

North West England North Wales Coastal Group Shoreline Management Plan

Shoreline Management Plan Guide

Wyre



Date: February 2023

Introduction

This booklet has been produced to provide an overview of the coastal geography, erosion and flooding risk and Shoreline Management Plan (SMP) policy as it applies to Wyre. The purpose of the leaflet is to provide a quick reference guide on the coastal management issues relevant to this coastline and the SMP policy response.

It is designed to be used by all stakeholders planning for development on the coast, including planners, coastal managers, asset owners and developers. Links are provided throughout the booklet to key parts of the SMP. In all cases, please refer to the current SMP for a fuller description of the SMP policy environment applicable to the Wyre coastline, and bear in mind any more recent strategies, studies and schemes. This booklet is based on information contained in the SMP, with an input from the relevant Local Authority.

The Shoreline Management Plan

The coast of England and Wales is covered by 22 Shoreline Management Plans (SMPs).

A Shoreline Management Plan (SMP) is a strategy for managing flood and erosion risk for a particular stretch of coastline, over short, medium and long-term periods. SMPs identify the best ways to manage coastal flood and erosion risk to people and the developed, historic and natural environment.

The SMP for North West England and North Wales (SMP22) covers the coast from Great Orme's Head to the Scottish border at the Solway Firth. This area is also known as Cell 11 and is divided into a series of Sub-cells.

The current (second generation) SMPs were developed by groups of Risk Management Authorities (RMAs), including the Environment Agency, coastal local authorities, Natural England and other key stakeholders. The second-generation SMP for North West England and North Wales was produced over the period 2009 to 2011 and published in 2012¹.

Although SMPs remain advisory rather than statutory documents they do set out an agreed 100-year strategy for coastal management, and are based on agreed objectives and high-level technical, economic and environmental assessments.

¹ <u>https://www.mycoastline.org.uk/shoreline-management-plans/</u>

Coastal Processes and Coastal Change in Wyre

A Lancashire coastal district with over 16km of coastline, bounded by the sea along parts of its western and northern boundaries, is very diverse in character, extending from the Pennine uplands in the east, across the rich agricultural mosslands of North Lancashire, to the coastal plain and the resorts of Fleetwood and Cleveleys. The Wyre Estuary is a relatively small, macro-tidal estuary, located along the southern shoreline of Morecambe Bay.

Characteristics

The Wyre coast is characterised by the open coast North of Anchorsholme. The Wyre Estuary is characterised by marshland. The open coast section from Knott-End is characterised by low-lying agricultural land fronted by large areas of saltmarsh and a wide sandy intertidal zone. The inter-tidal zone of Morecambe Bay and the estuaries are internationally important environmentally designated areas.

Processes

The north-south aligned coast is principally wind and wave dominated. Historically, the coastline has been subject to extensive flooding. Coastal flooding and erosion continued until the construction of coastal defences between the 1920s and 1930s from Cleveleys to Rossall Point and the 1960s around Fleetwood. The most recent major flood events occurred in 1927 and 1977 (Wyre Council, 2004). The northern facing coastline is characterised by sand dunes fronted by a wide sand beach, which forms part of the extensive sand banks at the mouth of the River Wyre. Extreme high water levels throughout the Wyre Estuary are caused by a combination of marine surges and high tidal levels. In the inner estuary extreme water levels are exacerbated by fluvial floods. The shoreline between Knott End and Pilling, once fronted by sand dunes, has more recently experienced periods of erosion, possibly due to the removal of material from the Fleetwood foreshore during the 1800s. Wave attenuation, across the wide expanse of intertidal sand, limits wave exposure at the shoreline, however, the frontage is susceptible to storm surges.

Defences

The northern section of the west-facing shoreline is characterised by a mixed sand and shingle beach backed by a sea wall and groynes. These defences protect lowlying land, which is mostly developed. The vast areas of flood risk at Fleetwood, Cleveleys and Knott End and development lying within those areas justify continuing to provide appropriate flood risk resources in the long-term. Defences in the estuary include seawalls, revetments, and embankments, alongside areas that are undefended. Parts of the upper Wyre estuary are proposed for managed realignment, to allow realignment back to high land. Along the open coast, from Knott-End, the longterm plan is to continue to provide protection against flooding to property and infrastructure, however, managed realignment is proposed as an option to some locations along the frontage, with an opportunity to recreate saltmarsh.

For more information on the existing (at time of writing of SMP) coastal characteristics, processes and defences in Wyre, see the North West Shoreline Management Plan Main Document (Section 3.2), Appendix C (Introduction and Sections C4 H, I and J) and Appendix D

- SMP Main Document FINALV2.pdf OneDrive (live.com),
- Appendix C Introduction FINAL.pdf Microsoft Word Online (live.com),
- Appendix C OneDrive (live.com) and
- <u>Appendix D OneDrive (live.com)</u>.

North West Shoreline Management Plan (SMP)

All SMPs consider four standard policy options. SMPs set out the management approach for a specific length of coast as either:

- Hold the Line (HTL) maintain or improve the current standard of protection.
- Advance the Line (ATL) move defence alignments seawards.
- Managed Realignment (MR) allow the shoreline to move backwards or forwards, but through a managed approach.
- No Active Intervention (NAI) no investment in defences, lets nature take its course.

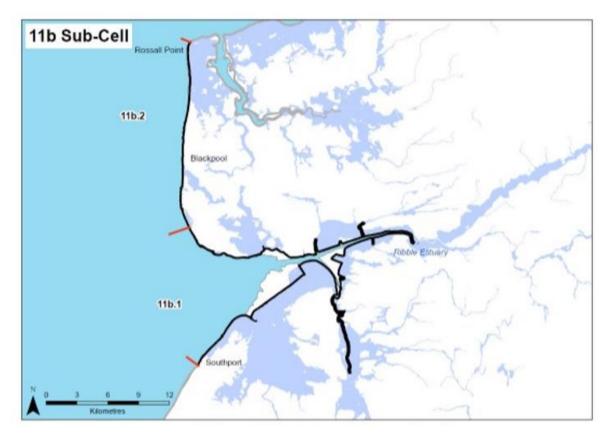
Policy options are broken down into three time horizons (epochs):

- the short term 0-20 years
- the medium term 20-50 years
- the long term 50-100 years

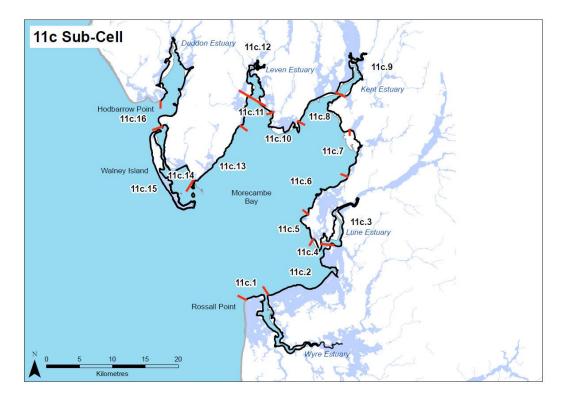
These time horizons provide direction on the timing of policy implementation, but are not absolute and there may be flexibility in the timing of policy transitions, taking into account factors like the rate of sea-level change, local studies, social and environmental factors.

The North West SMP extends between Great Orme's Head in North Wales and the Scottish Border. This area is known as Cell 11. It is divided into smaller sections of the coast known as Sub-cells. The relevant Sub-Cells for Wyre are 11b and 11c. This is broken down into Policy Areas, and those relevant are:

- 11b 2: St Annes to Rossall Point
- 11c 1: Fleetwood and Wyre Estuary
- 11c 2: Knott End to Glasson Dock



Map of Sub-Cell 11b Policy Area Locations



Map of Sub-Cell 11c Policy Area Locations

See the North West Shoreline Management Plan Main Document (Section 5.2) <u>SMP Main Document FINALV2.pdf - OneDrive (live.com)</u>

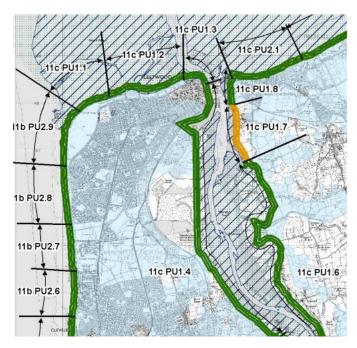
Coastal Management Policy Approach

Each Sub-cell is divided into smaller Policy Areas, themselves sub-divided further into Policy Units. Policy Areas consist of interacting areas of open coast or estuaries. For each Policy Area the SMP presents a Policy Statement that includes a summary of the long-term vision for the coast in question and describes the preferred policies (HTL etc.) for each Policy Unit. As mentioned above, there is some flexibility in the timing of the implementation of the policy approach, and these should not be viewed as absolute dates. The policy approach along the Wyre coast is as follows:

Policy Area 11b.2 Policy Location Unit			Policy Approach (from 2010)	
		0-20 years	20-50 years	50-100 years
2.5	Anchorsholme Park to	Hold the line	Hold the line	Hold the line

Policy Area 11b.2		Policy Approach (from 2010)		
Policy Unit	Location	0-20 years	20-50 years	50-100 years
	Jubilee Gardens			
2.6	Jubilee Gardens to Five Bar Gate	Hold the line	Hold the line	Hold the line
2.7	Five Bar Gate to Rossall Hospital (Rossall School)	Hold the line	Hold the line	Hold the line
2.8	Rossall Hospital to Chatsworth Avenue	Hold the line	Hold the line	Hold the line
2.9	Chatsworth Avenue to Rossall Point	Hold the line	Hold the line	Hold the line
11c.1 and 2				
1.1	Rossall Point to Marine Lake East	Hold the line	Hold the line	Hold the line
1.2	Marine Lake to Fleetwood Pier	Hold the line	Hold the line	Hold the line
1.3	Fleetwood Pier to Fleetwood Ferry	Hold the line	Hold the line	Hold the line
1.4	Fleetwood to Stanah	Hold the line	Hold the line	Hold the line
1.5	Stanah to Cartford Bridge (south bank) and Cartford	Hold the line	Managed Realignment	Managed Realignment

Policy Area 11b.2			Policy Approach (from 2010)	
Policy Unit	Location	0-20 years	20-50 years	50-100 years
	Bridge to to Shard Bridge (north bank)			
1.6	Shard Road (A588) to golf course	Hold the line	Hold the line	Hold the line
1.7	Knott End Golf course	No Active Intervention	No Active Intervention	No Active Intervention
1.8	Golf course to Knott End on Sea	Hold the line	Hold the line	Hold the line
2.1	Knott End on Sea	Hold the line	Hold the line	Hold the line
2.2	Knott End to Fluke Hall	Hold the line	Hold the line	Hold the line
2.3	Fluke Hall to Cocker Bridge	Hold the line	Hold the line OR Managed Realignment	Hold the line



Extract of Policy Statement map showing Policy Units

For full details see the relevant Policy Statement for the Policy Area in the SMP (main documents>Annex 1 Policy Statements) <u>Annex 1 Policy</u> <u>Statements - OneDrive (live.com)</u>

Implications of the Management Approach

Each Policy Statement in the SMP includes a table of predicted implications of the policies being adopted for each location, over the three different time horizons of the SMP. This includes implications for property, the historic environment and biodiversity. Examples of potential planning impacts across Wyre, <u>but are not limited to</u>:

Epoch 1 - 2010-2030

- Potential erosion of Knott End Golf Course and Wyre Country Park
- Manages flood and erosion risk to Cleveleys and Fleetwood
- Manages risk to material assets and infrastructure (e.g. A587 and A585 coastal roads) and docks

Epoch 2 - 2030-2060

- Potential loss or need for relocation of Wyre Way in some sections where managed realignment or no active intervention
- Increased flood and erosion risk to isolated properties
- Increased erosion of Knott End Golf Course and Wyre Country Park
- Continued management of flood risk to Fleetwood and Thornton, including the Hillhouse site
- Gains of habitat inland of areas of managed realignment

Epoch 3 - 2060-2110

- Beach lowering and erosion and sea level rise may affect the amenity use of some beaches at Fleetwood
- narrowing and steepening of Pilling Sands Beach (Preesall), which may reduce its overall amenity value.

For full details see the relevant Policy Statement for the Policy Area in the SMP (main documents>Annex 1 Policy Statements>'predicted implications of the Policies being Adopted in this location' table) <u>Annex 1 Policy Statements - OneDrive (live.com)</u>

Environmental Impacts of the SMP

The SMP describes the environmental effects of the preferred policies. In Wyre these are in the short-term and medium-term an overall net gain of intertidal saltmarsh, sandflat and mudflat within Morecambe Bay and its associated estuaries and net gain of dunes at Fleetwood. However, uncertainty relating to localised gains and losses due to volatility of channel movements. In the long-term overall gains and losses of intertidal and dunes are highly uncertain due to response of the Bay and estuaries to sea level rise and potential future management including implementation of managed realignment.

For full details see the SMP Main Document (Section 2.6), the relevant Policy Statement for the Policy Area in the SMP (main documents>Annex 1 Policy Statements) and Annex 1 of Appendix I 'SEA'

- <u>SMP Main Document FINALV2.pdf OneDrive (live.com)</u>,
- Annex 1 Policy Statements OneDrive (live.com) and
- <u>Appendix I OneDrive (live.com)</u>

Securing the Management Approach

The management approaches set out in the SMP are subject to funding and therefore are not guaranteed to be implemented. The National Planning Policy Guidance (NPPG, 2022) directs that the Environment Agency should be able to provide advice on this. Evidence may also be available in existing strategies and studies, which in Wyre includes the Wyre Flood and Coastal Defence Strategy Review – Coastal Processes Report (July 2012).

Flood and Erosion Risks

Maps of the shoreline management *Policy Units* and policies are provided in the SMP. These detailed maps can be used to identify the Policy Units relevant to your length of coastline. An extract of a Policy Statement map is shown above. Where NAI is the policy and coastal erosion is the main risk, cumulative erosion estimates are included, representing the minimum and maximum erosion distance from the shoreline position as of 2010. The flood extents are from The Environment Agency flood mapping (2008). It should be noted that the EA is continually updating its maps and these should be regarded as an update to those presented in the SMP.

Integrated Coastal Zone Management

The National Planning Policy Framework (NPPF, 2021) requires 'Integrated Coastal Zone Management should be pursued across local authority and land/sea boundaries, to ensure effective alignment of the terrestrial and marine planning regimes' (paragraph 170). In this regard, the SMP provides a long-term view (up to 2110). Some Policy Areas of the SMP overlap authority boundaries. In Wyre these are:

- 11b 2: St Annes to Rossall Point Blackpool Council
- 11c 1: Fleetwood and Wyre Estuary Fylde Council
- 11c 2: Knott End to Glasson Dock Lancaster Council

SMP Policy - Potential Planning Implications, taking into account national planning policy and guidance (NPPF (2021) and NPPG (2022))

- Local planning authorities where Hold The Line (HTL) management is proposed

 obtain evidence that this management approach can be secured. Where there
 is uncertainty about the implementation of HTL policies, consider the need for a
 Coastal Change Management Area (CCMA) Local Plan designation and policy.
- Local planning authorities CCMA Local Plan designation required in areas of No Active Intervention (Knott End Golf course Policy Unit 1.7) and Managed Realignment (Stanah to Cartford Bridge (south bank), Cartford Bridge to Shard

Bridge (north bank) Policy Unit 1.5 and Fluke Hall to Cocker Bridge Policy Unit 2.3).

- Consider the need for the relocation of assets (such as properties, roads and coastal paths), by identifying locations where existing development and infrastructure may not be sustainable in the long term, such as those in areas of No Active Intervention and Managed Realignment, and where there is uncertainty of HTL.
- Review the potential for habitat creation and natural flood management in areas of Managed Realignment.
- Local planning authorities Identify land which is likely to be needed for flood and erosion risk infrastructure (including access to that land and land needed temporarily during construction) and consider allocating these sites, such as land for Managed Realignment.
- Consider the use of community infrastructure levy or planning obligations to fund area wide flood management improvements, including natural flood management.
- Working with adjoining local planning authorities Fylde, Blackpool and Lancaster.

Overview

- Along the coast from Anchorsholme Park through to Rossall Point, the long- term plan is to continue to provide defence structures along present lines, with some improvements to beach and dune management where required, and consistent with management of the Fleetwood and Wyre estuary frontages due to potential flood linkages.
- The long-term plan is to continue to provide protection to the outer reaches of the Wyre estuary and northern coast of Fleetwood. In the upper reaches of the estuary, the vision is to allow a more naturally functioning system with realignment opportunities.
- No Active Intervention is proposed at the coast at Knott End golf club.
- For the northern coast from Knott End to Pilling, the long-term plan is to continue managing flood and erosion risks, although there is an opportunity to recreate saltmarsh along this frontage through managed realignment.

References

Department for Levelling Up, Housing and Communities (2021) National Planning Policy Framework.

Department for Levelling Up, Housing and Communities (2022) National Planning Practice Guidance – Flood Risk and Coastal Change.

Halcrow (2011) North West England and North Wales Shoreline Management Plan SMP2. North West & North Wales Coastal Group. Main report and appendices.

Halcrow (2012) Wyre Flood and Coastal Defence Strategy Review Coastal Processes Report. Wyre Borough Council.