt. It has been assumed that the training works will be maintained to hold the Alt Channel away from the shore.

Uncertainty surrounding the rates of accretion and potential benefits from preventing contamination and hence, consequence on the required level of investment to defend this frontage, will need to be explored as part of the supporting investigations detailed in the Action Plan. Economic justification needs to be examined in more detail at strategy level and opportunities for co-funding need to be investigated.

Policy delivery may be compromised by funding prioritisation and therefore opportunities for co-funding need to be investigated.

The SMP policies will be subject to review if sea level rise predictions are changed.

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Predicted Implications of the Policies being Adopted in this Location :

Time period from 2010	Property and population	Land use, infrastructure and material assets	Amenity and recreational use	Historic environment	Landscape character and visual amenity	Earth heritage, soils and geology	Water	Biodiversity, flora and fauna
0-20 years	+ Manages flood and erosion risks to Crosby and Hightown.	+ Manages erosion risk to infrastructure and material assets.	- Potential loss of part of West Lancashire Golf Course.	● No known impacts on the historic environment.	● No designated landscapes within the scenario area.	+ Continued accretion of the dunes (unless the dunes stop accreting naturally).	<ul style="list-style-type: none"> ● Maintenance of the River Alt training walls will ensure no known impacts on the River Alt. - Potential release of contaminants associated with erosion of dunes north of the Mersey Estuary Pollution Alleviation Scheme (MEPAS) pumping Station under a managed realignment policy. 	<ul style="list-style-type: none"> + Likely continued accretion of the dunes and intertidal habitat within international and national conservation sites and potential natural roll-back of dunes. + Where managed realignment, potential increase in extent of intertidal habitats.
20-50 years	As above	As above	As above	As above	As above	As above	As above	<ul style="list-style-type: none"> + Some accretion of the dunes and intertidal habitat within international and national conservation sites and potential natural roll-back of dunes. + Where managed realignment, potential increase in extent of intertidal habitats.
50-100 years	As above	As above	As above	As above	As above	As above	As above	<ul style="list-style-type: none"> + Minimises risk of adverse impacts on international conservation site features (e.g. sand dunes and intertidal habitats). ● Potential loss of intertidal habitat (and associated BAP species) in some areas due to coastal narrowing in areas within and outside of designated sites.

Impact colour key	+ Positive	● Neutral	- Negative
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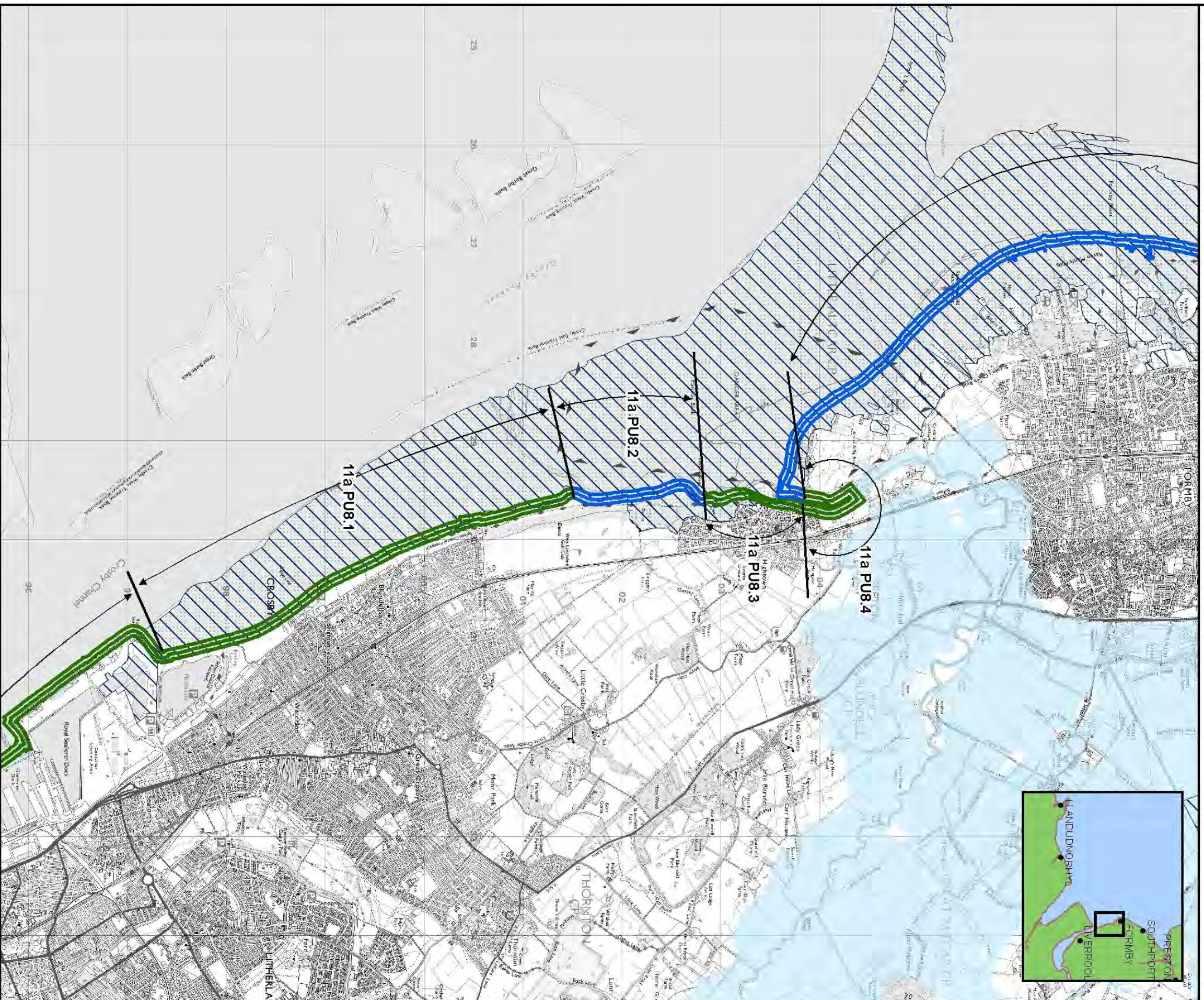
ACTION PLAN

Action	Action Ref	Action Description, (to be approved)	Potential source of funding (subject to approval)	Lead authority and key partners	To start by (subject to funding)	Outcome
1. Studies for policy area	1.1	Complete the Crosby to Formby strategy studies, taking account of SMP findings and a more detailed habitats regulations assessment to determine the approach to delivery of coastal flood and erosion risk management	EA	SC	2011 - 2014	An adopted strategy setting out a sustainable management approach
	1.2	In consultation with Natural England, develop a more detailed approach to the management and training of the Alt channel in order to minimise erosion risks to properties and infrastructure and the natural environment.	EA	SC, EA, NE	2011- 2014	A management plan with suitable triggers for action
2. Studies for Policy Units: PU 8.2	2.1	Investigate the hazard that the erosion of dunes north of the MEPAS pumping station poses to people and the environment from leaching or the release of contaminated materials.	EA	SC	2013-2016	Improved understanding of risk
3. Strategy	3.1	Finalise and adopt the Crosby to Formby strategy that defines details of approaches to managing the coastal defences.	EA	SC	2015	An adopted strategy setting out a sustainable management approach
4. Scheme Work	4.1	To be defined by strategy	EA	SC	ongoing	Actions identified in Long Term Plan.
5. Monitoring (Data Collection)	5.1	Undertake estuary and coastal defence asset monitoring in conjunction with Cell 11 Regional Monitoring Strategy to inform strategy and future SMP reviews	EA	SC	ongoing	Data provided to CERMS provides improved evidence base for future decision making
	5.2	Environmental monitoring of designated habitats within international conservation sites to provide baseline data for future Habitat Regulations Assessments	n/a	NE	ongoing	
6. Asset Management	6.1	Maintenance of defences and beach and dune management including management of public access	SC, LO	SC	ongoing	Maintenance undertaken to required standards.
7. Communication	7.1	Undertake consultation with key stakeholders and general public during strategy development	EA	SC	ongoing	Participative planning
	7.2	Monitoring and management of Action Plans by the NWNWCG to confirm SMP policies are put into practice	n/a	NWNWCG	ongoing	NWNWCG reports on progress
8. Interface with Planning and Land Management	8.1	Advise local Planning Authority about SMP policies and flood and erosion risks so they can be accounted for in the next revisions of land use plans in order to help manage residual risks from flooding and erosion.	n/a	SC, EA	ongoing	Coastal flood risks considered in land use plans.
	8.2	Advise local Planning Authority about SMP policies and flood and erosion risks so they can take due account in planning decisions and aim to reduce the need to manage flood risk in future.	n/a	SC, EA	ongoing	Coastal flood risks considered in planning decisions.
9. Emergency Response	9.1	Development, monitoring and review of emergency response plans to prepare for over design standard events.	n/a	SC	ongoing	Coastal flood risks considered in emergency plans.
10. Adaptation/Resilience	10.1	Develop an adaptation strategy to manage risks and allow natural roll-back of assets located within or adjacent to the dunes to facilitate natural roll-back of the dune system	EA / Defra	SC	2011	Management of risk
11. Flood Forecasting and Warning	11.1	Continue to improve flood risk maps and inundation modelling, particularly in areas where there are dunes and promenades and areas benefiting from these defences are not currently shown.	EA	EA	ongoing	Improved flood warnings and risk mapping, raising awareness of coastal risks.
12. Habitat Creation and environmental mitigation	12.1	Monitor progress with dune management and restoration in PU 8.2 & 8.3 and link to dune habitat strand of RHCP.	n/a	NE, SC	ongoing	Improved understanding
	12.2	Undertake a Habitat Regulations Assessment for the strategy and link mitigation to RHCP.	EA	SC, NE, EA	2015	Meet legal requirement
	12.3	Seek opportunities for habitat enhancements during strategy development as part of flood/erosion risk management works e.g. consider scrub control at Hightown within the Sefton Coast SAC	EA	SC, NE	2011	Objectives set for strategy

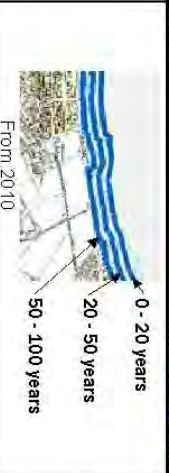
NB Activities from SMP will be carried forward into medium term plans and carried out on a priority basis, subject to funding and approval. n/a = activity is part of authorities general duties, not funded through flood and erosion risk management routes. EA = Environment Agency; LO = land owners; NE = Natural England; NWNWCG = North West and North Wales Coastal Group; RHCP = regional Habitat creation Programme; SC = Sefton Council.

North West England and North Wales Shoreline Management Plan 2

Sub-Cell 11a: Area: 8 Map: 1



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| | National Nature Conservation Designations |
| | International Nature Conservation Designations |
| | Scheduled Monuments |
| | Coastal flood risk area under extreme events, Environment Agency Flood Map 2008 |
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| | Hold the Line (HTL) |
| | Managed Realignment (MR) |
| | No Active Intervention (NAI) |
| | Policy Unit Boundary |
| | Policy Unit Extent |



Note that the policy lines on the map show the preferred shoreline management policy for each period and do not represent either the shoreline or defence location.

Palcrow

Scale: 1:35,000

0 0.25 0.5 1 Kilometres

N

Boxes showing cumulative erosion estimates represent the expected minimum and maximum erosion distance from the shoreline position in 2010. They are only shown where there is a NAI policy and coastal erosion is the main risk.