

Report to:- **Carlisle City Council**

Date of Meeting:- **14th September 2010**

Agenda Item No:-

Public

Title:- **SHORELINE MANAGEMENT PLAN ADOPTION**

Report of:- **Assistant Director (Economic Development)**

Report reference:- **ED.25/10**

Summary:-

The Shoreline Management Plan (SMP) for the area Great Orme's Head in North Wales to the Scottish Border includes the coastal area from Burgh Marsh to the Scottish Border within Carlisle District. It also sets out an action plan over three time periods 0-20 years, 20-50 years and 50-100 years. This is a review of the existing SMP which was produced in 2000. As part of the process Carlisle City Council are required to formally adopt the Plan.

The attached report was considered by Executive at its meeting on the 2nd September 2010 and resolved:

“That the North West England and North Wales Shoreline Management Plan for Carlisle City Council Coastline be referred to the City Council to consider adoption of the policies.”

Recommendation:-

That the North West England and North Wales Shoreline Management Plan for Carlisle City Council Coastline be adopted

Contact Officer: Helen Renyard

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Chris Hardman

Assistant Director (Economic Development)

03 September 2010

Note: in compliance with section 100d of the Local Government (Access to Information) Act 1985 the report has been prepared in part from the following papers: Executive report ED.23/10



REPORT TO EXECUTIVE

PORTFOLIO AREA: ECONOMIC DEVELOPMENT AND LOCAL ENVIRONMENT

Date of Meeting: 2nd September 2010

Public

Key Decision: Yes

Recorded in Forward Plan: Yes

Inside/Outside Policy Framework

Title: SHORELINE MANAGEMENT PLAN ADOPTION
Report of: ASSISTANT DIRECTORS (ECONOMIC DEVELOPMENT AND LOCAL ENVIRONMENT)
Report reference: ED 23/10

Summary:

This report sets out the policy approach for the Shoreline Management Plan (SMP) for the area Great Orme's Head in North Wales to the Scottish Border which includes the coastal area from Burgh Marsh to the Scottish Border within Carlisle District. It also sets out an action plan over three time periods, 0-20 years, 20-50 years and 50-100 years. This is a review of the existing SMP which was originally produced in 2000. As part of the SMP process Carlisle City Council, along with other maritime local authorities, will be required to formally adopt the North West England and North Wales Shoreline management Plan review (SMP2).

Recommendations:

It is recommended that Executive refer the North West England and North Wales Shoreline Management Plan for the Carlisle City Council Coastline to Council to consider adoption of the policies

Note: in compliance with section 100d of the Local Government (Access to Information) Act 1985 the report has been prepared in part from the following papers: None

Contact Officer: Helen Renyard

Ext: 8545

1. BACKGROUND INFORMATION AND OPTIONS

Shoreline Management Plans (SMPs) are part of the Flood and Coastal Erosion Risk Management planning framework. The SMP sets the long term policy for the coast and is taken forward through shoreline strategies and schemes. The relevant parts of the draft SMP2 for the Carlisle District are enclosed in Annex 1.

This is the first review of the SMP that was undertaken over 10 years ago and the review was started in 2008. Carlisle City Council's coastline is part of Coastal Cell 11, which runs from Great Ormes Head in Llandudno to the Scottish Border in the Solway Firth, and in this review there is one SMP2 for the whole length, including the many large estuaries.

As part of the North West England and North Wales Coastal Group, Blackpool Council has taken the lead on procuring a consultant to undertake the SMP2 and managing the SMP2 process on behalf of all the Coastal Authorities and the Environment Agency. Blackpool Council gained funding from Defra (now administered through the Environment Agency) to undertake the SMP for the English coastline and Conwy County Borough Council gained funding from the Welsh Assembly Government (WAG) for the Welsh coastline. Following an OJEU procedure Blackpool Council contracted with Halcrow Group consultants to assist with production of the SMP2.

The SMP2 has been undertaken in stages in accordance with the Defra 2006 guidance, which is supported by WAG. The guidance gives four possible policy options:

Hold the Line- maintain the existing coastline position

Advance the Line- move the coastline seaward

Managed Realignment- manage the movement of the coastline either landward or seaward

No Active Intervention- No significant public money put into management of the coastline.

The guidance states that a policy needs to be assigned to lengths of coastline over 100 years in each of three time epochs:

Short term- 0-20years

Medium term- 20-50years

Long term- 50-100years

Implications for Carlisle City Council

The draft policies for the Carlisle City Council covering Burgh Marsh to the Scottish Border varied from Hold the Line at Rockcliffe to No Active Intervention in other areas. However, during the consultation there were objections to the No Active Intervention policy. The No Active Intervention policy would mean that there would be very little chance of obtaining funding and approvals for works along the coastline. The areas originally covered by No Active Intervention have now been changed to Managed Realignment. Although there is insufficient economic justification for public funding of defences along much of the City Council's coastline at present, the policy Managed Realignment would allow for provision in future if the need arises. This policy still allows for private funding of defences if individuals and landowners wish to provide it, subject other necessary consent (i.e. planning approval, Land Drainage consent).

Part of the SMP documentation is the Action Plan which sets out actions that need to be undertaken to achieve the policy. Delivery of the SMP Action Plan forms part of the National Indicator 189 score for Carlisle City Council. NI 189 is used to report progress against Catchment Flood Management Plans (CFMP) (all Local Authorities) and Shoreline Management Plan development (maritime authorities only).

2. CONSULTATION

Consultation to Date – The SMP for North West England and North Wales underwent full public consultation between October 2009 and February 2010 with comments in some areas being allowed until the end of March 2010. The public were invited to make comments either in writing, via email, or in person at one of many consultation events that were held along the coast. A report detailing the consultation in the Carlisle City Council area is included in Annex 2.

The draft SMP2 was available at various council buildings along the coastline and press releases were issued from each council to advertise the public consultation. In addition all of the documents were available on the Coastal Group website at www.mycoastline.org. There were also public meetings and more local meetings to discuss the draft plan with stakeholders and the public.

All the comments that were received were reviewed by the project team to assess whether changes needed to be made to the draft plan. The consultant has amended the documentation as the result of changes and has written a consultation report. The consultation report which gives responses to the comments received has been published on the Coastal Group website for Stakeholders to see. A copy of the relevant parts of this report is included in Annex 2.

Comments from organisations in the Carlisle Area included a comment from English Heritage regarding World Heritage Sites, namely Hadrian's Wall. Their comments have allowed for the proposed policy to change for the coastline surrounding Hadrian's Wall from No Active Intervention to Managed Realignment. This will allow interested parties to protect the World Heritage Site subject to funding availability.

The Solway Coast AONB Partnership, through Cllr John Collier who is a member of the partnership, have had the opportunity to view the Plan and are satisfied with its proposed policies.

3. RECOMMENDATIONS

It is recommended that the Council adopt the policies set in the North West England and North Wales Shoreline Management Plan for the Carlisle City Council Coastline

4. REASONS FOR RECOMMENDATIONS

Adoption of the SMP2 will allow Carlisle City Council to apply for Grant in Aid from the Environment Agency for Flood and Coastal Protection Schemes. Adoption of SMP2 will give Carlisle City Council a tool to deliver sustainable development, flood and coastal erosion risk management over the long term. Adoption of the SMP2 will meet Defra's Outcome Measure 9 target.

5. IMPLICATIONS

- Staffing/Resources – None
- Financial – Without adoption of the SMP2 Carlisle City Council will jeopardise its ability to apply for grant funding from the Environment Agency for Coast Protection Works. This would then place more liabilities for Coast Protection works on the City Council.

- Legal – The SMP2 does not form part of the Local Development Framework but its content does inform the same and is taken into account. It also forms part of DEFRA’s strategy dealing with flood alleviation.
- Corporate – None
- Risk Management – The proposal will provide the Council with a tool to deliver sustainable development, flood and coastal erosion risk management over the long term. It should be used as evidence in the Local Development Frameworks.
- Environmental – The SMP2 has had to undergo a Habitats Regulations assessment to assess the impacts on European designate habitats. If there is likely to be an adverse impact on a European site then the SMP will need to go to the Secretary of State to be approved. This will also allow for the continuation of the Council’s policy to protect Hadrian’s Wall.
- Crime and Disorder – None
- Impact on Customers – The proposal will provide the Council with a tool to deliver sustainable development, flood and coastal erosion risk management over the long term. This may benefit customers by providing a mechanism for funding coastal protection to protect their homes.
- Equality and Diversity –

Impact assessments

Does the change have an impact on the following?

Equality Impact Screening	Impact Yes/No?	Is the impact positive or negative?
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Does the policy/service impact on the following?		
Age	No	
Disability	No	
Race	No	
Gender/ Transgender	No	
Sexual Orientation	No	
Religion or belief	No	
Human Rights	No	
Social exclusion	No	
Health inequalities	No	
Rurality	Yes	Positive

If you consider there is either no impact or no negative impact, please give reasons:

The managed realignment of the coast line will impact on some individuals although this will not be a particular sector of the community. The nature of the coastline is rural within Carlisle district and will therefore impact on rurality but this plan will provide clear policy direction.

If an equality Impact is necessary, please contact the P&P team.

North West & North Wales Coastal Group

North West England and North Wales Shoreline Management Plan SMP2

Main SMP2 Document – Consultation Draft



Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Approved by
1	0	1 st Working Draft – for PMB Review	14 th September 2009	A Parsons
	1	Consultation Draft	1 st October 2009	A Parsons

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I Introduction

I.1 The draft North West England and North Wales Shoreline Management Plan 2

What is this document?

A Shoreline Management Plan (SMP) provides a large-scale assessment of the risks associated with coastal erosion and flooding at the coast. It also presents policies to help manage these risks to people and to the developed, historic and natural environment in a sustainable manner. SMPs form an important part of the Department for Environment, Food and Rural Affairs (Defra) and Welsh Assembly Government (WAG) strategy for managing risks due to flooding and coastal erosion (Defra, 2006¹).

The first generation of SMPs were completed for the coastline of England and Wales about ten years ago and are now being reviewed to ensure that they take account of the latest available information and our current understanding of flood and coastal erosion risks.

What area does the SMP2 cover?

This document is the draft second generation Shoreline Management Plan (SMP2) for the shoreline which extends between Great Orme's Head in North Wales and the Scottish Border. This area is also known as Cell 11 and is shown in Figure 1.

The North West England and North Wales shoreline includes a number of large estuaries and is sub-divided using the following boundaries:

- Sub-cell 11a: Great Orme's Head to Southport Pier (including the Clwyd, Dee and Mersey Estuaries);
- Sub-cell 11b: Southport Pier to Rossall Point (including the Douglas and Ribble Estuaries);
- Sub-cell 11c: Rossall Point to Haverigg (including the Wyre, Lune, Kent, Leven and Duddon Estuaries);
- Sub-cell 11d: Haverigg to St Bees Head (including the Ravenglass estuary Complex); and,
- Sub-cell 11e: St Bees Head to the Scottish Border (including Morecambe Bay and the Eden estuary).

These sub-cell boundaries are also shown in Figure 1.



Figure 1: Map showing the shoreline of North West England and North Wales included in this SMP2.

¹ Defra (2006). Shoreline Management Plan Guidance. March 2006.

1.2 The Role of the North West England and North Wales Shoreline Management Plan 2

This Shoreline Management Plan 2 is a non-statutory, high level policy document for coastal flood and erosion risk management planning. It takes account of other existing planning initiatives and legislative requirements, and is intended to inform wider strategic planning.

The SMP2 will sit at the top of a hierarchy of Strategy and Scheme plans that the Environment Agency and Local Authorities use to plan their work to manage coastal risks, as explained in Table 1 below.

Stage	SMP (or CFMP ²)	Strategy	Schemes
Aim	To identify policies to manage risks	To identify appropriate schemes to put the policies into practice	To identify the type of work ³ that is needed to put the preferred scheme into practice
Delivers	A wide-ranging assessment of risks, opportunities, limits and areas of uncertainty	Preferred approach, including economic and environmental decisions	Compares the different options for putting the preferred scheme into practice
Output	Policies	Type of scheme (such as a seawall)	Design of work
Outcome	Improved long-term, strategic management for the coast	Management measures that will provide the best approach to managing floods and the coast for a specified area	Reduced risks from floods and coastal erosion to people and assets

Table 1: Stages in assessing coastal flood and erosion risk management (Defra (2006))

What will the SMP2 do?

The Government guidance for developing SMP2s (Defra, 2006) requires them to:

- identify sustainable and deliverable policies for managing coastal risks while working with natural processes wherever possible;
- promote management policies for the coastline over the next 100 years, to achieve long-term objectives that are technically sustainable, environmentally acceptable and economically viable;
- be realistic and consider known legislation and constraints, both human and natural, and not promise what cannot be delivered.

Further reviews of the SMP2 will be carried out in future years, when deemed necessary. Future reviews may include changes to policies, particularly in light of more detailed studies of the coastline.

1.3 The Objectives of the Shoreline Management Plan 2

What are the objectives that Defra and WAG say the SMP2 should address?

² A CFMP (Catchment flood management plan) is an equivalent policy level plan to SMPs dealing with flood risk from rivers

³ Schemes could include a variety of activities such as building a seawall or developing a flood warning service

- set out the risks from flooding and erosion to people and the developed, historic and natural environment within the SMP2 area;
- identify opportunities to maintain and improve the environment by managing the risks from floods and coastal erosion;
- identify the preferred policies for managing risks from floods and erosion over the next century;
- identify the consequences of putting the preferred policies into practice;
- set out procedures for monitoring how effective these policies are;
- inform others so that future land use, planning and development of the shoreline takes account of the risks and the preferred policies;
- discourage inappropriate development in areas where the flood and erosion risks are high; and
- meet international and national nature conservation legislation and aim to achieve the biodiversity objectives; and
- highlight areas where there are gaps in knowledge about the coast and produce an action plan to address these gaps.

The SMP2 must remain flexible to adapt to changes in legislation, politics and social attitudes. The SMP2 therefore considers objectives, policy setting and management requirements for three main epochs or timescales; the present day or short-term (0 to 20 years), the medium-term (20 to 50 years) and the long-term (50 to 100 years). The SMP2 should show that we aim to achieve a long term sustainable vision when considering decisions about coastal defence now.

What can I influence?

Whilst we are consulting on the SMP2 and this is a draft document, it is important to recognise that major changes to policies in the short term may not be possible. Setting policies over three timescales allows us to meet the objectives and put in place policies that provide opportunities for change in the future. Action Plans have been developed in draft to help put the policies into practice and we would like your comments on these proposals.

What are the policies that are used in SMP2s

The policies for managing the shoreline used in this SMP2 are defined in the Defra and WAG guidance as shown in Table 2.

Policy option	Description	Non-technical description
Hold the line	by maintaining or changing the standard of protection. This policy includes those situations where work is carried out in front of the existing defences (such as beach recharge, rebuilding the toe of a structure, building offshore breakwaters and so on) to improve or maintain the standard of protection provided by the existing defence line. It also includes work behind existing defences (such as building secondary flood defences) where this work would form an essential part of maintaining the current coastal defence system.	Keeping the shoreline in the same place

Policy option	Description	Non-technical description
Advance the line	by building new defences on the seaward side of the original defences. Use of this policy is limited to those policy units where significant land reclamation is considered.	Creating more land by moving coastal defences into the sea
Managed realignment	by allowing the shoreline to move backwards or forwards, in a managed way to control or limit risk (such as reducing erosion or building new defences on the landward side of the original defences).	Letting the shoreline move forward or backwards in a controlled way
No active intervention	where there is no justification to intervene with coastal defences or operations.	Letting nature take its course on the shoreline

Table 2 Descriptions of the four shoreline management policies used in SMP2

1.4 Shoreline Management Plan 2 Report Structure

This SMP2 is the result of numerous studies and assessments performed over a period of time. To cater for a wide audience, the SMP2 is presented in two parts:

- **Main SMP2 Document** (this document); and
- **Supporting Appendices** (a series of supporting documents to the management plan).

Main SMP2 Document

What is included in the Management Plan?

The Main SMP2 Document sets out the policies for managing the risks of coastal erosion and tidal flooding over the next 100 years. It is intended for a general audience and is the main way that we will let people know what the SMP2 policies are. Whilst the justification for decisions is presented, it does not provide all of the information behind the recommendations; this is contained in the supporting Appendices.

The Main SMP2 Document is presented in five parts:

- **Section 1 – Introduction (this part)** gives details on the principles, structure and background to the SMP2s development.
- **Section 2 – Environmental Assessment** presents a summary of the environmental assessments undertaken to confirm that the SMP2 policies comply with the requirements of European and National Directives and Regulations.
- **Section 3 – Overview of Shoreline Management Plan** presents an overview of the preferred policy options for shoreline management, and the reasons for their selection.
- **Section 4 – Action Plan** provides an introduction to the action plan which is a programme for future activities that are needed to progress the plan between now and its next review.
- **Section 5 – Policy Statements** provides a series of policy statements that give details of how the policies might be implemented and the local implications of these policies in terms of: management activities; property, built assets and land use; landscape; nature conservation; historic environment; and amenity and recreational use.

Although it is expected that many readers will focus upon the local details in Section 5, it is important to recognise that the SMP2 is produced for the North West England and North Wales coastline as a whole, considering issues that extend beyond specific locations. Therefore, the policy statements must be read in the context of the wider-scale issues and policy implications, as reported in Sections 2 and 3 and the appendices to the SMP2.

Supporting Appendices

What information is in the supporting appendices?

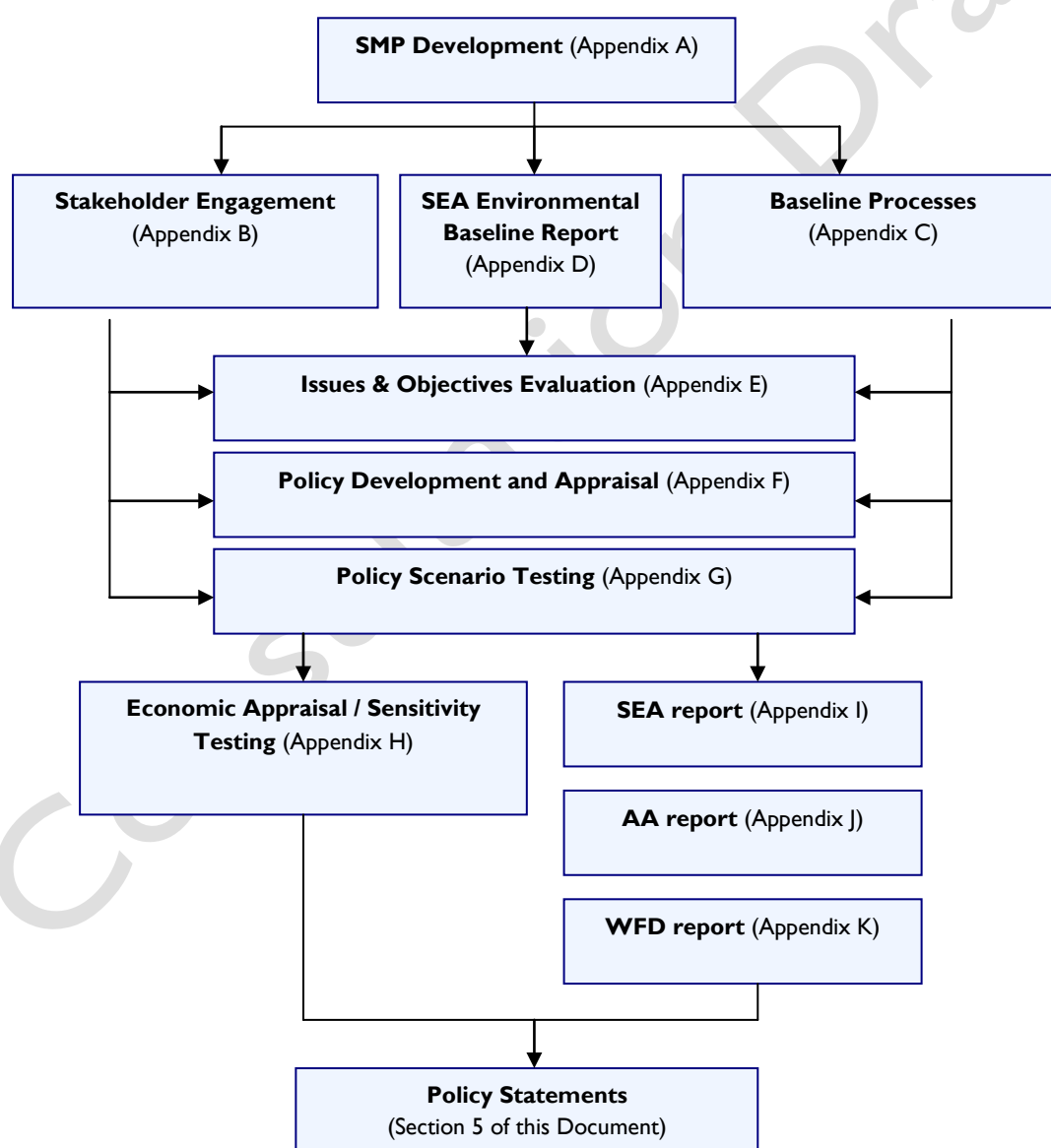
The supporting appendices provide all of the background information to the SMP2. These are provided to ensure that there is clarity in the decision-making process and that the rationale behind the policies being promoted is both transparent and auditable.

This information is largely of a technical nature and is provided in twelve parts:

- **Appendix A: SMP2 Development** reports the history of development of the SMP2, describing in more detail the policy decision-making process.
- **Appendix B: Stakeholder Engagement** stakeholders have had an important role in shaping the plan. All communications from the stakeholder process are provided here, together with information arising from the consultation process.
- **Appendix C: Baseline Process Understanding** includes baseline coastal process reports, defence assessments, No Active Intervention (NAI) and With Present Management (WPM) process assessments and summarises assumptions used in the assessments.
- **Appendix D: SEA Environmental Baseline Report (Theme Review)** identifies and evaluates the environmental features of the coastline (human, natural, historical and landscape) in terms of their significance and how these need to be accommodated by the SMP2.
- **Appendix E: Issues & Objective Evaluation** provides information on the issues and objectives identified as part of the Plan development.
- **Appendix F: Initial Policy Appraisal and Scenario Development** explains the development of a range of policy options for particular sections of coast into policy scenarios in order to help assess interactions between parts of the coast. The assessment of shoreline evolution and changes in coastal risks has formed a key part of determining the combinations of policies to make up the 'scenarios' for testing.
- **Appendix G: Policy Scenario Testing** a summary of the assessment and appraisal of the preferred policies, via (i) assessment of shoreline interactions and response against preferred policy; and (ii) assessment and achievement of the objectives against the baseline scenario (No Active Intervention) and the tested policies.
- **Appendix H: Economic Appraisal and Sensitivity Testing** provides a high-level assessment of the economic justification of each preferred policy and an assessment of sensitivities and uncertainties relating to these policies.
- **Appendix I: Strategic Environmental Assessment Report** draws together the work undertaken in developing the Plan that specifically relate to the requirements of the EU Council Directive 2001/42/EC (the Strategic Environmental Assessment Directive).

- **Appendix J: Appropriate Assessment** presents the assessment of the effects of the policies on European sites as required by the Habitats Regulations (Conservation (Natural Habitats &c.) Regulations 1994).
- **Appendix K: Water Framework Directive Assessment** presents an assessment of the effects of the policies on the water bodies as described in the River Basin Management Plans established under the Water Framework Directive and as required by the Water Environment (Water Framework Directive) (England and Wales) Regulation, 2003.
- **Appendix L: Meta-database and Bibliographic database** includes a database of supporting information used to develop the SMP2, referenced for future examination and retrieval.

The structure of the SMP2 documents, and how they relate to each other, is summarised in the flow chart below.



1.5 The Plan Development Process

How has the SMP2 been developed?

Development of the North West England and North Wales SMP2 has taken account of:

- SMP 1's;
- latest studies since SMP 1 (e.g. Futurecoast (Halcrow, 2002⁴), Cell 11 Transport and Sediment Study (CETaSS), various reports on climate change and national / regional mapping (e.g. Environment Agency flood risk mapping);
- issues identified by recent coastal defence planning (i.e. coastal defence studies and schemes that cover parts of the SMP2 area developed since completion of the original SMP) – see below for more details;
- changes in legislation (e.g. the EU Habitats and Birds Directives, Water Framework Directive);
- changes in national flood and erosion risk planning requirements (e.g. the need to consider 100 year timescales in future planning, modifications to economic evaluation criteria, etc.); and
- the results of coastal monitoring activities.

Throughout the SMP2 process it has also been important to work closely with other studies and projects to make sure that these plans are co-ordinated and coherent. A range of plans are being or have been developed to co-ordinate works for flood and erosion risk management in North West England and North Wales which link with the SMP2 and include:

- Catchment Flood Management Plans: Conwy and Clwyd, River Dee, Mersey, Upper Mersey, Alt and Crossens, Douglas, Ribble, Wyre, Lune, Kent and Leven, South West Lakes, Derwent and Eden;
- Strategy studies developed to determine approaches to delivery of SMP1 policies, including Formby to Crosby Strategy, Blackpool Shoreline Strategy, Walney Island strategy, Morecambe strategy, Denbighshire coastal strategy, Penrhyn and Colwyn Bay Strategy, and estuary studies for the Dee, Ribble, Lune, Wyre and Kent.

How has the work been managed?

Development of this SMP2 has been led by a Project Management Board made up of members of the North West and North Wales Coastal Group, including technical officers and representatives from Coastal Local Authorities, the Environment Agency, Natural England and English Heritage. The Project Management Board has been assisted by Client Steering Groups (covering the Sub-Cell shorelines) and an Environmental Sub-Group set up to oversee and review the environmental aspects of the Plan.

The SMP2 development has been greatly assisted by inputs from a large number of stakeholders, whose views have been sought at key decision-making points. Many of these stakeholders participated in the policy development process via Stakeholder Forums. A number of rounds of Stakeholder Forum meetings have been held at locations across North West England and North Wales. These have helped to identify and understand the issues, review the objectives, set direction for appropriate policy development, and review and comment upon the proposed SMP2 policies.

⁴ Halcrow (2002). **Futurecoast**. CD produced as part of the Futurecoast project for Defra.

In addition, all decisions made have been reviewed by a group of Elected Members (Local Councillors) and the Environment Agency's Regional Flood Defence Committee where appropriate to get input into policy development from those who will ultimately need to adopt or support the SMP2 policies.

What did the work involve?

The main activities involved in producing the SMP2 include:

- reviews reporting on themes of human, historic and natural environmental to identify features near the shoreline and issues relating them to shoreline management;
- developing and analysing issues and objectives for shoreline management to address for various locations along the shore;
- analysing coastal and estuarine processes and coastal change to let us know the impacts of not defending and/or continuing to defend the coastline as it currently is;
- agreeing key objectives and primary policy drivers with Stakeholders, to help determine scenarios of possible policy options;
- developing scenarios of policy options based on the key objectives and primary policy drivers for sections of the shoreline;
- examining coastal change in response to policy scenarios and assessing the implications for people and the historic and natural environment;
- determining the preferred plan and policies through review with Stakeholders, Elected Members, the Client Steering Group and Project Management Board, before compiling the SMP2 draft document; and,
- consulting on the proposed plan and policies (5th October 2009 to 10th January 2010).

What will happen after the SMP2 consultation?

Following the three month consultation period, the remaining activities to finalise the SMP2 will include:

- considering consultation responses and finalising the SMP2 so it can be formally adopted;
- adoption of the SMP2 by the local authorities and dissemination; and,
- Sign off of the SMP2 by the Environment Agency's National Review Group.

The finalised SMP2 will then be put into practice by the members of the North West and North Wales Coastal Group

Following adoption of the SMP2 it will be the responsibility of the North West and North Wales Coastal Group to ensure that the action plan is progressed by the appropriate Partners and where there are problems with delivery to seek to resolve issues through collaborative working.

2 Environmental Assessment

2.1 Introduction to Strategic Environmental Assessment

What is Strategic Environmental Assessment (SEA)?

Strategic Environmental Assessment (SEA) is the systematic appraisal of the potential environmental consequences of *high level* decision-making, such as policies, plans, strategies and programmes, before they are approved. The SEA provides environmental protection by ensuring that the environment is considered when preparing and adopting plans and programmes, with a view to promoting sustainable policy.

As SMP2s are not required by legislation, SEA is also not strictly required. However, SMP2s set a framework for future planning decisions, and have the potential to result in significant environmental effects, so in accordance with Defra guidance (Interim⁵, supplementary⁶, revised and current⁷), SEA has been undertaken for the North West England and North Wales SMP2.

The SEA process has been fully integrated into the work involved in the North West England and North Wales SMP2 development, enabling the impacts of a more strategic proposal on the wider environment to be taken into account. The advantage of this approach is that it enables focus on not only the physical environment, but also on other external factors, such as economic, technical and social factors.

Appendix I documents the SEA process undertaken for the SMP2 and demonstrates how, when developing this SMP2, the natural, built and historic environment has been considered alongside social, technical and economic issues in line with the SEA Directive's requirements.

A summary of the SEA carried out for the North West England and North Wales SMP2 is provided below.

2.2 Baseline Environment

What does the SEA say about the key environmental issues in the SMP2 area?

An SEA Environmental Baseline Report (Theme Review – **Appendix D**) was prepared, which summarises the existing environment within the SMP2 area and identifies key issues, including: -

- Population and human health – safety, security and social/physical well-being for occupants of properties within areas at coastal flood or erosion risk; population and properties are concentrated within the cities of Chester, Liverpool, Preston, Lancaster and Carlisle and other towns and villages. Recreation and tourism in the SMP2 area is centred on coastal holiday resorts (e.g. towns with promenades, pleasure piers and tourist attractions), open areas of natural coast, cycle routes and coastal footpaths, bathing beaches and formal recreational pursuit venues such as golf courses.
- Flora and Fauna – the importance of the plan area for wildlife is reflected in the large number of designations of international, national and local nature conservation sites. The SMP2 area is home to a variety of habitats including limestone pavements, cliffs, saltmarsh, mudflats, estuaries, sand dunes, grazing marsh, vegetated shingle, meadow, woodland, heathland, fen, saline lagoons and grassland. Opportunities exist to create wetland habitat in low-lying parts of the SMP2 area.
- Earth Heritage, Soils and Geology – there are numerous geological sites of national and local importance within the SMP2 area, but there are also potential areas of contamination and known landfill sites that need to be taken into account.

⁵ Defra (2003) Procedural Guidance for the Production of Shoreline Management Plans; Interim Guidance May 2003.

⁶ Defra (2004) Supplementary Procedural Guidance, 2004.

⁷ Defra (2006) SMP Guidance, March 2006

- Air and Climate – the long term effects of rising sea levels expected due to climate change could have significant implications for future flood risks to the natural, historic and built environment across large areas of low-lying land in the SMP2 area.
- Water – there are numerous coastal, freshwater, transitional (areas of water near river mouths, which are partially saltwater but influenced by freshwater) and groundwater bodies in the SMP area that have the potential to be affected by SMP policies. This SEA Report seeks to assess environmental effects of the preferred SMP policy scenarios on these water bodies, along with suggesting appropriate mitigation measures that could be implemented to ameliorate any adverse impacts. A Water Framework Directive (WFD) Assessment, which is contained within **Appendix K**, has also been prepared in order to include the environmental objectives of the WFD into the Shoreline Management Plan, through assessing the potential hydromorphological changes and consequent ecological impact of SMP policies.
- Landscape Character and Visual Amenity – Some areas of the SMP2 lie within nationally important landscapes including the Lake District National Park, Areas of Outstanding Natural Beauty and Heritage Coasts.
- Historic Environment – the SMP2 area contains a complex array of historic buildings (many of which are scheduled or listed), historic settlements and landscapes including Registered Parks and Gardens, and known archaeological sites that are a fundamental component of the regional identity. The SMP2 area also includes two World Heritage Sites (WHS); Hadrian's Wall and Liverpool Maritime Mercantile City.
- Land Use, Infrastructure and Material Assets – much of the land along the coastline is made up of a combination of good/moderate quality agricultural land, sand dunes, urban areas (see population below), MoD land, ports and harbours and major industrial sites. Infrastructure within the SMP2 area varies from rural roads to major transport linkages (e.g. airports, railway lines, motorways and A-roads). The SMP2 area is also important for energy production comprising offshore and onshore wind farms and gas, hydro and nuclear power stations.

2.3 Strategic Environmental Assessment Objectives

What are the Strategic Environmental Assessment (SEA) objectives?

Strategic Environmental Assessment objectives were identified for the SMP2 to appraise the preferred policy options during the assessment process. The following objectives were developed following identification of the key environmental features (or assets) and an understanding of the strategic environmental issues along the coastline.

- To support natural processes and maintain and enhance the integrity of internationally designated nature conservation sites and maintain / achieve favourable condition of their interest features (habitats and species)
- To avoid adverse impacts on, conserve and where practical enhance the designated interest of nationally designated nature conservation sites. Maintain/achieve favourable condition
- To avoid adverse impacts on, conserve and where practical enhance the designated interest of locally designated conservation sites

- To avoid adverse impacts on, conserve and where practical enhance national and local BAP habitats and species
- To support natural processes and maintain geological exposures throughout nationally designated geological sites
- To maintain and enhance features as a natural flood defence
- To manage any risk of change in quality of aquifers as a result of significant saline incursion
- To manage and minimise risk of pollution from contaminated sources
- To conserve and enhance nationally designated landscapes in relation to risks from coastal flooding and erosion and avoid conflict with AONB and National Park Management Plan Objectives
- To minimise coastal flood and erosion risk to scheduled and other internationally, nationally, locally and regionally important cultural heritage assets, sites and their setting
- To minimise the impact of policies on marine operations and activities
- To minimise coastal flood and erosion risk to critical infrastructure and maintain critical services.
- To minimise coastal flood and erosion risk to agricultural land and horticultural activities
- To minimise coastal flood and erosion risk to people and residential property
- To minimise coastal flood and erosion risk to key community, recreational and amenity facilities
- To minimise coastal flood and erosion risk to industrial, commercial, economic and tourism assets and activities
- To minimise coastal flood and erosion risk to Ministry of Defence ranges

2.4 Consultation

How were the public consulted about the Strategic Environmental Assessment?

An awareness raising leaflet was produced and widely distributed at the start of the studies to encourage participation and help gather data and identify interested parties. The draft environmental baseline review was discussed at a series of stakeholder workshops and made available on the project website. The baseline reports were updated following consultation and have been used throughout the SMP2 development. A three month public consultation on the draft SMP2, including the SEA is planned between 5th October 2009 and 10th January 2010. Full details of the consultation process including consultation materials, comments made to date and comments on how they have been taken into account are being documented in **Appendix B**.

2.5 Identification and Review of Alternative Policy Scenarios

In addition to the four standard SMP2 policy options described in Section 1.1, cases of 'with present management' and 'no active intervention' throughout the SMP2 area were also assessed during the development of the SMP2. The 'with present management' case assumes that the present management practices will be continued indefinitely, regardless of economic or technical constraints and is useful for comparative work when undertaking the policy scenario development stage of the SMP2, while the 'no active intervention' case is essentially a walk away and do nothing scenario.

Based on the background understanding of how the coast responds in ‘no active intervention’ and ‘with present management’ situations, the potential risks posed to the environmental assets were identified, and an initial set of policy scenarios were developed using these ‘strings’ of policy options (see **Appendix F**).

In order to ensure that the potential wider impacts of SMP2 policy decisions are considered, the SMP2 guidance suggests developing a ‘policy scenario’ rather than looking at individual policy units. This brings together individual policy units that interact with those next to them (i.e. a group of policy units). This approach has been followed for this SMP2, using a ‘string’ of SMP2 policy options over a discrete stretch of coastline (Policy Area). These Policy Areas were defined in terms of their geology, coastal processes and features present.

For each Policy Area, generally up to three initial policy scenarios were developed for appraisal. In each policy area, draft policy unit boundaries were identified, and for each policy unit one of the four SMP2 policy options was assigned in each of the three epochs: 0-20 years (short-term), 20-50 years (medium-term) and 50-100 years (long-term).

The resulting ‘policy scenarios’ for each policy area were appraised against SMP2 issues and objectives agreed with stakeholders, including the environmental features (ie SEA receptors) identified along the coastline. This involved an assessment of the likely future coastal change that would occur as a result of these scenarios. By comparing achievement of objectives, provisional SMP2 policy unit boundaries and policies were selected. These provisional SMP2 policies were then discussed and agreed at Stakeholder and Elected Member Forums.

Appendix G identifies the environmental impacts of each of the alternative scenarios developed through an assessment of the SEA receptors set out in the SEA Directive. It has helped to identify the preferred SMP2 policy for each policy unit.

2.6 Environmental Impacts of the SMP2

The environmental effects of the preferred SMP2 policies on the standard SEA receptors are described in detail Annex I of **Appendix I ‘SEA’** and summarised in the **Policy Statements** in **Section 5** of this document. An overview of the findings across the SMP2 is provided below.

Flora and Fauna: The SMP2 seeks to support natural processes and maintain wildlife (including the condition of designated sites) along the coastline. The SMP2 recommends the preferred policies of no active intervention or managed realignment where it would be possible to enhance and/or create new areas of wetland habitat within or adjacent to designated conservation sites, which would have beneficial impacts.

However, in some locations, holding the line is essential to protect cities or towns. In some of these locations, coastal habitats such as sand dunes, saltmarsh, mudflats and/or sandbanks may be adversely affected or lost in the long term due to expected future sea level rise as they may become squeezed against fixed defences or cliffs. Where impacts on international conservation sites are possible, further assessment (a Habitats Regulations Assessment) has been undertaken. It is not proposed to hold the line in any previously undefended areas. In other areas, where defences will continue to be maintained, some designated freshwater or terrestrial habitats may benefit from holding the line and be protected from coastal flooding.

There are often conflicts between allowing the coastline to evolve naturally (benefiting marine or intertidal habitats) and maintaining designated terrestrial/freshwater sites on the land. In such areas, any SMP2 policy will result in some loss of habitat. Careful management of the shoreline will therefore be necessary to sustain the designated habitats in place wherever possible, while managing and adapting to changes due the impact of future sea level rise.

Earth Heritage, Soils and Geology: The proposed SMP2 seeks to support natural processes and maintain the visibility of and accessibility to geological features wherever possible. There are however, some areas where continued protection of urban settlements is required and in some of these areas the SMP2 policies may damage geology or earth heritage features. In general, the SMP2 is not recommending the construction of new defences to maintain economic assets in areas where none are currently present.

Along many areas of the frontage, beach management is proposed to maintain natural features, particularly in the short-term. However, where HTL is proposed to protect significant urban communities, increasing sea levels may result in the narrowing of natural defence features in future.

Air and Climate: No impacts on air and climate are anticipated as a result of the preferred SMP2.

Water: In most areas along the coast, the proposed SMP2 protects the majority of potentially polluting features such as landfill sites from flooding or erosion. However, there are some areas where changes to flooding or erosion risks at landfill sites may be experienced and in these areas, potential or known contamination sources should be investigated further at a more detailed stage to confirm the approach to policy delivery and manage pollution risks to water resources. It is envisaged that the SMP2 policies could be implemented in a manner that avoids pollution of surface water. However, there is the potential for saline intrusion to affect groundwater in three areas (due to the preferred SMP2 policies of either managed realignment or no active intervention in some or all epochs). Again, in these areas further investigation of the approach to policy delivery and monitoring will be recommended at a more detailed stage.

Landscape Character and Visual Amenity: The proposed SMP2 policies seek to achieve a free functioning natural coastline wherever possible, thus creating a more natural coastal and estuarine landscape and reducing piecemeal man-made structures on the beach. This is more beneficial to the landscape than a policy of defending the whole coastline, which would involve construction of new, more substantial defences, which in some places would also be unlikely to be technically sustainable or economically viable.

Generally, the SMP2 policies therefore conserve nationally designated landscapes and avoid conflicts with AONB Management Plan or National Park objectives, though localised changes in landscape (e.g. landscape changes resulting from the potential loss of coastal features) will need to be considered further at a more detailed level when approaches to delivering policy are determined.

Historic Environment: The majority of the heritage sites will be retained and protected through the preferred SMP2. However, in areas where there are benefits in reverting to natural processes either by no active intervention or through managed realignment, there may be an increase in tidal flooding or erosion risk with associated negative impacts on isolated historic assets (e.g. Scheduled Monuments, a Registered Park and Garden, parts of Hadrian's Wall WHS and non-scheduled archaeological features of medium and high importance). Important historic assets that may be affected lie within the Dee Estuary and Leven Estuary; at Piel Island, Saltom Pit, Maryport and Hadrians Wall between Cardurnock and the Scottish Border.

Land Use, Infrastructure and Material Assets: For much of the coastline, the SMP2 policies will not affect critical infrastructure or crucial services. However, it will become increasingly difficult to minimise the risk to infrastructure and material assets in some areas in the long-term as sea level rise causes holding the line to become less acceptable due to economics, technical sustainability and environmental acceptability. In these areas, affected infrastructure may include some local roads and sewage works etc, particularly in areas that are realigned or that experience overtopping of defences during storm surges. Consequently, it may be necessary to re-route some of the critical infrastructure in the longer term.

The SMP2 policies will help reduce the coastal flood and erosion risks to large areas of agricultural land, with the long term policies protecting around 25,000ha of currently at risk land from erosion/flooding. However,

where no active intervention or managed realignment is proposed, the loss of some agricultural land will be inevitable.

The proposed SMP2 policies are generally beneficial to industrial and commercial premises and/or activities, by protecting areas of significant development from flooding or erosion. However, some isolated industrial or commercial facilities may be affected, as policies leading to a more 'natural' and sustainable shoreline in the long-term are implemented.

The preferred SMP2 may result in the flooding or erosion of small areas of MoD ranges in the short to long-term as these generally lie within undeveloped stretches of coastline. In the longer term, Eskmeal Ranges may experience an increase in tidal flooding if the dunes breach under a no active intervention policy but as there is no change to the existing management regime, there will not be an increase in the number of MoD sites at risk.

Population and human health: For much of the coastline, the preferred SMP2 will maintain existing defences where economically viable in the long-term, thus having a beneficial impact on people, their health and property by protecting areas of significant urban development and developed parts of the coastline from flooding or erosion. The proposed SMP2 policies provide for long term protection to over 107,000 residential properties that would be at long term risk of loss. However, there are some areas where isolated properties and areas of community, recreational and amenity facilities exist and may be lost to flooding or erosion through allowing the coastline to retreat naturally.

Under the proposed SMP2 long-term policies, the key centres of tourism and recreation will continue to be protected. However, this will be at the expense of natural beaches along many of these frontages, which are unlikely to be retained as the frontages and promenades become more prominent, exposed and less accessible.

2.7 Appropriate Assessment

In many locations along the North West England and North Wales coastline, policies would be implemented within or next to international conservation sites (European sites). A Habitats Regulations Assessment (**Appendix J 'Appropriate Assessment'**) has therefore been undertaken in accordance with the requirements of the EC Habitats Directive (92/43/EEC) and European Union Birds Directive (79/409/EEC) and their implementation in the UK under the Conservation (Natural Habitats &c.) Regulations 1994, under Regulation 48(1) ("Habitats Regulations"). Natural England and the Countryside Council for Wales are currently being consulted on the conclusions of the draft Appropriate Assessment.

Full details of the approach used and the findings of the draft Appropriate Assessment is given in **Appendix J**. The draft conclusions now need to be considered and agreed by Natural England and the Countryside Commission for Wales.

What is the overall finding of the Draft Appropriate Assessment?

The overall conclusion of the draft Appropriate Assessment is that provided that the preventative measures that have been recommended in the SMP2 Action Plan, such as additional studies or assessments to explore the practicality and feasibility of each particular Policy option and the best way to implement it, then it can be concluded that No Adverse Effects are anticipated on the Integrity of the International Sites within the SMP2 area at this stage.

2.8 Water Framework Directive Assessment

A Water Framework Directive (WFD) assessment has been prepared and can be viewed in **Appendix K** of the SMP2.

Ecological and water quality can be influenced by SMP2 Policy as changes in coastal management may result in different hydrological regimes and water body morphology – including such factors such as current velocities, sediment accretion/erosion, water quality (turbidity, salinity) and tidal inundation. This WFD assessment takes into consideration the potential effects of SMP2 policy options on the ecological and water quality elements of the coastal and transitional (estuary) water bodies directly affected by the SMP2. It also incorporates an assessment of adjacent river water bodies, which may also experience some indirect effects due to SMP2 policies (such as shifting in the upper tidal limit in rivers). The potential effects on ecological quality elements are associated with changes in hydrological regimes and water body morphology – including such factors as changes in current velocities, sediment accretion/erosion, water quality (turbidity, salinity) and tidal inundation.

The WFD assessment also considers whether the SMP2 policies may have adverse consequences for water bodies protected under other EU legislation, in particular Special Protection Areas and Special Areas of Conservation (related to the Birds Directive and Habitats Directive, respectively). Additionally, the potential for changes in groundwater bodies are considered insofar as such changes could affect dependent ecology (i.e. groundwater dependent ecosystems).

A further consideration of possible impacts on groundwater bodies relates to their use for public (or other) water supply. Such considerations are primarily related to 'no Active Intervention' and 'managed realignment' policies, which could result in a geographical change in the shoreline in the vicinity of a groundwater Source Protection Zone (SPZ).

What is the overall finding of the WFD Assessment?

Full details of the approach used and the findings of the draft WFD assessment are provided in **Appendix K**.

The majority of the SMP2 Policies comply with the WFD Environmental Objectives and will not lead to deterioration in Ecological Status or Ecological Potential of the water bodies in the SMP2 area.

However, some of the preferred policies within a limited number of Policy Units have the potential to fail in meeting WFD environmental objectives. Where this is the case, summary statements that assess the preferred SMP2 policy against Article 4.7 of the WFD are provided in **Appendix K**. In these Tables, the reasons for policy selection are outlined and mitigation measures are proposed that should avoid the potential failures occurring.

The most significant potential failures of WFD environmental objectives relates to potential saline inundation of a groundwater body and potential for re-activation of contaminated sediments. Mitigation actions have been proposed to minimise the potential impacts in the SMP2 Action Plan.

3 Overview of the Shoreline Management Plan

3.1 Summary of the Plan

This SMP2 aims to achieve balanced sustainability, i.e. optimising the achievement of objectives for people, nature, historic and economic realities. In doing so it recognises that achievement of this goal will not be instantaneous and will be the outcome of the managed plan.

As indicated in Section 1.4, this SMP2 is based on the result of numerous studies and assessments.

The proposed short term (first epoch-up to 20 years) policies for the Cell 11 SMP2 coastline provide a high degree of compliance with objectives to protect existing communities against flooding and erosion. The preferred long-term policies promote greater sustainability for parts of the shoreline where natural process and evolution provide a practical means of managing the shoreline.

In the longer term, ongoing coastal change combined with the expected impacts of climate change and sea level rise means that policies that continue to defend the shoreline in the present-day manner will generally result in the need for increasing lengths of defences that are larger with smaller beaches to seaward. As well as being increasingly difficult to afford, such an option will inevitably produce a change in the nature of the coast, with a prominence of large concrete seawall structures and fewer beaches. In some locations there is socio-economic justification to maintain existing defences in the short to medium term, but when defences need rebuilding in future alternative opportunities to optimise management techniques to sustain or adapt the assets presently protected may need to be undertaken. In such locations it will be important to put steps in place to adapt and respond to coastal change and plan for the future sooner rather than later.

The preferred plan for each SMP2 sub cell area is explained in the following sections of text. Details of the preferred policies for individual locations are provided by the individual Policy Statements in **Section 5**.

Sub-cell 11a – Great Orme's Head to Southport

This section of coast includes the area stretching between Great Orme's Head, North Wales, and Southport and incorporates the two major estuaries of the Dee and Mersey as well as the smaller Clwyd and Alt. As such, there are significant interactions between the open coast and the estuaries in this section. This coastline is important for tourism (North Wales), industry and commercial activities (Dee and Mersey estuaries), heritage (Chester, Liverpool) as well as its environmental significance (Formby Dunes, Dee estuary).

Over the last 200 years, the construction of a mixture of seawalls, revetments, groynes and flood embankments along the majority of the North Wales coast has prevented shoreline erosion and managed flood risk to coastal towns (including Llandudno, Rhos-on-Sea, Colwyn Bay, Towyn, Rhyl and Prestatyn), tourism assets and infrastructure. However, these structures have also led to a lowering of beach levels, erosion of dunes and the need for beach management. There is strong justification to continue to manage erosion and flooding risks for most of this frontage over the next century, however, this is likely to result in increasing beach loss over time and further beach management will be required to sustain beaches which are important for coastal defence, amenity, tourism and environmental conservation. The sand dunes of Point of Ayr spit have important environmental designations and provide a natural defence to the low lying land behind, and as such need to be allowed to behave as naturally as possible without major intervention.

The mouth of the Dee estuary is characterised by several channels and sandbanks, the small rounded spit of the Point of Ayr near Talacre, and Hilbre Island at West Kirby. Much of the Welsh bank of estuary has industrial and commercial activities at the shoreline, including factories and power stations, as well as the railway line and roads. A number of urban areas, including West Kirby, Parkgate, Connah's Quay and the city of Chester are also located around the estuary. There are numerous environmental conservation designations

along the frontage, with the Dee estuary internationally designated as a Special Protection Area, Ramsar site and Marine Protection Area to protect the extensive inter-tidal flats and the numerous waterfowl that use the habitat. There is section of eroding cliffs near Thurston that are also environmentally designated. The long term plan is to continue to protect commercial and industrial assets from flooding and erosion, but to also allow more natural evolution where appropriate. In order to mitigate the impacts of the defences on the evolution of the estuary in combination with expected future sea level rise the plan allows for creation of areas of new habitat by moving defences inland where opportunities exist.

The northern Wirral coastline is significantly influenced by the Dee and Mersey Estuaries at either end of the frontage. Sand dunes and the environmentally designated wide sandy foreshore have formed along the length of the frontage, providing natural protection to the settlements of Hoylake, Moreton and Birkenhead and recreational assets along the frontage. The whole frontage is currently defended, and the long term plan is to also continue to provide flood and erosion protection to the residential areas, infrastructure and low lying land along the frontage. However, the justification and sustainability of continuing to hold the present defence line for the whole frontage requires more detailed investigations and consideration of combinations of front line and secondary defences.

The Mersey estuary is quite different from most other estuaries in the North West, having a deep narrow mouth, with rocky shores that have been extensively modified in the past. Consequently, the shoreline is now almost entirely industrialised with extensive port facilities, power stations and oil refineries and onshore wind farms. There are also substantial urban areas, with associated recreational and amenity facilities. The Liverpool Maritime Mercantile City is a World Heritage Site, with significant commercial, civic and public buildings. The Manchester Ship Canal runs along the southern shoreline of the Inner and Upper estuary. The long term plan in the Narrows and Inner Mersey estuary is to maintain the status quo by continuing to provide the same extent of protection currently afforded to property and infrastructure, while allowing natural evolution of the shoreline where there are currently no defences present. In the Upper Mersey, however, the long term plan is to look at opportunities to potentially reduce flood risks upstream and create additional habitat.

The Sefton frontage, between the Mersey estuary and Southport, is characterised by a wide sandy foreshore, backed by dunes. The shoreline has been heavily influenced by both the Mersey and Ribble Estuaries and is environmentally designated for the extensive dune habitats. The significant dune system, extending up to 4km inland at Formby, is eroding around Formby Point, but is also accreting to the north and south. Allowing the natural evolution of this area is the long term plan with only minimal intervention if local problems occur. The frontage also supports a number of large urban settlements, namely Crosby, Hightown, Formby and Southport. However, much of the frontage remains unprotected by defences, with structures concentrated at Crosby, Blundellsands and Southport. The long term plan here will be to manage the risks to property and infrastructure if and when threatened by erosion, although continued accretion along areas of the frontage could mean that little intervention is actually required to implement this plan.

Sub-cell 11b – Southport to Rossall Point, Fleetwood

This section of coast covers the area between Southport and Rossall Point near Fleetwood, and includes the Ribble estuary as well as the River Douglas. The Ribble estuary and its associated banks and channels exert a significant control on the evolution of both the important tourist areas of Southport frontage and the Fylde Peninsula.

The Ribble estuary contains internationally important environmentally designated areas including a Special Protection Area and Marine Protection Area. It is naturally accreting and this has allowed and encouraged widespread reclamation in the past. The low-lying land around the estuary is mostly agricultural interspersed

with settlements including Southport, Hesketh, Hutton, Penwortham, Bamber Bridge, Freckleton and Warton, while the urban area of Preston lies in the upper estuary. Tourism and recreational facilities exist, including a number of sailing clubs and nature reserves. The long term plan is to maintain protection of Southport and Preston and their associated facilities, as well as large areas of low-lying agricultural land along the southern bank of the estuary, in combination with seeking further opportunities for habitat creation and creating set back areas to help reduce flood risk and manage the impact of defences on the estuary in the longer term. Along the River Douglas the plan is to continue to manage risks to assets on the extensive flood plain throughout much of its length.

The Fylde Peninsula sits between the Ribble estuary, to the south, and Morecambe Bay, to the north, and is backed by the Wyre estuary, and at a large scale it has potential to be affected by changes within these systems. There is a sand dune system to the south at Lytham, which is fronted by a wide sandy beach, although the majority of dunes have been significantly modified and built upon. The long term plan is to continue to provide protection through maintenance of formal defences in combination with encouraging the natural dune system to evolve where possible, as a natural form of defence. Dune management should allow the dunes to supply material to feed Lytham frontage, however, there may be a need to construct localised set back defences behind the current dunes for additional flood protection to low lying areas behind.

From central Blackpool to Anchorsholme, up to 30m high protected cliffs back the sand beach, while north of Anchorsholme the frontage is low lying and potentially at flood risk from both the open coast and the Wyre estuary. The frontage is heavily urbanised, with the town of Blackpool spreading into Thornton and Cleveleys. Consequently, much of the shoreline is now held seaward of its natural position and this has implications for future management of this coastline as sea levels rise. Again, the long term plan is to provide continued protection. The major tourist centre of Blackpool and the residential areas of Thornton and Cleveleys will continue to be defended; however, this is likely to result in diminishing beach levels over time. Therefore there will be increasing future needs for beach management to sustain these beaches which are important for coastal defence, amenity, tourism and environmental conservation.

Sub-cell 11c – Rossall Point, Fleetwood to Haverigg

This section of coast between Rossall Point, Fleetwood and Haverigg, includes Walney Island and the Wyre, Lune, Kent, Leven and Duddon estuaries; as well as the Rivers Cocker and Keer, all forming integral components within the larger Morecambe Bay system. The Bay is characterised by extensive sandflats, which become exposed at low tide. Various channels cut across these sandflats and the dynamic meandering of these is an important influence upon patterns of shoreline erosion and accretion. The shorelines of the Bay are characterised by large areas of saltmarsh in more sheltered areas fronting rocky outcrops, low cliffs and low lying land. The five key estuaries exert a significant control on the behaviour of adjacent shorelines. The inter-tidal zone of Morecambe Bay and the estuaries are internationally important environmentally designated areas.

The Wyre estuary is characterised by marshland, agricultural land, small villages and urban and industrial settlements in the Thornton area, including the Hillhouse Plant commercial power station. The low-lying area to the west provides a continuous potential flood route linking through to the coast and there is reported evidence that there was a historical channel westwards to the shore at Cleveleys. The estuary falls within the boundaries of the Morecambe Bay Special Protection Area, Special Area of Conservation and Marine Protection Area. 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 management measures in the long term. Notwithstanding this, there are some areas in the upper reaches of the estuary where realignment opportunities back to higher land, to provide additional intertidal habitat that could offset future impacts of flood defences on the internationally important sites.

The open coast section between Knott End-on-Sea and the headland at Heysham is characterised by low lying agricultural land fronted by large areas of saltmarsh in sheltered areas and a wide sandy intertidal zone. There is some recreation and tourist use, and a number of scattered settlements, including Knott End-on-Sea, Preesall and Pilling. The long term plan is to continue providing protection against flood and erosion to property and infrastructure, although there is some opportunity to recreate saltmarsh along much of this frontage, by retiring to a secondary defence line. At Cockerham there is a need for more detailed studies to consider the justification for continuing to defend as there are a range of significant realignment opportunities which need to be fully evaluated, including any implications on agricultural output, ground water bodies and flows into/out of the Lune estuary.

The mouth of the Lune estuary is constrained by eroding cliffs at Sunderland Point and Plover Hill. The outer areas of the estuary are characterised by large intertidal areas, saltmarsh and a meandering low water channel. At present, the access route to Sunderland village across a marsh is cut off on large tides. This will worsen in the future and longer term viability of sustaining Sunderland village itself needs consideration. Within the middle reaches of the Lune, training walls which once constrained the channel are becoming increasingly ineffective. Consequently, where the channel is now able to meander freely, saltmarsh erosion is occurring. The city of Lancaster is located in the inner part of the estuary where there has been significant development on the flood plain. The long term plan for the Lune is to continue to protect infrastructure and the historic city of Lancaster, but other areas would not be defended, allowing occasional inundation and natural evolution.

The section of coastline between Heysham and Arnside includes the large port and nuclear power stations at Heysham and the tourist town of Morecambe which will all justify continued protection into the long term. Maintenance of this headland will also continue to provide protection to adjacent frontages to the south. Elsewhere; the long term plan is generally to continue to provide appropriate protection to property and infrastructure where it is threatened by erosion or flooding while allowing other coastal sections to evolve naturally. Long term management along significant parts of this section will however, depend on whether the coastal railway continues to operate into the long term. Between Heald Brow and Arnside the resistant headlands will be allowed to continue to function naturally without intervention.

The Kent estuary, characterised by large expanses of low-lying land agricultural land interspersed with low hills, is constrained at the mouth by the railway viaduct at Arnside. The two small towns of Storth and Sandside are also located within the estuary, as well as other smaller villages and farms. The long term plan is to continue to protect the settlements of Arnside and Sandside from flooding and erosion and to maintain the integrity of the railway as long as it remains. In order to mitigate the impacts of these defences on the evolution of the estuary, in combination with expected future sea level rise, the long term plan also allows for creation of areas of new habitat and flood storage areas, by moving defences inland where opportunities exist. Proposed realignments will need to be considered in combination for impacts upon flows into and out of the estuary and to assess potential economic losses resulting from reduction in agricultural land. As the flood risk area within the Kent estuary is so large, a no active intervention policy was not considered appropriate as a future policy option.

The urban settlement of Grange-over-Sands will justify ongoing coastal defence, however, continued accretion and development of saltmarsh along the frontage is likely to mean that only limited intervention will be required in the short term. The long term vision for the Cartmel Peninsular is to set back defences, while maintaining protection, where economically justifiable, to the railway and agricultural land, and to allow additional saltmarsh development/habitat creation.

The Leven estuary, similar to the Kent estuary, is also constrained at the mouth by a railway viaduct, however, the River Leven meanders through hills interspersed with smaller areas of low lying land which extend back to

higher land. The long term plan is to continue to protect property and infrastructure at Greenodd, but to also return much of the remaining estuary back to a more natural system. The plan is to realign flood risk areas back to higher ground where opportunities exist and then allow natural process to return the estuary to a more natural state whilst creating additional habitat.

Between the Leven estuary and Piel Island the general plan is to allow natural functioning of the shoreline without intervention, although local protection could be justified where the road or property is at risk. In addition, industrial facilities in the flood zone between Canal Foot and Ulverston will justify continued protection into the long term. Between Newbiggin and Rampside, maintaining the present defence line will be dependent upon the economic case for maintaining the coast road on its present alignment. In the event it is deemed uneconomical to maintain the road in this location then a policy of no active intervention or realignment of defences in a set back position should be adopted. Limited defences are present on Piel Island and the plan for this location is to allow natural processes to continue, however, localised defences may be permitted to protect the scheduled monument subject to consent.

Walney Island is characterised by large environmentally designated sand and shingle spits to the north and south which extend into the Duddon estuary and Morecambe Bay respectively. Significant areas of Walney are low-lying and at coastal flood risk, including the village of Biggar, while other parts of the island, including the major settlements at Vickerstown and North Walney are on higher land. There are also a number of historical landfill sites on the eroding west coast of the island which constitute a risk of pollution if allowed to erode. East of the Walney Channel, the heavily industrialised town of Barrow-in-Furness and the Port of Barrow on the mainland coast benefits from the protection provided by Walney Island. Appropriate long term protection policies are provided for the major areas of property, industry and associated infrastructure throughout Barrow-in-Furness. The long term plan for Walney Island is to manage flood and erosion risk to residential areas and landfill sites and maintain the overall integrity of the island, even though it is predicted that the integrity of Walney Island as a whole can be maintained naturally over the next century. Locally, at Earnse Point the feasibility of modifying the defences to facilitate the movement of sediment along the frontage and maintain down drift frontages needs investigating.

Most of the Duddon estuary comprises extensive areas of environmentally designated saltmarsh and intertidal sandflats with only a narrow channel of water remaining at low tide. Two naturally evolving dune systems are present at the mouth of the estuary: Haverigg Dunes on the northern bank and Sandscale Dunes on the southern bank. The plan is to continue to allow these dune systems to evolve naturally, providing important natural defence features. Low lying land around the estuary is mainly agricultural, however, a few scattered settlements such as Askam, Kirkby, Broughton and Millom, as well as the railway are also partly located within the coastal flood risk zone. Consequently, a number of substantial realignment opportunities exist throughout the estuary, seaward of the railway line and these could be exploited to mitigate potential impacts of expected sea level rise in the long term. The long term plan therefore is to set back defences where opportunities exist, while continuing to protect necessary infrastructure and residential / commercial property in main villages and towns. Amenity value and designated habitats within the lagoon will be maintained if deemed justifiable and affordable following investigation in the short term. In the future, realignment of defences so the lagoon becomes tidal once again may be feasible, but only if suitable freshwater compensatory habitat has been created.

Sub-cell 11d – Haverigg to St Bees Head

The varied coastline between Haverigg, at the mouth of the Duddon estuary, and St Bees Head incorporates the Ravenglass estuary complex (including the Rivers Mite, Esk and Irt) as well as the Rivers Calder and Ehen. The frontage is characterised by eroding cliffs of varying heights to the south, sand dune systems, and resistant

to the north, interspersed with small settlements and the Sellafield nuclear waste processing and storage facility and Drigg low-level waste storage site. Much of the frontage is within the Lake District National Park and the St Bees Head Heritage Coast is at the northern boundary of this frontage. The Cumbrian railway line is also a significant feature along a large stretch of this coast between Seascale and St Bees and within the Ravenglass estuary complex. If the railway is to remain operational then the long term plan would be to maintain it in its current position and continue to afford defence to it. If the railway does not remain, then the long term plan would be to not continue to maintain those defences. However, even walking away would not enable a 'naturally' functioning coast as the debris from existing structures would take decades to disperse.

The long term plan between Haverigg and Seascale is to allow natural processes to continue, however maintenance of isolated local defences would be permitted in the short term as long as there is no adverse effect on coastal processes. The local road at Stubb Place is at risk of being lost to erosion, although the road could be relocated further inland. Natural accretion of the dunes will provide protection to much of Haverigg; however, the continued provision of formal defences will also be required to address flood risk issues in this location.

Within the environmentally designated Ravenglass estuary complex, the natural behaviour of Rivers Esk, Mite & Irt will be allowed to continue through into the long term. Ravenglass village will continue to be protected and localised defence of the railway is not expected to have detrimental effects on the natural behaviour of the river channels or environmental designations.

At Drigg, the nuclear storage site is not at risk of erosion within the timescale of the plan, however, there will continue to be strong justification to continue to protect the nuclear facility at Sellafield, due to its national significance, as well as Seascale, from flooding and erosion throughout and beyond the next hundred years.

North of Sellafield to St Bees, consideration needs to be given to the existing and expected future increases in risks to the railway which is critical infrastructure, therefore flood and erosion risk to the railway should be monitored and defence works considered where the railway is at risk. The properties built on the beach seaward of the railway will become increasingly at risk of inundation and are expected to be largely unsustainable in their current position in the long term. The short term plan at St Bees is to continue to maintain the frontage for amenity /recreational /tourism value, but in the long term options will need to be investigated to allow the coast to realign to a more natural and affordable position to enable the beach to remain in the future.

Sub-cell 11e – St Bees Head to the Scottish Border

The Cumbria coastline between St Bees Head and the Scottish border includes Moricambe Bay (including the Rivers Wampool and Waver) and the southern shoreline of the Solway Firth; as well as the Rivers Ellen, Derwent, Eden and Esk (north). The southern boundary of sub-cell 11e forms part of the St Bees Head heritage coast, whilst north of Dubmill Point, including Moricambe Bay and the Solway Firth estuary, the shoreline is internationally important for its environmental designations. To the north of Maryport, the coastline is within the Hadrian's Wall World Heritage Site, with 48 Scheduled Monuments, the majority of which relate to frontier defences forming part of the Heritage Site. Northern sections of frontage also lie within the Solway Coast Area of Outstanding Natural Beauty.

The towns and ports of Workington, Whitehaven, Maryport and Silloth are key centres. Historical reclamation using mine waste has taken place at Workington, Whitehaven and Maryport in the past. Consequently protection of these areas will remain necessary into the long term. The plan for other smaller settlements, including Allonby, Flimby and Parton, is to continue to manage flood and erosion risk to these settlements.

Where the foreshore is currently healthy, such as at Allonby, this is likely to involve limited intervention in the short and medium term.

The Cumbrian Coastal Railway extends along the shore for large sections of the coast between Whitehaven and Maryport. If the railway is to remain operational then the long term plan would be to maintain it in its current position and continue to afford defence to it. If the railway does not remain, then the long term plan would be to not continue to maintain those defences. However, even walking away would not enable a 'naturally' functioning coast as the debris from existing structures would take decades to disperse.

In a number of other areas along the frontage, including between St Bees Head and Whitehaven, Workington and Siddick and between Maryport and Silloth, the long term plan allows for a naturally evolving shoreline, enabling sediment to build beaches and to conserve the environmental status of these areas. Present defences in front of Saltom Pit Scheduled Monument will be maintained, but not replaced once they can no longer be repaired. Between Workington and Siddick protection of current assets such as windfarms will continue in the short term. Sections of the coastal road between Maryport and Silloth, for example at Dubmill Point will need rerouting at a future time.

Moricambe Bay is situated along the southern shoreline of the Solway Firth estuary between The Grune and Cardurnock and forms part of the internationally important environmentally designated areas of the Solway. The sheltering effect of the shingle spit of The Grune and the promontory at Cardurnock has resulted in the development of extensive areas of saltmarsh within the sheltered Bay. The Rivers Waver and Wampool drain into Moricambe Bay. An earth embankment, setback from the foreshore at Skinburness, is the only formal flood defence within the bay. The long term plan for Moricambe Bay is to allow the shoreline to retreat where appropriate, so allowing the sea to return to low lying areas to create saltmarsh as sea levels rise. Localised defences may be permissible to protect land and property, but are unlikely to attract central government funding in many cases. A coastal process and strategy study is recommended for Moricambe Bay and between Silloth and the Grune, to consider the linkages between the Grune and the long term evolution of the adjacent internationally designated sites.

The area north-east of Moricambe Bay includes the dynamic inner section of the Solway Firth estuary and its confluence with the Rivers Eden, Esk and Sark at the Scottish Border. Extensive sandbanks, mudflats and saltmarsh characterise the large intertidal areas of this section and they are designated for their internationally important environmental features. Land use is largely agricultural, however, there are several small settlements and the MOD sites at Longtown and Anthorn are located along this frontage. The long term plan for this area is to allow the shoreline to continue to evolve naturally as much as possible, allowing expected future sea level rise to return low lying areas to saltmarsh. Some localised defences would be permissible to protect agricultural land and property, but are unlikely to attract central government funding in many cases.

3.2 Achievement of Objectives by Preferred Plan Policies

An overview of how the SMP2 objectives (defined in the SEA Environmental Baseline Report – **Appendix D**) have been achieved by the SMP2 policies as well as the predicted implications and benefits of the preferred Plan is presented below. Detailed predicted implications of the preferred policies for each location are included in each individual Policy Statement (Section 5).

Property, Land Use and Recreation Objectives

For much of the SMP2 coastline, the preferred policy is to maintain existing defences where economically viable into the long term. This is to provide continued management of risks to property and assets as well as

to critical infrastructure and crucial services along the developed parts of the coastline. However, for some sections of the coast, a change in management policy has been identified for the longer term where a hold the line policy is no longer acceptable on grounds of economics, technical sustainability or the environment. Along these frontages there may be a small number of properties at increasing risk as well as some need for re-routing of infrastructure in the longer term as a result of a change of policy to managed realignment or no active intervention. In situations where communities may be affected, it will be critical to manage expectations, implement resilience measures and investigate appropriate relocation or mitigation measures should there be mechanisms to do so. The development of adaptation plans for such areas will need to consider the outcome of the recent Defra and Communities and Local Government consultation on coastal change.

The key areas of management change are the Dee estuary (Sub-cell 11a); Ribble estuary (Sub-cell 11b); Lune estuary, River Keer, Cartmel Peninsula and Duddon estuary (Sub-cell 11c); and the Cumbria coast, Morecambe Bay and the Solway coast (Sub-cell 11e); where the long term technical sustainability and economic viability of a hold the line policy is questionable. These management policy changes are based on comprehensive consideration of multiple factors, including scientific fact and best technical knowledge.

Under a 'no active intervention' scenario, there are estimated to be around 107,900 residential and 20,000 commercial properties, as well as a significant number of regionally important industrial and power generation assets at risk of coastal flooding or erosion across the whole of Cell 11. The proposed SMP policies endeavour to provide long term risk reduction to around 107,400 residential and 19,900 commercial properties as well as the important industrial and power generation assets throughout the SMP area.

Tourism and recreation is an important economic sector, with key centres located along the SMP2 frontage including those at North Wales, Blackpool and Morecambe Bay. While the preferred policy for many of these areas is to hold the line in the long term, there may be a detrimental impact on tourism through loss of beaches at places such as along the North Wales coast and at Blackpool, where it will become increasingly technically difficult to retain beaches as sea level rise causes coastal squeeze pressures. The SMP2 has therefore recognised and discussed future options for beach management in order to sustain these beaches for coastal defence, recreation amenity and environmental conservation.

Agriculture and grazing also represents a share of the local economy and along the coast there are various grades of agricultural land. Along much of the shoreline these areas are in the undeveloped stretches between towns and within the estuaries. In a number of these locations there is insufficient economic justification to maintain or construct new defences, which would also be technically inappropriate in some cases. There is estimated to be around 37,000 ha of agricultural land presently at risk of coastal flooding or erosion under a 'no active intervention' scenario. Of this, the SMP2 policies will provide long term risk reduction to around 25,000 hectares.

There are a number of Ministry of Defence (MoD) ranges along the SMP2 frontage, most of which lie within less developed stretches of coastline. Small areas of these may continue to be at flood or erosion risk under this SMP2 where there are no changes to the existing management regime.

Nature Conservation Objectives

Along large sections of the SMP2 coastline, beaches, dunes and intertidal areas are designated under national and international legislation for their conservation interests and have associated biodiversity targets, which include that dynamic processes be allowed to occur. The shoreline management policies therefore seek to support natural processes and maintain wildlife (including the condition of designated sites) along large areas of this coastline. Policies of no active intervention or managed realignment have been proposed wherever

possible to enhance and create areas of wetland habitat within or adjacent to designated conservation sites, which would have beneficial impacts.

However, in some locations, holding the line is essential to protect cities, towns or other assets. In these locations, coastal habitats such as sand dunes, saltmarsh, mudflats and/or sandbanks may be affected or at risk from sea level rise as they become squeezed against fixed defences or cliffs. Where impacts on international conservation sites are possible, further assessment (a Habitats Regulations Appropriate Assessment) has been undertaken. In general, the SMP2 is not recommending the construction of new defences to maintain economic assets in areas where none are currently present. In other areas, where defences will continue to be maintained, some designated freshwater or terrestrial habitats may benefit from holding the line as they are protected from coastal flooding.

There are also a variety of cliff types along the SMP2 frontage, some resistant, some highly erodible, with many being nationally and internationally important for their geology and geomorphology. The most significant threat to these areas is the creation of artificial structures along the coast that would affect the natural processes of erosion or obscure the exposed geology. The proposed plan therefore seeks to balance the protection of these natural features with the maintenance and protection of property and material assets wherever possible. The preferred policies of no active intervention or managed realignment have been recommended in areas where there are limited human assets or along areas of undeveloped coastline to ensure the preservation of the geological interests.

There are inherent conflicts between allowing the coastline to evolve naturally whilst maintaining designated terrestrial/freshwater sites and in such areas, any policy will result in some loss of habitat. Careful management of the shoreline is therefore necessary to sustain the designated habitats already in place wherever possible, while managing the impact of sea level rise. The conflicting objectives of a more dynamically functioning coastline coupled with conserving existing habitat will rely on the adoption of the appropriate management policy. By making step changes based on analysis of monitoring data, changes to management policy can be made slowly, with limited impact on the habitat.

Water Objectives

In most areas along the coast, the preferred plan protects potentially polluting features such as landfill sites from flooding or erosion. However, there are some areas where flooding or erosion risks to landfill sites should be investigated further at strategy or scheme level to determine if potential or known contamination sources need flood or erosion risk management to avoid pollution of water resources.

It is envisaged that the preferred policies could be implemented in a manner that avoids pollution of surface and groundwater from contamination, although there are a number of areas where further investigations are required to confirm the risks and best approach at strategy level.

Landscape Objectives

The preferred long-term policies in this SMP2 are intended to sustain the current dense urban areas through proactive management of the existing beaches and defences, whilst recognising that new linear and possibly shoreline control defences may be needed in the longer term; although in general the Plan is not to construct new defences in currently undefended areas so much of the coastline will remain as today. However, opportunities for forming a free functioning natural coastline in some areas have been taken wherever possible, to create a more natural coastal and estuarine landscape and reducing piecemeal man-made structures on the beach. This is more beneficial to the landscape than a policy of defending the whole coastline, which would involve construction of new, more substantial defences, which in some places would also be unlikely to be technically sustainable or economically viable.

The policies therefore aim to conserve nationally designated landscapes and avoid conflicts with AONB Management Plans or National Park objectives though localised changes in landscape (e.g. landscape changes resulting from the potential loss of salt pans in the SMP2 area etc) will need to be considered further at strategy or scheme level.

Heritage Objectives

There are a wide range of heritage sites along the coast and the risks to many more of these will be managed through the plan's policies than would survive under a no active intervention policy. The majority of known heritage sites will be retained and protected through the preferred plan. As a large number of Scheduled Monuments, Registered Parks and Gardens, Conservation Areas and Listed Buildings within the North West England and North Wales SMP2 area are located within the towns and cities along the coast, the majority of these heritage assets would be protected, under the preferred policies.

However, in areas where there are benefits in reverting to natural processes either by no active intervention or through managed realignment, there may be an increase in tidal flooding or erosion risk with associated impacts on isolated historic assets including the following Scheduled Monuments:

- Cockersands Abbey;
- Piel Castle on Piel Island;
- Saltom Pit;
- Saltpans north of Maryport; and,
- Parts of Hadrians Wall.

4 Action Plan

4.1 Approach

The purpose of the SMP2 Action Plan is to identify the steps that need to be taken in order to put the SMP2 policies into practice. This primarily includes taking steps to ensure that the SMP2 policies are taken forward in the short term but also to provide a strategic basis for more detailed studies and plans for managing and/or improving coastal management.

It is also vitally important that information provided by the SMP2 on the future coastal risks and their management is disseminated to Local and Regional Planning Authorities so that people involved with the development of and implementation of land use plans can make informed decisions.

As well as short term activities, the SMP2 Action Plan needs to ensure that activities to facilitate the implementation of the longer-term policies are initiated as appropriate. This includes actions to:

- facilitate implementation of the Shoreline Management Plan (SMP2) policies through more detailed local studies and consultation on the best approaches to delivery;
- identify studies to improve understanding or reduce uncertainty where this is required to resolve policy and/or implementation;
- facilitate the development of a prioritised programme of strategy plan development and outline plan of possible schemes;
- deal with the consequences of the plan;
- promote use of the SMP2 recommendations in spatial planning of land use;
- establish a process for informing stakeholders of progress with SMP2 implementation;
- establish a framework to monitor and manage progress against the action plan and initiate future SMP2 review.

Within **Section 5**, Action Plans for individual policy areas have been included in each policy statement. These identify the steps to be taken in the period up to the next review of the plan. This is nominally a 5 - 10 year process, however, the plan provides for reassessment of this timescale should an earlier review be considered necessary.

In the most part, the policy recommendations in this plan will be implemented through the process of coastal defence strategy development and the subsequent implementation of coastal defence schemes or other coastal management actions. The process of implementation will be underpinned by monitoring of the shoreline to identify ongoing behaviour (to confirm assumptions made in policy development), together with targeted study and investigation where specific uncertainties need to be addressed to enable policy (short or longer term) implementation.

Where the Action Plan tables refer to undertaking monitoring, this includes the proper storage and analysis of data to inform management practices. In many areas of the SMP2, the environmental appraisal of options has recommended that monitoring to provide data to assess impacts, assist in the specification of any required mitigation and to feed into future SMP2 revisions. There is already a strategic monitoring programme in place for the Cell 11 coast, known as the Cell Eleven Regional Monitoring Strategy (CERMS). Undertaking strategic regional monitoring is an essential part of the shoreline management processes and a general action from the SMP2 is to continue with the CERMS programme, incorporating additional activities from the SMP2 action plan where appropriate.

4.2 Broad Scale SMP2 Actions

It is expected that implementing this and other SMP2s across England and Wales may require changes at local planning, regional and national government levels. At a time when regions are being charged with increasing the national housing stock, there may need to be compensatory provisions made to offset and adapt to the expected losses highlighted in SMP2s. These provisions may, for example, include making other land available for building, thus facilitating adaptation to changing risks. Regional planning needs to consider the messages being delivered by this SMP2, and ensure that future proposals for regional development and investment are made accordingly. Such planning needs to be looking beyond the current 20 year horizon.

Local planning should consider the risks identified in this SMP2 and avoid approving development in areas at risk of flooding and erosion. Local planning also needs to consider that relocation of displaced people and property may require land set back from the coast to be made available within the same settlements to maintain the same level of community and may need to become increasingly flexible to enable this. Locations for new developments may need to be identified. Within a national context, Pathfinder projects to help develop approaches to coastal adaptation are presently being planned by Defra following a consultation process between July and September 2009. Further information is available on the Defra website, <http://www.defra.gov.uk/environment/flooding/manage/coastalchange.htm>

In the short-term the need to ensure that conservation interests within designated sites or in the wider environment are appropriately addressed by coastal management should be done in a way that engages the public and involves local communities in finding long-term solutions to issues. To help deliver this objective Natural England has published a Maritime Strategy entitled 'Our coasts and seas: making space for people, industry and wildlife', available from the Natural England website.

To accommodate retreat and loss of property and assets, whether due to coastal erosion or flooding, local operating authorities will need to develop action plans. These will need to address the removal of buildings and other cliff-top facilities well in advance of their loss. The plans for relocation of people also need to be established and clear for all affected. However, mitigation measures do not fall solely upon national and local government and should not be read as such within this Plan. Business and commercial enterprises will need to establish the measures that they need to take to address the changes that will take place in the future. This includes providers of services and utilities, who will need to make provision for long-term change in coastal risks when upgrading or replacing existing facilities in the shorter term. They should also consider how they will relocate facilities that will become lost to erosion or flooding and the need to provide for relocated communities. Other parties needing to consider mitigation measures will be the local highways authorities and bodies responsible for local amenities (including churches, golf clubs, etc).

Private land and property owners will also need to consider how they will deal with the changing shoreline. The terms of the Acts under which the coastal defence operating authorities work confer only "permissive powers" and, as such, there is currently no general obligation on the part of operating authorities or national government to assure protection against flooding or erosion or to provide any compensation for losses. The Government in England (Defra⁸ and Department of Communities and Local Government⁹) has recently consulted on adaptation to changing coastal risks, but there is no reason at present to assume that this will change the present approach in the future or that individual losses would be recompensed from central funds.

⁸ <http://www.defra.gov.uk/environment/flooding/index.htm>

⁹ <http://www.communities.gov.uk/publications/planningandbuilding/consultationcoastal>

However, the Shoreline Management Plan provides a long lead time for the changes that will take place, which in general will not happen now, but will occur at some point in the future. To manage these changes effectively and appropriately, the approach put forward in this SMP2 needs to be considered now, not in several decades time.

Spatial Planning Actions

As discussed above, the risk management policies set out in the SMP2 cannot be implemented through engineering or coastal defence management alone. There is a need for spatial planning to adopt the policies and understand their consequences, such that risk areas are avoided by development, and future changes in policy are facilitated to allow a more sustainable approach to management of coastal risks and avoid increasing risks by allowing development in flood and erosion prone areas.

Strategic Flood Risk Assessments (SFRAs) are intended to guide development decisions and meet the requirements of the Planning Policy Statement PPS25, Development and Flood Risk. Local and regional planning authorities should monitor the development of SFRAs for their areas and put them into practice. Where appropriate, erosion risks should also be captured and the requirements of the developing new PPS20 should be taken into account.

Table 3 includes actions which aim to ensure that the SMP2 policies are appropriately reflected in the relevant Regional Plan and Local Development Frameworks, such that long term coastal erosion and flooding risks are a material consideration in the planning process.

Action	Responsibility
1) Communicate the completion of the SMP2 to the North West Regional Assembly (NWRA) and WAG Planning Department to ensure appropriate reflection in the next revision to the Regional Plans.	North West and North Wales Coastal Group (Chair/Secretary)
2) Communicate the completion of the SMP2 to the Regional Development Agency to ensure appropriate reflection in the Regional Economic Strategy (RES).	North West and North Wales Coastal Group (Chair/Secretary)
3) Inform Local Authority Planning Officers of final SMP2 recommendations and implications.	Local Authority Engineering Officers
4) Submit SMP2 to Local Authority Planning Committees with recommendation to approve the SMP2 for consideration in preparation of planning documents and for development control purposes.	Local Authority Planning Officers to report to planning committee
5) Inclusion of the SMP2 as reference material for, or an annex to, the Local Development Framework.	Local Authority Planning Officers & Planning Committees
6) Promote the use of Strategic Flood Risk / Consequence Assessment as part of the preparation of development framework documents.	Local Authority and Environment Agency Planning Officers
7) Ensure that SMP2 policies are integrated into Development Control activities to control development	Local Authorities & Environment Agency

Action	Responsibility
and flood risk. Development Control Teams should pay particular attention to managed realignment and no active intervention policies and any associated drainage issues.	
8) Promote the development of planning policies to facilitate adaptation to coastal change and address potential housing and other future losses through implementation of 'realignment' and 'no active intervention' policies.	Local Authority and Environment Agency Planning Officers
9) Promote the consideration of the relocation of land uses that are at risk from erosion or flooding, within the preparation of LDF/LDP documents. Identify elements of the preferred option policies where this may apply.	Local Authority and Environment Agency planning officers

Table 3: Actions for spatial planning

Actions to Facilitate Medium / Long Term Policies

In addition to the specific actions outlined in each Policy Statement in **Section 5**, there is also a need for some activities to be progressed, which require consideration at a broader scale, either across Sub-Cells, the whole of Cell 11 or even beyond the SMP2 boundaries. It is important that the need for these broader scale studies is promoted by the relevant bodies.

These studies/initiatives and the actions for the Coastal Group are outlined in Table 4.

Action	Responsibility
1) Formal adoption of the SMP2 by the Coast Protection Authorities, the Regional Flood Defence Committee, Natural England, CCW and other partner authorities and the Environment Agency's National Review Group.	North West and North Wales Coastal Group, Elected Members and Local Authority Officers.
2) Promote a formal, policy, link between SMP2s and Local Development Frameworks/ Local Development Plans and Regional Plans. This will require Defra/WAG and ODPM to review current arrangements.	North West and North Wales Coastal Group to promote with Defra through Coastal Group Chairs forum.
3) Promote Central Government funding for all consultation/stakeholder activities in the development of SMP2s, and strategies/schemes.	North West and North Wales Coastal Group to promote with Defra through Coastal Group Chairs forum.
4) Take account of overall SMP2, i.e. other immediate-term needs and long-term planning, when considering implications for strategies and schemes within the plan area and related nature conservation commitments.	Natural England, CCW, EA and other regulatory/stakeholder organisations.

Action	Responsibility
5) Promote the investigation, and implementation, of mechanisms to facilitate the removal of 'at risk' assets (properties, infrastructure, etc), to enable the implementation and community adaptation to long term realignment/NAI policies. This will require account to be taken of the current consultation of coastal adaptation in England.	North West and North Wales Coastal Group to promote with Defra and WAG, through ongoing 'Making Space for Water' and New Approaches initiatives.
6) Develop exit strategies/management plans for the relocation of communities and removal of assets when they become at risk from erosion.	Local Authority Technical Officers and Planning officers.
7) Develop medium to long-term plans for relocation of community services and facilities that will be lost to erosion, e.g. outfalls, highways.	Service and utility providers, highways agencies.
8) Develop and promote a communication strategy / awareness raising / education of the public with regards to potential future coastal issues and SMP2 recommendations.	North West and North Wales Coastal Group to promote in conjunction with the Environment Agency.
9) Develop the regional coastal monitoring strategy (CERMS) to include estuaries and encompass all areas of the SMP2	North West and North Wales Coastal Group in conjunction with the Environment Agency, led by Sefton Council.
Activities to add following consultation?	

Table 4: Further Actions to facilitate medium / long term policies

4.3 Managing the SMP2 until the next review

Through the implementation of actions outlined in each Policy Statement and in section 4.2 it is likely that the technical understanding of this coastline, the basis of some SMP2 policies, and the wider shoreline management framework may change. As such, it is important that progress against these actions is monitored by the Coastal Group so that any developments which might affect policy, and hence works, are notified, and also so that the need for revision of the SMP2 can be monitored. Adjacent projects should be monitored for cross project changes.

The Action Plans will be managed by the North West and North Wales Coastal Group. The Action Plan should be a working document which needs to be regularly reviewed at Coastal Group meetings and updated as and when required. The Action Plans will be retained on the agenda for all future Coastal Group meetings. It will be the responsibility of the Coastal Group to promote and monitor progress and to ensure that the action plan is progressed by the appropriate Partners and where there are problems with delivery to seek to resolve issues through collaborative working.

The North West England and North Wales Shoreline Management Plan pages of the Coastal Group website (<http://www.mycoastline.org>) will have updates which will record progress against the actions reported. This will include identification of the implications of any study outputs or wider developments for the relevant SMP2 policies. The updates are important as the means of disseminating progress to stakeholders and, as such,

the existence of this information will be reported during the final SMP2 dissemination process. The responsibility for maintaining the website will remain with the Coastal Group.

It is not possible at this time to set a date for the next review of the SMP2. It is considered likely that a 5 to 10 year period may be appropriate. However, it is vital that changes in understanding or the shoreline management framework are monitored to establish if there comes a point (within the next 5 to 10 years) that the SMP2 policies become sufficiently out of date as to warrant a full review of the plan. This will be a judgment made by the Coastal Group, as it is not possible to prescribe exactly at what point this should be.

Regardless of other developments, it is considered that the review should be undertaken in 10 years (if not before) in order to ensure the policies remain appropriate.

5 Policy Statements

5.1 Introduction

This section describes the contents of a series of tables and maps or Policy Statements that present the consultation draft SMP2 policies. The Policy Statements are arranged by Sub-Cell and within each Sub-Cell the shoreline has been sub-divided into smaller interacting areas of open coast or estuaries, known as Policy Areas, which cover a number of Policy Units. The Policy Statements can be found in Annex 1.

How is the information in the Policy Statements set out?

Each Policy Statement contains four sections as described below.

1. Summary of the draft SMP2 recommendations

Location – each policy statement gives the location of the policy area covered by the statement, together with the policy units covered by the statement. The policy units are identified by a number which is sequential along the shoreline from south to north. The policy unit boundaries shown should not be taken as definitive, as the SMP2 is based upon high-level assessment and more detailed studies at implementation may justify the need to ‘go across’ boundaries shown by a small distance in order to appropriately deliver the intention of the Plan policies.

Overview - summarises the long term vision for the location but also notes any different short-term requirements.

Preferred policies – describes the SMP2 policies and potential approaches that could be used to put the policies into practice in the short, medium, and long-term. In this respect, “Short-term” is broadly representative of the next 20 years, “Medium-term” 20 to 50 years, and “Long-term” 50 to 100 plus years. These timescales should not be taken as definitive, however, but should instead be considered as phases in the management of a location.

Justification – outlines the principal reasons for selecting the SMP2 policy for the policy unit or combination of units.

2. Predicted Implications of the Draft Policies being Adopted in this Location

This table summarises the consequences at this location resulting from the preferred policies. These are categorised in accordance with requirements for the Strategic Environmental Assessment of the SMP2 and are: “Property and Population”, “Land Use, Infrastructure & Material Assets”, “Amenity and Recreational Use”, “Historic Environment”, “Landscape Character and Visual Amenity”, “Earth Heritage, Soils and Geology”, “Water”, and “Biodiversity, Flora and Fauna”. The implications have been assessed for the “Short-term” (next 20 years), “Medium-term” (20 to 50 years), and the “Long-term” (50 to 100 plus years).

3. Actions

This table identifies the steps that need to be taken in order to put the SMP2 policies into practice for each individual policy areas. These identify the steps to be taken in the period up to the next review of the plan. This is nominally a 5 - 10 year process, however, the plan provides for reassessment of this timescale should an earlier review be considered necessary.

4. Maps

Maps are included for each Policy Area, which include policy unit boundaries and the preferred plan policies for each of these discrete areas for the short, medium and long terms. In addition, where no active

intervention 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 in 2010.

5.2 The Policy Statements

The following list identifies the subsequent Policy Statements provided for each Sub-cell in Annex I.

Sub-Cell 11a (Figure 2)

- 11a 1: Great Orme to Little Orme
- 11a 2: Little Orme to the Clwyd estuary
- 11a 3: Clwyd Estuary
- 11a 4: Clwyd Estuary to Point of Ayr
- 11a 5: Dee Estuary
- 11a 6: North Wirral
- 11a 7: Mersey Estuary
- 11a 8: Seaforth to the River Alt
- 11a 9: Formby Dunes



Figure 2: Overview map of Sub-Cell 11a Policy Statement locations

Sub-Cell 11b (Figure 3)

11b 1: Ribble Estuary

11b 2: St Annes to Rossall Point



Figure 3: Overview map of Sub-Cell 11b Policy Statement locations

Sub-Cell 11c (Figure 4)

- 11c 1: Fleetwood and the Wyre Estuary
- 11c 2: Knott End to Glasson Dock
- 11c 3: Lune Estuary
- 11c 4: Sunderland Village to Potts Corner
- 11c 5: Potts Corner to Heysham Dock
- 11c 6: Heysham to Hest Bank
- 11c 7: Hest Bank to Heald Brow
- 11c 8: Heald Brow to Humphrey Head
- 11c 9: Kent Estuary
- 11c 10: Humphrey Head to Cark
- 11c 11: Outer Leven Estuary
- 11c 12: Leven estuary
- 11c 13: Bardsea to Piel Island
- 11c 14: Walney Island
- 11c 15: Walney Channel (Mainland)
- 11c 16: Duddon Estuary



Figure 4: Overview map of Sub-Cell 11c Policy Statement locations

Sub-cell 11d (Figure 5)

11d 1: Haverigg to Selker

11d 2: Selker to Eskmeals

11d 3: Ravenglass Estuary Complex

11d 4: Drigg Point to Seascale

11d 5: Seascale to St Bees

11d 6: St Bees

11d 7: St Bees Head

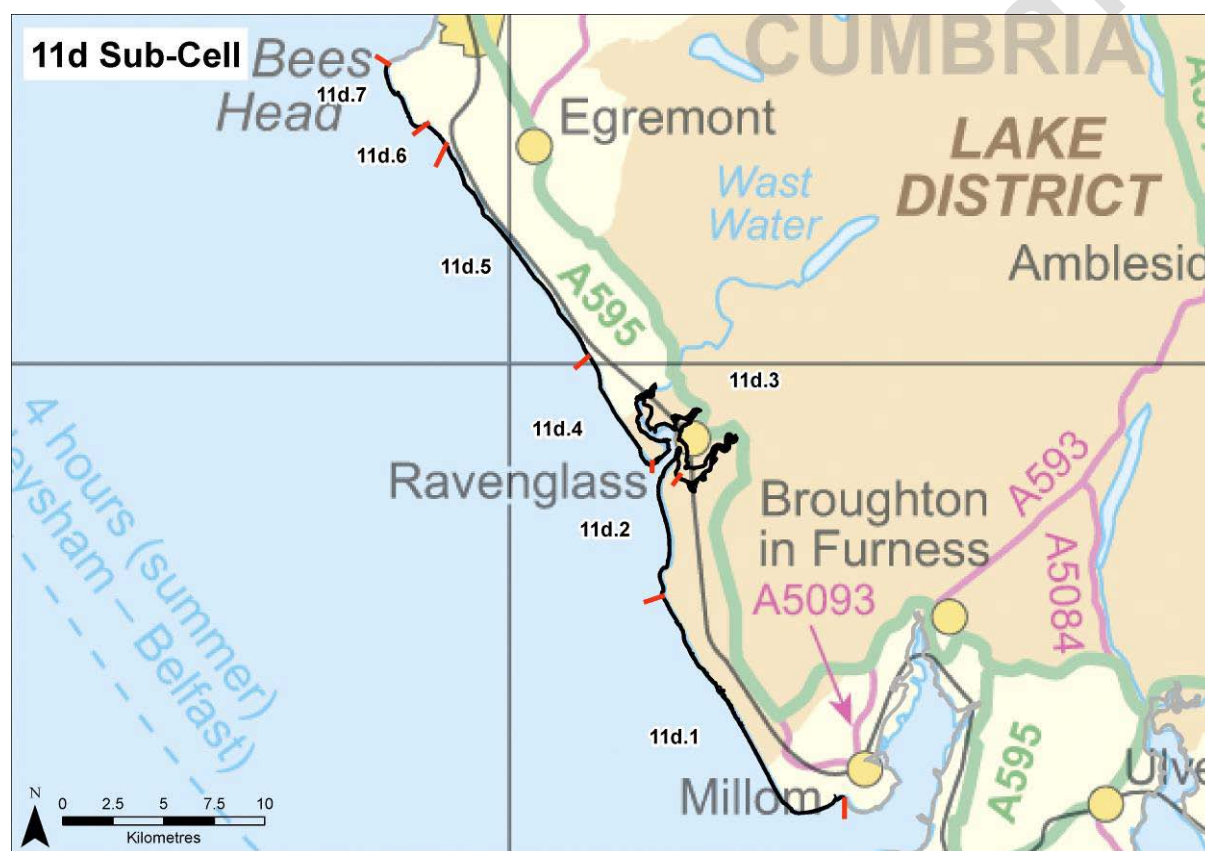


Figure 5: Overview map of Sub-Cell 11d Policy Statement locations

Sub-cell 11e (Figure 6)

11e 1: St Bees Head to Whitehaven

11e 2: Whitehaven to Workington

11e 3: Workington to Maryport

11e 4: Maryport to Dubmill Point

11e 5: Dubmill Point to Silloth

11e 6: Silloth to The Grune

11e 7: Moricambe Bay

11e 8: Cardurnock to the Scottish Border



Figure 6: Overview map of Sub-Cell 11e Policy Statement locations

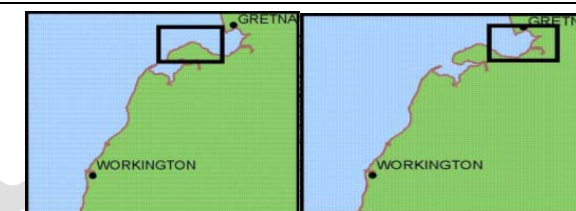
North West & North Wales Coastal Group

North West England and North Wales Shoreline Management Plan SMP2

Main SMP2 Document – Consultation Draft

Annex I – Policy Statements

Cardurnock to the Scottish Border (11 e 8)



Draft Recommendations:

Overview:

The long term plan for this area is to allow a return to a more natural shoreline and for the sea to return low lying areas to saltmarsh where practicable, creating a more sustainable and naturally functioning coastline. As there is insufficient justification to maintain shoreline defences this will result in a number of isolated properties, minor access roads and paths becoming increasingly at risk of flooding in the longer term. A number of Scheduled Monuments and part of Hadrian's Wall World Heritage Site will also be at increased risk of flooding. Some localised defences in current or retreated positions might be permissible to protect some agricultural land and property, but would be unlikely to attract national funding.

The large areas of potential habitat creation as a result of this plan will compensate for any coastal squeeze in the defended sections and mitigate losses elsewhere in the shoreline management plan region where sea level rise and coastal squeeze due to defences is of more concern.

Location (Policy Unit)		Draft Policy and Approach (from 2010)			Justification		
		0-20 years	20-50 years	50-100 years	Social	Environmental	Economic
8:1	Cardurnock to Bowness-on-Solway	No Active Intervention – Allow continued natural coastal evolution.	No Active Intervention – Allow continued natural coastal evolution.	No Active Intervention – Allow continued natural coastal evolution.	No social assets at risk.	Continued natural shoreline evolution will help maintain condition of Internationally designated sites.	Insufficient justification for new defences.
8:2	Bowness-on-Solway	No Active Intervention – Return to a more natural shoreline, permit landowners to maintain informal defences. Saltmarsh accretion provides natural defence.	No Active Intervention – Return to a more natural shoreline, permit landowners to maintain informal defences. Saltmarsh accretion provides natural defence.	No Active Intervention – Allow continued natural coastal evolution.	Primarily gardens at risk of erosion, but saltmarsh accretion reduces risks.	No Active Intervention will work with natural processes though potential increased risks to Roman Fort Scheduled Monuments and part of Hadrian's Wall World Heritage Site.	Unlikely to be sufficient economic justification for maintenance or improvement of defences in medium to longer term.
8:3	Bowness-on-Solway to Drumburgh	No Active Intervention – Plan for local diversion or set-back of coastal road where at coastal risk. Undertake study to evaluate coastal risks to Port Carlisle. Localised defences at Port Carlisle could be maintained.	No Active Intervention – Naturally functioning coast.	No Active Intervention – Allow natural coastal processes to re-establish. There are potential habitat creation possibilities in the long term, dependant on Appropriate Assessment requirements.	Managed risk to properties at Port Carlisle through maintenance of local defences.	Return to natural shoreline processes will help condition of internationally designated sites.	Insufficient justification for defences to highway. Localised defences to reduce risk to properties in Port Carlisle may be required in the long term but not likely to have sufficient economic justification for national funding.
8:4	Drumburgh to Dykesfield	No Active Intervention – Plan for re-route or diversion of presently at risk undefended coastal road.	No Active Intervention – Naturally functioning coast.	No Active Intervention – Allow natural coastal processes to re-establish. There are potential habitat creation possibilities in the long term, dependant on Appropriate Assessment requirements.	Coastal road already cut-off at high tide and will not be sustainable in long term.	Culverts under old railway embankment have already allowed roll-back of coastal marsh. Embankment will constrain change even under no active intervention. Could consider Regulated Tidal Exchange habitat creation opportunities, depending on status of designated sites south of embankment.	Insufficient justification for future intervention with defences.
8:5	Dykesfield to Kingsmoor (Eden Normal Tidal Limit)	No Active Intervention – Allow continued natural coastal evolution.	No Active Intervention – Allow continued natural coastal evolution.	No Active Intervention – Allow continued natural coastal evolution.	Limited assets at flood risk.	Continued natural shoreline evolution will help maintain condition of Internationally designated sites.	No justification for intervention with defences.

Location (Policy Unit)		Draft Policy and Approach (from 2010)			Justification		
		0-20 years	20-50 years	50-100 years	Social	Environmental	Economic
8:6	Kingsmoor (Eden Normal Tidal Limit) to Rockcliffe	No Active Intervention – Allow continued natural coastal evolution.	No Active Intervention – Allow continued natural coastal evolution.	No Active Intervention – Allow continued natural coastal evolution.	Limited assets at flood risk.	Continued natural shoreline evolution will help maintain condition of Internationally designated sites.	Insufficient justification for intervention with defences
8:7	Rockcliffe	Hold the Line – Undertake reactive management, i.e. maintain and upgrade defences with set-back embankment if justified / required.	Hold the Line – Undertake reactive management, i.e. by maintaining or extending defences if justified / required.	Hold the Line – By maintaining defences.	Protects properties in village and maintains integrity of Rockcliffe	Set back defence could be implemented outside the Internationally designated sites.	Policy is economically viable.
8:8	Rockcliffe to Demesne Farm	No Active Intervention – Seek opportunities to re-route or divert undefended coastal road.	No Active Intervention – Plan for re-route or diversion of undefended coastal road.	No Active Intervention – Allow return to natural coastal evolution. There are potential habitat creation possibilities in the long term, dependant on Appropriate Assessment requirements.	Potential loss of minor access road which will be at increased flood risk in future.	Continued natural shoreline evolution will help maintain condition of Internationally designated sites.	Insufficient justification for intervention with defences.
8:9	Demesne Farm to Metal Bridge (Esk)	Managed Realignment – Investigate opportunity to realign defences to high ground. Rockcliffe Marsh also provides natural flood defence.	No Active Intervention – Realign to high land allowing space for marsh roll-back & habitat creation opportunities. Rockcliffe Marsh also provides natural flood defence.	No Active Intervention – Allow return to natural coastal evolution.	Presently defended agricultural land does not provide adequate justification for shoreline defences in the long term.	Managed realignment could provide habitat creation opportunity to manage impacts of possible coastal squeeze on Internationally designated sites in later epochs.	Maintenance or reconstruction of defences not economically justified.
8:10	Metal Bridge (Esk) to the River Sark	Managed Realignment – Investigate opportunity to realign defences as maintenance of these may not be justified in medium / long term. Habitat creation opportunity. Saltmarsh also provides natural flood defence.	Managed Realignment – By constructing set back defences if required to reduce risk to Motorway embankment. Saltmarsh also provides natural flood defence.	Hold the Line – By maintaining set back defences. Saltmarsh also provides natural flood defence.	Presently defended agricultural land does not provide adequate justification for shoreline defences in the long term. Managed realignment would protect strategic infrastructure (railway and motorway).	Managed Realignment would provide habitat creation opportunity to manage impacts of coastal squeeze on Internationally designated sites in later epochs.	Unlikely to be sufficient economic justification for maintenance of improvement of defences in medium to longer term. Requirements for defence to A74 / M74 would need to be reviewed.

Key assumptions made during development

In the past the behaviour of low water channels has been a major control on the sedimentary infilling of the inner Solway Firth and the position of these channels will continue to influence patterns of accretion and erosion in the future. It has been assumed that current trends of erosion and accretion within the inner Solway will continue. However, this is uncertain as tidal mudflats and sandflats will change position over time, altering localised shoreline exposure conditions and the influence of scars on channel position would reduce as sea levels rise.

Predicted changes in rainfall patterns with future climate change may increase river flows which may in turn affect low water channel meandering and siltation rates. The supply of sediment is assumed to continue, allowing saltmarsh to accrete vertically in line with sea level rise. In the long term there is some uncertainty over the balance between sediment supply and sea level rise. It has been assumed that supply will continue to allow vertical accretion within the estuary. If sediment supply were not to keep pace with sea level rise then coastal squeeze could occur.

The long term flood risk management policy for the Solway Firth, as with other estuaries in the North West may change if proposals for tidal power barrages are progressed.

Uncertainties are associated with the economic valuation of social, tourism and infrastructure benefits and more detailed valuations will be needed to support decisions on timing and location of realignment and inundation.

Cardurnock to the Scottish Border (11 e 8)



Predicted Implications of the Draft 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	<ul style="list-style-type: none"> + Manages flood risk to Rockliffe Village - Increasing flood-risk to isolated properties located along the frontage in the vicinity of Bowness-on-Solway and Easton 	<ul style="list-style-type: none"> - Increasing flood risk to local roads (including the main road to Drumburgh) during high tides with some sections periodically inaccessible. 	<ul style="list-style-type: none"> - Increasing flood risk to amenity and tourist assets (e.g. parts of the Cumbria Way coastal path, Hadrian's Wall path and local access roads). 	<ul style="list-style-type: none"> - Increasing flood risk to / potential damage/ long term loss of up to four Scheduled Monuments (SM) and part of Hadrians Wall World Heritage Site (WHS) from flooding at high tides. - Potential damage to Historic remains of castle, port, dock and harbour installation considered of medium/high importance on the NWRCZA 2009. 	<ul style="list-style-type: none"> ● Limited change in landscape character of Solway Coast AONB. 	<ul style="list-style-type: none"> + Continuation of natural processes will maintain the geological features (e.g. creek systems and exposures) of Upper Solway Flats and Marshes Geological SSSI and GCR. - Holding the line at Rockliffe may interrupt natural processes, damage the creek system and obscure rock exposures within the geologically designated sites 	<ul style="list-style-type: none"> ● No known impacts on water quality. ● Potential changes to shellfisheries due to changes in sediment patterns and increased areas for spawning. – impact uncertain at this stage 	<ul style="list-style-type: none"> + No active intervention in many areas would allow the natural migration inland of intertidal habitats adjacent to designated conservation sites. + The natural geomorphology of watercourses within the area will not be constrained. - Holding the line in some areas may result in coastal squeeze of intertidal habitat within and adjacent to designated conservation sites. - Potential for saline inundation to affect terrestrial and freshwater habitats. ● Potential for significant impacts on <ul style="list-style-type: none"> ○ Upper Solway Flats and Marshes SPA, Ramsar & SSSI ○ Solway Firth SAC ○ River Eden SAC & River Eden & Tributaries SSSI <p>Awaiting agreement of conclusions of Appropriate Assessment (AA).</p>
20-50 years	As above	<ul style="list-style-type: none"> - Increasing flood risk to Grade 3 (and lower) land 	As above	As above	As above	As above	As above	As above
50-100 years	As above plus: <ul style="list-style-type: none"> - Increasing flood-risk to isolated properties and land located along the - frontage 	As above plus: <ul style="list-style-type: none"> - Potential loss of Grade 3 (and lower) agricultural land 	As above plus: <ul style="list-style-type: none"> - Increasing flood risk and potential loss of amenity and tourist assets (e.g. parts of the Cumbria Way coastal path, Hadrian's Wall path and local access roads). 	As above	As above	As above	As above	As above

Impact colour key	+ Positive	● Neutral	— Negative
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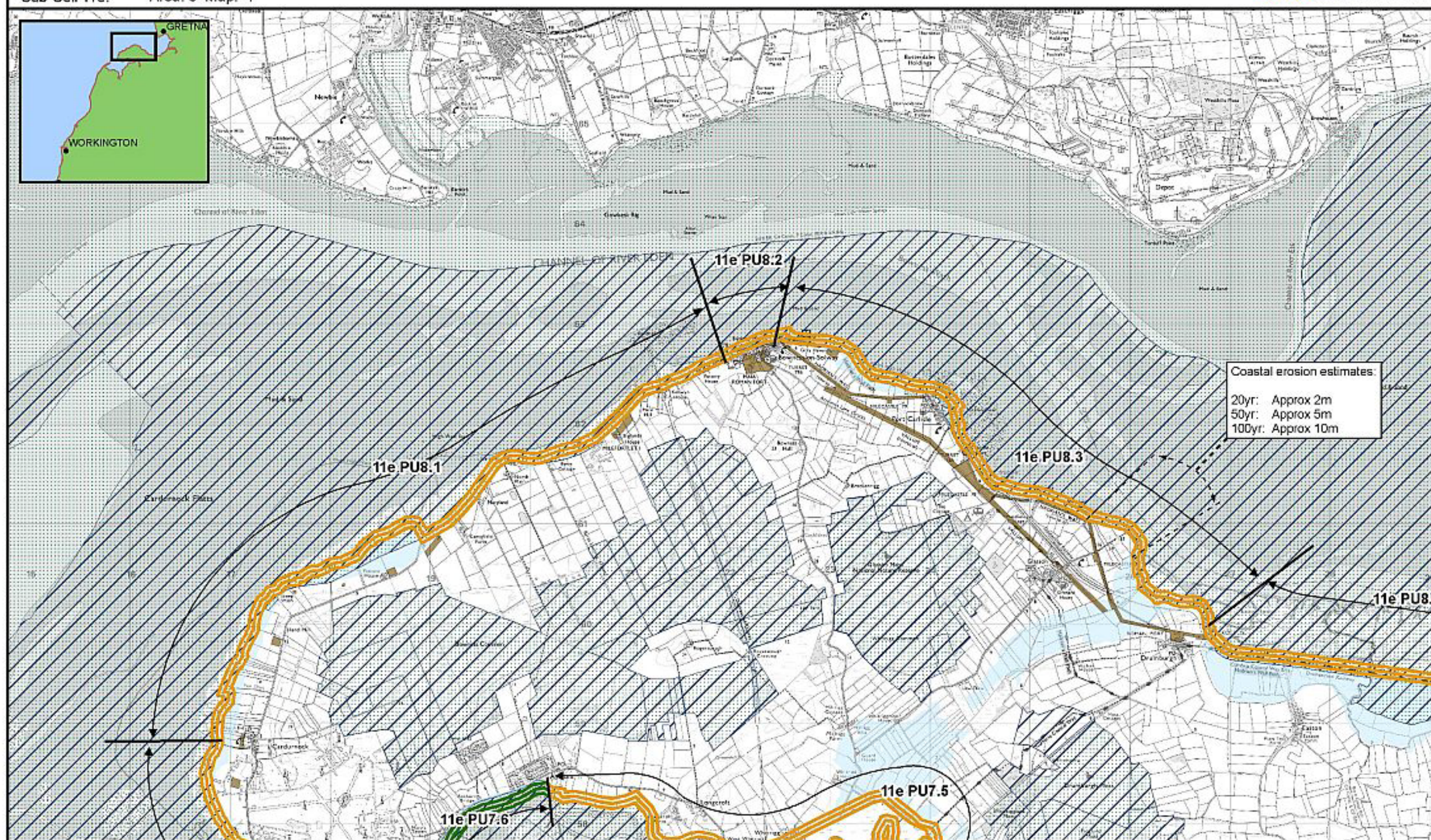
Consultation Draft



DRAFT ACTION PLAN					
Action	Action Ref	Action Description, (to be approved)	Potential source for funding (subject to approval)	Responsibility (lead partner)	When by (subject to funding)
1. Studies for scenario area	1.1	-			
2. Studies for Policy Units:					
PU 8.3	2.1	Promote a flood risk and coastal adaptation study for Port Carlisle and access road to raise awareness and encourage individual property flood defences if appropriate.	EA / Defra	ABC	2015
PU 8.4	2.2	Undertake a land use management and habitat creation study for Drumsburgh to Dykesfield and also plan for re-route or diversion of coastal road to define approach and timing of implementation of policies	EA / ABC / HA	ABC	2015
PU 8.8	2.3	Seek opportunities to re-route or divert undefended coastal road for Rockcliffe to Demesne Farm -	HA	Highway Authority	2015
PU 8.9	2.4	Undertake studies to investigate realigning defences to high ground between Demesne Farm to Metal Bridge, to facilitate habitat creation and more cost effective defence.	EA	EA	2015
PU 8.10	2.5	Undertake studies to investigate realigning defences between Metal Bridge (Esk) to River Sark as many existing defences may not be justified in medium/long term, and there are opportunities for habitat creation.	EA	EA	2015
3. Strategy	3.1	Develop an estuary flood risk adaptation strategy in consultation with stakeholders, to help manage adaptation to coastal change throughout the estuary,	EA	EA	2015
4. Scheme Work	4.1	To be defined by policy unit studies and monitoring	EA	LAs and EA	ongoing
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	EA	ongoing
	5.2	Environmental monitoring of designated conservation sites to provide baseline data for future Habitat Regulations Assessments	NE	NE	ongoing
	5.3	Monitor risk levels at Rockcliffe to facilitate reactive management i.e. maintain & upgrade defences when justified/required.	EA	EA	ongoing
6. Asset Management	6.1	Maintenance of defences including management of public access	ABC / EA	EA	ongoing
7. Communication	7.1	Undertake consultation with key stakeholders and general public during implementation phase	n/a	EA	ongoing
	7.2	Monitoring and management of Action Plans to ensure SMP policies are put into practice	n/a	EA	ongoing
8. Interface with Planning and Land Management	8.1	Ensure Shoreline Management Plan policies and flood and erosion risks are accounted for in the next revisions of land use plans in order to help manage residual risks from flooding and erosion.	n/a	ABC / CCC	ongoing
	8.2	Ensure flood and erosion risks are accounted for in planning decisions to aim to reduce the need to manage flood risk in future.	n/a	ABC / CCC	ongoing
9. Emergency Response	9.1	Development, monitoring and review of emergency response plans to prepare for over design standard events.	n/a	ABC / CCC	ongoing
10. Adaptation/Resilience	10.1	See items 2.1, 2.2, 2.3, 2.4, 2.5. & 11.1			
11. Flood Forecasting and Warning	11.1	Continue with improvements to flood risk maps and inundation modelling to provide improved flood warning service.	EA	EA	ongoing
12. Habitat Creation and environmental mitigation	12.1	See items 2.2, 2.4 & 2.5 above. Undertake Habitat Regulations Assessment at strategy or scheme level in consultation with Natural England	EA	EA	2015
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.					

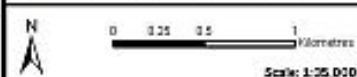
North West England and North Wales Shoreline Management Plan 2

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



Coastal erosion estimates:
20yr: Approx 2m
50yr: Approx 5m
100yr: Approx 10m

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Legend

- National Nature Conservation Designations
- International Nature Conservation Designations
- Scheduled Monuments

- 2008 Indicative Floodplain © Environment Agency
- Policy Unit Boundary
- Policy Unit Extent

Shoreline Management Policies

- Hold the Line (HTL)
- Managed Realignment (MR)
- No Active Intervention (NAI)



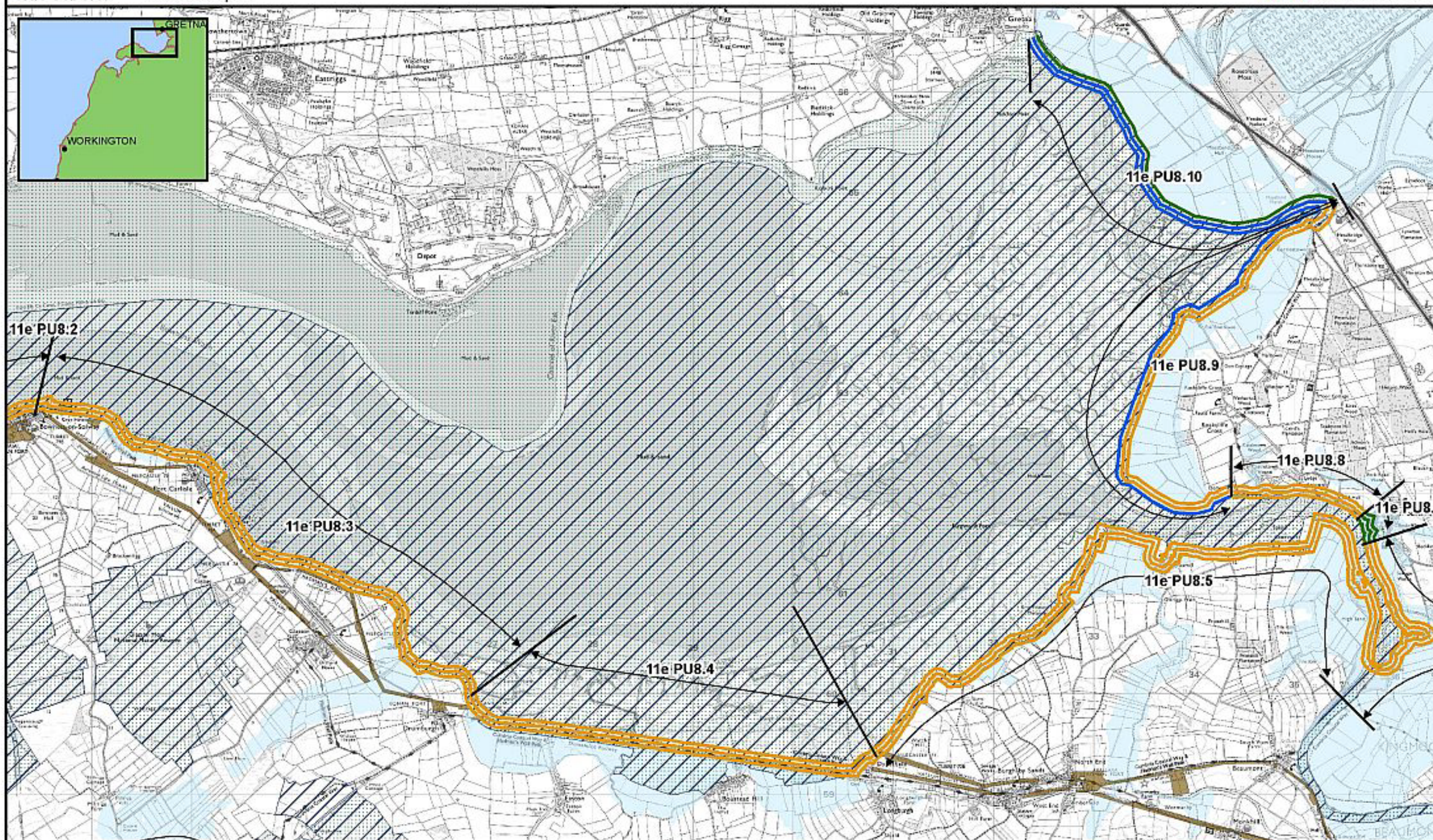
Note that the policy lines on the map show the preferred shoreline management policy for each period and do not represent either the shoreline or defence location

Halcrow

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

North West England and North Wales Shoreline Management Plan 2

Sub-Cell 11e: Area: 8 Map: 2



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Legend

- National Nature Conservation Designations
- International Nature Conservation Designations
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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

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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

[Small vertical text, likely a reference or file name]

North West & North Wales Coastal Group

North West England and North Wales Shoreline Management Plan SMP2

Appendix B Part 2 – Public Consultation Report

This document describes how we have consulted with the public about the Shoreline Management Plan 2, summarises the responses received during the consultation and gives the SMP2 team's comments on these responses.

Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Approved by
1	0	Draft Public Consultation Report for client comment	10/05/2010	A Parsons
2	0	Final report for publication	11/06/10	A Parsons

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- B5 Sub-Cell I Ia Consultation Materials**
- B6 Sub-Cell I Ib Consultation Materials**
- B7 Sub-Cell I Ic Consultation Materials**
- B8 Sub-cell I Id Consultation Materials**
- B9 Sub-cell I Ie Consultation Materials**
- B10 Sub-Cell I Ia Consultation Location Responses**
- B11 Sub-cell I Ib Consultation Location Responses**
- B12 Sub-Cell I Ic Consultation Location Responses**
- B13 Sub-Cell I Id Consultation Location Responses**
- B14 Sub-cell I Ie Consultation Location Responses**
- B15 SMP Document General Responses**

I. Introduction – what is this document?

The North West England and North Wales Coastal Group and its members have consulted with stakeholders and the public throughout the development of the North West England and North Wales Shoreline Management Plan 2 (SMP2) see **Appendix B Part 1**. Meetings have been held with stakeholder groups and elected members at key stages in the plans development and these are described in more detail in **Appendix B Part 1 sections B1, B2 and B3**.

This Consultation Report describes how we have consulted with the public during the public consultation stage (October 2009-February 2010) to inform them about the draft Shoreline Management Plan 2 and to give them the opportunity to comment on the proposed policies. **Section 2** describes what we have done and **Sections 3 to 8** summarise the responses we received and how we are taking account of these in finalising the SMP2.

Public Consultation was originally planned to take place over a three month period, from the start of October 2009 until the 31st December 2009. However, due to technical problems with the Coastal Group website and the severe flooding which affected many people in Cumbria in November 2009, we extended the consultation until 14th February 2010.

Concern was expressed in some areas that stakeholders and the public would not have sufficient time to respond to the consultation, especially where there were contentious issues which would require further information and/or meetings to be held. To accommodate for this, certain areas where provisional responses with requests for extensions of time had been made were given until the 31st March 2010 to submit their final consultation responses.

2. How we consulted with the public and dealt with consultation responses

The SMP2 team developed a strategy setting out how they would engage with the public about the SMP2 consultation.

The following methods of consultation were used during the SMP2 public consultation:

- Information on the North West England and North Wales Coastal Group Website (www.mycoastline.org);
- Consultation Response forms;
- Leaflets placed in town halls and other public buildings;
- Posters advertising events and to use at consultation events;
- Letters to extended stakeholder group, Parish Clerks and Elected Members;
- Press Releases distributed to local media;
- Elected Member Reports;
- Reports to Parish Councils;
- Links to the SMP2 and coastal group website on Local Authority Websites;
- Banners;
- Presentations;
- Radio and television coverage;
- Public evening meetings; and,
- Further targeted consultation in identified 'hotspots' tailored for each location taking into account the specific issues and stakeholders.

Details of consultation methods, materials used and meetings held for each area are included at the start of each of sections [4](#), [5](#), [6](#), [7](#) and [8](#).

2.1 Website

The North West England and North Wales Coastal Group website (www.mycoastline.org) hosted information on the SMP2 consultation, consultation events, downloadable versions of the draft SMP2 consultation documents, the full consultation document and all appendices and maps. A consultation response form was also available to download or complete online. A copy of the consultation response form is provided below in Figure 1.

Have your say	
Name	
Contact (to be used for feedback on the SMP) Email: Postal Address:	
Organisation (if applicable)	
Area of interest	
Do you agree with the policies set out in the Draft SMP?	<div> <div>Yes</div> <div>No</div> </div> Policy area(s) of disagreement:
What areas are of concern to you?	
Is there additional information which may affect the SMP policy? <i>(Continue on a separate sheet if necessary)</i>	Policy area(s): Additional Information:

Figure 1: Example feedback form downloadable from website

2.2 Summary leaflets

A leaflet was produced by the SMP2 team to promote the SMP2 consultation. Five separate inserts were also produced and distributed with the leaflets; each containing information about Shoreline Management Planning in each specific area (known as sub-cells).

The general part of the leaflet contained information about the aims of the SMP2 and the key implications and challenges that these could bring to local communities and the environment.

Approximately 3500 copies of the leaflet were sent to Local Authorities and the Environment Agency to be distributed as appropriate. Leaflets were placed in Local Authority offices, Environment Agency offices, local libraries and Town Halls. A copy of the general and specific leaflet text is included in Annex B4.

2.3 Exhibition posters

A series of exhibition posters were produced by the SMP2 team. The posters showed what an SMP is and why it is needed, how the SMP2 has been developed, the 4 policy options available, maps showing where individual policy units, details of where further information can be found and how feedback can be given. Copies of these posters are included in [Annex B4](#).

An additional poster was produced for Local Authorities advertising the public consultation events a copy of which is included in [Annex B4](#).

2.4 Letters to all registered stakeholders

A letter which included a consultation response form was sent out to all people and/or organisations identified as having an interest in the SMP2 by Local Authority officers or who had registered an interest in the SMP2 over the course of its development. This letter gave information about the SMP2, raised awareness of the consultation and invited the reader to attend a consultation meeting. A copy of the stakeholder letter is provided in [Annex B4](#).

2.5 What we did with the consultation responses

Written correspondence and consultation response forms were sent to Blackpool Council, the authority responsible for managing the SMP2. An email address was set up for emailed consultation responses and responses submitted through the Coastal Group website (smp2@mycoastline.org).

All consultation responses were collated and reviewed. People who responded received a standard reply from Blackpool Council, on behalf of the Coastal Group. This acknowledged their response and informed them that a formal response document would be produced after the end of the consultation. However, each response received was considered individually and if appropriate, a detailed reply was sent to the responder.

All responses received were recorded as detailed below:

- Upon receipt each response was given a unique reference number;
- Details of each response were entered into a Consultation Response Log (e.g. date, name, contact details, area of interest and comment);
- Each comment was considered individually and any actions required were noted;

- At the end of the consultation period the responses were reviewed and categorised according to theme and / or geographical location;
- The SMP2 Team held a two day workshop to discuss the response and agree an approach to dealing with them.
- The consultation report was reviewed by the PMB and CSG's before finalising and making available to the public.

2.6 Where can I find my response?

Copies of all the SMP2 consultation responses can be found in Annexes B10 to B14. These annexes bring together responses under common themes or geographical location, by sub-cell. A comment and/or details of actions taken by the SMP2 Team is listed next to each consultation response. This is to make it clear how consultation responses have been taken into account.

Summarised versions of the consultation responses can be found in this document along with summarised versions of the SMP2 Team's comments on these.

Section 3 details general responses to the SMP2, the principles behind it and the methods used to develop it. Sections 4 to 8 contain responses grouped geographically (based on the 5 sub cell areas). See Figure 2 below for the geographic location of the Sub-Cells.

Within each geographic summary there are sub-sections to describe:

- How we have engaged with the public to raise awareness of the SMP2 consultation;
- Details of Public Events and Stakeholder Meetings;
- An overall summary of consultation responses; and
- Summaries of area specific responses.

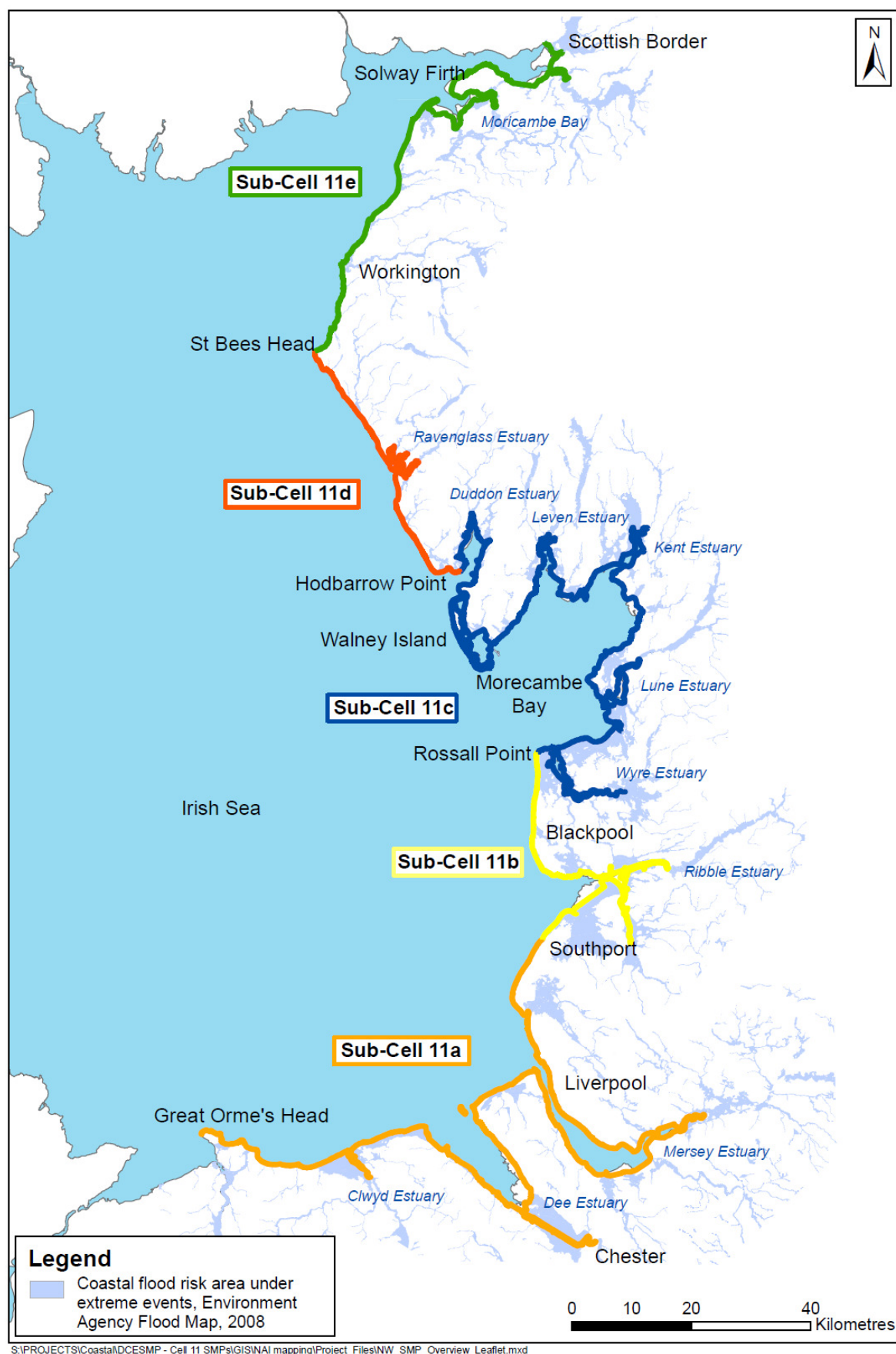


Figure 2: Map showing the location of Sub-Cells in North West England and North Wales

3 General Responses

Below are summaries of general responses and issues raised during public consultation and the SMP2 Team's comments on the responses. These have been split into the following sub-sections.

- Responses giving support
- Climate change and sea level rise
- Food security
- Managed realignment
- Private defences
- Compensation
- Consultation methods

3.1 Responses giving support

Several responses were received expressing support for draft SMP2 policies and / or the draft SMP2 as a whole.

Examples of responses of support relating generally to the **whole SMP area** included:

"BASC acknowledges the visions outlined in the consultation document for North West England and North Wales Shoreline Management Plan SMP2. BASC believes this process complements existing government coastal initiatives which BASC and its members are actively involved in at national and local levels eg Marine Bill, Coastal Change Policy, Natural England and Environment Agency programmes." British Association for Shooting and Conservation

"We are aware your SMP process has been out to consultation, a process we embrace and in which we welcome the chance to participate." The Crown Estate

"With regard to marine activities in the NW, agree to the draft policies." Royal Yachting Association

"Agree with draft policies for Morecambe Bay and the Kent Estuary" Morecambe Bay Wildfowlers Association

"Broadly agree with draft policies" Cumbria Local Access Forum

"Broadly speaking, we support the adoption of NAI or MR for those Policy Units where these are proposed as the Preferred Option" RSPB

"The National Trust has been involved in the consultation process around the preparation of the SMP2 and broadly supports the policy options and proposals which relate to the land in our care in the Merseyside coast." National Trust

SMP2 Team Comments

The SMP2 Team would like to acknowledge and welcome the support given for the North West England and North Wales SMP2.

3.2 Climate change and Sea level rise

A number of responses related to how climate change had been considered in SMP2 development. Other responses indicated people were sceptical about the existence of climate change.

Examples of responses relating to locations across the **whole SMP2 area** included:

“The main plan document may benefit from a clearer explanation of how climate change estimates have been and will be incorporated into the SMP2 process”.

“This outdated theory has now been thoroughly discredited by most leading scientists apart from the few who have invested their reputations in manipulating the research to try to prove the unprovable, sea levels have not risen and are not rising”.

“The sea levels have not risen by one single millimetre and the rivers running into the (Morecambe) Bay are less full than they have ever been.”

“Issues like climate change effect are not conclusive, in fact some parties now say it is not happening and could be in reverse”.

“I am sure that part of this process is promulgated by the theoretical potential for increased sea levels. This is a dubious and controversial area and, whilst it is not acceptable to do so, open to serious scientific challenge. Where is the evidence for this?”

“Bearing in mind also that the DEFRA guidance on sea level rise from 1990 to present is clearly incorrect for the Irish sea and overestimates sea level rise by a factor of two it would appear premature to adopt policy change in this area at this time”.

SMP2 Team Comments

The global climate is constantly changing, but it is generally recognised that we are entering a period of accelerated climate change, particularly with respect to rising sea levels. The anticipated implications of climate change and sea level rise present a significant challenge to how the coast is managed in the future.

The sea level rise information in the SMP2 has been recommended by Defra and is shown in Table C4 of Appendix C. This information allows for 988mm of relative mean sea level rise between the years 1990 and 2115 in North West England. The Defra information gives average rates of relative sea level rise over 30 year time periods. The acceleration in rise is expected to increase exponentially in future. It is not surprising that evidence for measured sea level rise since 1990 does not yet match the mean rate expected for the first time period,

The United Kingdom Climate Projections 09 (UKCP09) are the most recent predictions on climate change and were released in June 2009. This information has not been used to develop the SMP2 as it was not available at the start of the SMP2 project. However, the SMP2 Action Plan will allow for this to be taken into

account in implementation and future updates. UKCP09 provides probabilistic projections of climate change. The UKCP09 information includes publications, key findings, information to help the reader and data. The UKCP09 information is available on-line at: <http://ukclimateprojections.defra.gov.uk/> Coastal change projections will be updated nationally to consider these recent climate change projections after the SMP2s have been completed around the country.

3.3 Food Security

Concern has been raised that UK food security has not been thoroughly considered throughout the SMP2 process and that the decision to allow agricultural land to flood may result in future problems with food availability. Responses suggest that Government policy has recently changed, with farmers being urged to increase productive land and people being encouraged to grow food at home. Many responses suggest that the draft SMP2 policies go against this Government advice. Along the North West England and North Wales coastline, there has been significant reclamation of land for agricultural purposes. It is seen as unwise to consider abandoning this land at a time when the population is growing and there are concerns about the need to increase future British food production.

Responses mainly relate to **Sub-Cell 11c** and include:

“Resident feels that the food security policy has changed over the last 12 months with Hilary Benn advocating growing food at home. He thinks this should be taken into account in the SMP and give farmland more weight.”

“I am sure you are more than aware that over the course of the next 40 yrs the world's population is set to increase by some 50% to 9 billion people, most of who will live in Asia and are already net importers of food. 60% of these people will also live in cities and the last time I checked they don't produce much in the way of food there. Additionally we are currently loosing approx 3% of the world's farmland each yr to construction, deforestation and desertification and as they say they don't make it anymore, land that is. Combine all these factors and the world is going to starve within the next generation, certainly before it drowns. The thought of losing over a thousand acres of Grade 1 and 2 land to the sea for it to 'die' and then leak methane gas into the atmosphere needs careful consideration and I would urge the decision makers to undertake a deep and wide review of this matter and to include openly the residents and owners of the land as it would appear that so far this has been kept quiet as an issue.”

“After the impact of the foot and mouth outbreak of 2001 surely the UK should be looking at being as near self sufficient in food production as it is possible. At least if we grow our own food in the UK we are in charge of the bio security of it. How long before the bio security of food becomes an issue for extremists and terrorists to exploit? With the population projected to grow to 70 million in the next twenty years surely we should be looking to reclaim land rather than letting it go to wetland. After World War 2 farmers were encouraged to produce food to feed the country and overcome the food rationing at that time. Grants were available for drainage projects and for farmers to improve their businesses now it appears that we should allow good fertile land revert to wetland and import food from places around the globe at what cost to the UK economy not to mention the Carbon footprint.”

“At a time when increasing world population is causing a massive increase in demand for food it is stupid to lose agricultural land; its retention is a much higher need than some amphibians or moths. Hundreds of years of effort have gone into the reclamation of farmland around our estuaries and thousands of pounds of both taxpayers and land owners money; to reverse this achievement now is crass stupidity;”

“It is also appropriate for us to highlight that a sustainable productive agricultural industry is a critical. Disappointingly this has often been undervalued here in the UK. However things are changing and it has been quite noticeable how quickly the issue of food security, even its availability has 'climbed' the political ladder in the last 12 months....The true value of agricultural land is its market price and this is not recognised or taken into full account in scheme appraisals. This view is once again, portrayed in the Shoreline Management Plan 2 - which disappointingly fails to acknowledge agriculture as a key policy driver in setting out future options for the relevant policy units” NFU Cymru

“Too often public organisations overlook the fact that agricultural land is a business asset which must be treated, now more than ever, as a precious commodity. With the publication of ‘Food 2030’ in January 2010, Defra have for the first time in almost 60 years formally recognised the value of the agricultural and horticultural industry’s primary products. Food security, it seems, has finally taken a step up within Defra’s estimation. The document sets out the steps the government feel will need to be taken to produce more food without unnecessary damage to natural resources, against the back drop of climate change whilst improving food safety. Given this back drop, the SMP must now recognise the role the North West has to play in the increased demand there will be for locally sourced food and energy.” NFU

SMP2 Team Comments

Government guidance on flood and erosion risk management decision making has placed an increased importance on consideration of farmland in recent years. The way that the national economic value of farm land is calculated has been changed to reflect the changes in agricultural subsidies.

Previously, the national economic value of farmland was considered by government to be 45% of the market value due to the subsidies artificially raising prices. This has now changed and the actual market value less £600/ha is used. Market values have also substantially increased in recent years. These increased values have been used in the SMP2 economic assessment. Land values used change for different agricultural land grades, but in the SMP2 area they are typically of the order of £13,000/ha.

The Defra “Food 2030” strategy was launched in January 2010. The SMP2 project started in October 2008 and as such, the “Food 2030” information was not used in the SMP2 development.

However, there is a proposed action in “Food 2030” to improve ways to value ecosystems through “Applied research looking at how food production and consumption in the UK links to the value of ecosystem services principles for decision-making which help in considering whether to convert land or intensify food production in the UK based on a proper assessment of costs / benefits based on ecosystems services”. In the final SMP2 Action Plan, we will recommend a further task to consider the implications of changing land use as a result of SMP2 policies.

3.4 Managed Realignment

Draft policies proposing managed realignment have resulted in mixed reactions. A number of responses have expressed support for managed realignment policies and have seen it as an opportunity to return to a more natural coast. This could help to address future climate change issues and loss of natural coastal habitat elsewhere. However, concern has also been raised about uncertainty process of managed realignment – how it would be implemented and where the new defence line may be. There are also concerns about the economic viability of managed realignment schemes, including the cost of removing existing defences and constructing

new defences further inland. Responses have questioned whether the schemes are simply being driven by the need to acquire more inter-tidal habitats rather than for the benefits to the local area. Both the RSPB and the NFU would prefer to see proactive managed realignment rather than a no active intervention policy.

Responses relate to locations across the **whole SMP area** and include:

“Coastal management policies such as No Active Intervention and Managed Realignment offer significant opportunities to allow natural processes to prevail and to address climate change impacts. RSPB is also supportive of using natural habitats such as dunes and saltmarsh, as natural flood defences. Opportunities for creation or better management of these habitats should be sought.” RSPB

“Where opportunities have been identified for managed realignment/ retreat these should be investigated further. It may be possible to feed actions into local wetland creation schemes which are currently being carried out in the Morecambe Bay area. It is accepted that managed realignment may only be possible in the longer term due to stakeholder pressures. However, it is important that potential sites are considered and publicised to stakeholders to make sure these options are possible and have support.” EA NW

“The NFU also accepts that managed realignment will play a part in achieving sustainable flood defence. Where realignment does take place, it needs to be planned and managed; not left to be determined by chance wherever the defences happen to fail.” NFU

“We would like to better understand the concept of ‘managed realignment’ and how this would be likely to be implemented in our area if the draft policy was approved. If more than one option is possible, we would like to know what these options are likely to be. Specifically, would this involve the actual removal of current defence walls?”

“No evidence to date has been presented regarding the necessity for more salt marsh on ecological grounds as marshland already exists, or has been created, in nearby areas such as Cockerham Marsh and Hesketh”

SMP2 Team Comments

Managed realignment is effectively moving the line of defence landward (or seaward) to control or limit coastal flood or erosion risk (such as building new defences further inland from the existing defences). Any increase of flood risk as a result of such movement will also be managed. This policy mainly applies to low-lying areas of land at risk of flooding, but can apply to cliffed areas, where taking managed action can slow or limit cliff erosion.

Managed realignment provides the opportunity to create a more natural coastline in a controlled way. It also helps to allow sediment movement and maintain beaches by providing space for natural landward roll-back of saltmarsh, beaches or dunes. It may also provide opportunities to create habitats for wildlife.

Theoretically, defences could be moved inland up to where the area at risk of coastal flooding ends (where the land begins to get higher). However, in reality defences are often not realigned that far (for example where there are settlements or infrastructure within the floodplain that need protecting). The SMP2 has identified where there are opportunities for managed realignment but does not state where the new line of defence would be. The SMP2 recommends that detailed studies are carried out before any realignment is implemented.

These studies would need to consider the potential local and regional impacts of realigning defences, the risks and opportunities associated with any realignment and how the land is currently used. There will be a timetable detailing when further studies, including future managed realignment opportunities, will take place in the SMP2 Action Plan.

Following concerns raised by respondents including the Environment Agency, RSPB and NFU a number of policy units where a no active intervention policy was suggested in the consultation document have been changed to Managed Realignment to allow opportunities for habitat creation and active management of flood and coastal erosion risks where practicable.

3.5 Private defences

A number of responses were received about the decision to have a headline policy of No Active Intervention in cases where the defence can be maintained in the future with private funding. There are a number of areas where there are currently defences which were privately funded or funded by a combination of public and private sources. In these cases, further explanation was required to address landowner concerns.

Examples of responses received from locations across the whole **SMP2 area** include:

“the policy description needs to be clear i.e. that there is no economic case based upon a national economic assessment, but that there is landowner support for HTL.”

“Myself and our neighbours are quite happy to contribute to a private fund to ensure that the sea defences are maintained over the 100 year period.”

“As property owners, we have every right to protect our property and No Active Intervention directly contravenes that basic right.”

“The majority of this Policy Unit is in the ownership of private frontagers who have invested in the provision of the existing coastal defence. The headline policy of No Active Intervention in the long term conflicts with the detail of the policy which indicates that a Hold The Line policy subject to private investment would be allowed. The headline policy should reflect the policy for the majority of the frontage.”

SMP2 Team Comments

The SMP2 is a non-statutory document and provides information to help Local Authorities and others make planning decisions. While Local Authorities and the Environment Agency will use the SMP2 policies, these policies do not override statutory rights of landowners, or the Local Authorities or Environment Agency duties under land use planning legislation, the Habitats Regulations or flood and coastal defence legislation such as the Coast Protection Act (1949), the Land Drainage Act (1991) and the Flood and Water Management Act (2010).

In North West England and North Wales, there are lengths of coastal defences that are privately owned and maintained. The SMP2 will help us to understand how and whether individual private defences affect the levels of risk elsewhere. In the future, private land and property owners will need to consider how they will deal with coastal change that affects their property. Since flood and coastal defence powers for Local Authorities

and the Environment Agency is permissive, meaning that they do not have a duty to undertake works, but can do so if justified and affordable, the public do not have a general right to protection against coastal flooding or erosion.

It would be difficult to get National funding to defend a number of locations along the SMP2 coast as the cost of building and maintaining defences outweighs the value of the assets and land it would be defending.

Individuals and some private organisations have rights or powers to protect their own property, although permission is needed from Local Authorities and / or the Environment Agency before work other than routine maintenance can be carried out.

In situations, where small areas of private defence were not considered to have impact on erosion or flood risk elsewhere, the draft SMP2 policy was set as no active intervention. This decision was taken as such work would not receive national funding and therefore a hold the line policy could not be guaranteed. However, there was a caveat in the no active intervention policy stating that local/private funded maintenance of existing defences would be allowed subject to consent.

Following consultation, the SMP2 team have decided that where private funding of defences is expected to continue, and private defences make up a majority of the Policy Unit, it is more appropriate to change the policy from a no active intervention policy to hold the line (subject to a private funding agreement).

There will not be details about how landowners can build or maintain their own coast defence in the SMP2. However, Defra's position on maintaining uneconomic sea defences can be viewed at:
<http://www.defra.gov.uk/environment/flooding/documents/policy/guidance/seadefence.pdf>

3.6 Compensation

Homeowners who live in areas where they consider the proposed SMP2 policy could reduce the value of properties or leave them vulnerable to flooding or erosion have voiced significant concerns. There are suggestions that policies may be in breach of Human Rights, and there have been questions regarding the rights to compensation and how this would be calculated.

Responses predominately relate to **Sub-Cell 11c** and include:

"In my opinion, although I stand to be corrected, I believe there could be issue under the Human Rights Act 1988....Article 8: the right to respect for private and family life."

"If these public authorities do decide to approve the draft policy it may very well be that they will be in breach of the property owners human rights under Article 1 of the First Protocol of the Convention for the Protection of Human Rights and Fundamental Freedoms"

"No offers of compensation for loss of homes, farmland and businesses and destruction of same would affect the human rights of all landowners involved."

“If a change to a policy were to go ahead, then all of those affected by a loss of asset value (e.g., value of home, farm etc) will require immediate financial compensation. Twenty years ahead, if MR were to take place, then those directly affected by MR operations would require further compensation payments.”

“Your proposal did not include any compensation or financial support for the properties put at risk.”

“If you cannot do this (change the policy) then the very least is financial support in the form of market value of the properties and compensation for having to move. I recognise the current policy regarding permissive loss. However we moved here on the understanding of coastline protection as has been here for the last several hundred years. The Council did not withhold planning permission or offer advice regarding this change in policy. Realignment is not permissive. It is active. In the meantime what do I do about my property? Please buy it off me, and compensate me for having to move.”

“We have spent sleepless nights worrying about the situation we now find ourselves in. If the current sea wall ceased to be maintained as with the non-active intervention option, the value of our property would be severely reduced and possibly uninsurable. We would never know if or when we would be flooded and by how much. We would be living in a constant state of fear during times of high tides, especially if accompanied by strong winds. Our worst case scenario is that our home would become uninhabitable; we would lose everything and would have to leave.”

“If the coastline was left to degrade, then this would have a detrimental effect on the value and selling potential of our property. No potential buyer would ever contemplate on purchasing a property that would ultimately fall into the sea.”

SMP2 Team Comments

The Environment Agency and Local Authorities can undertake flood risk management activities but do not have a legal duty to do so. In the UK there is not an automatic right to state funded flood protection and there is no right to compensation if there is a decision taken to stop maintaining defences.

The SMP2 is a non-statutory document and provides information to help Local Authorities and the Environment Agency make planning decisions on coastal defences. It does not provide solutions to issues such as compensation. The national cost of providing compensation to those who lose land or property to coastal flooding or erosion, whether as a result of SMP2 policies or not, could be high and government policy changes to allow for any payments of this kind would have to be properly evaluated against other demands on the public purse.

Money for building and maintaining public coastal flood and erosion defences comes mainly from central government. If compensation for owners of land and property lost to coastal flooding and erosion were introduced, decisions would have to be made regarding whether it should be provided at the expense of building defences elsewhere (if taken from the existing flood/erosion budget), or if it should be funded from a different area of the national budget (e.g. education, health, police, etc).

The Department for Environment, Food and Rural Affairs (Defra) and the Welsh Assembly Government (WAG) however, recognise that compensation could significantly help landowners. They are currently investigating the best ways to help people adapt to the changing coast. Defra recently held a public consultation on coastal adaptation and has announced funding for a number of pathfinder projects, which will

help to investigate and trial measures that can be taken by communities in areas where defences won't be built.

Both Defra and WAG are developing and encouraging alternative approaches to managing coastal risks. In England up to £28 million of Defra's Comprehensive Spending Review settlement for 2008 – 2011 was made available to support adaptation measures. This was intended to focus on ways that we can reduce damage caused by floods and coastal erosion, through careful land use planning and building design, better information and community engagement to encourage sensible risk management by individuals or organisations, and measures to help communities adapt to increasing risk. Further information is available from: <http://www.defra.gov.uk/environment/flooding/manage/index.htm>

Current legislation does allow financial compensation for land purchase if this is required for the construction of coastal defences. In some cases this can extend to schemes involving the managed realignment of coastal flood defences. A guidance note on Defra's position on land purchase, compensation and payment for alternative beneficial land use with managed realignment can be viewed at: <http://www.defra.gov.uk/environment/flooding/policy/guidance/realign.htm>

Where the SMP policy may result in increased risk to property and assets, whether due to coastal erosion or flooding, the effect on property owners should be managed through adaptation measures or relocation. Business and commercial enterprises will also need to establish the actions that they need to take to address coastal change in the future. This includes providers of services and utilities, which will need to plan for long-term change when upgrading or replacing existing facilities in the shorter term. They should also consider how they will relocate facilities that will be lost to erosion or flooding, and the potential need to provide for relocated communities. Other parties needing to consider mitigation measures will be the local highways authorities and bodies responsible for local amenities (including churches, golf clubs etc). The Coastal Group aims to work with these interest groups in the future, to ensure they are given appropriate advice and guidance.

3.7 Consultation methods

Some responses were received about how we have consulted with the public on the SMP2. Issues include the length of the consultation period, the availability to attend meetings at short notice and the locations of other meetings. In addition, some residents were not aware of the Plan's existence in general and would have appreciated being kept informed and updated from an earlier stage.

Responses on consultation predominately relate to **Sub-Cells 11c, d and e** and include:

"We were also appalled to be told that you fully realised that the meeting had been called at short notice, but then to be further told that the deadline date for responses was Sunday 14 February (leaving just one working day after the meeting) was both ludicrous and thoughtless. We sincerely hope that your assurances that responses received after this date will still be considered, will hold true."

"We will start by reiterating our disgust (expressed at the meeting) at the lack of publicity for this meeting – an all-important one for many of us."

“We understand from speaking with some of our neighbours that you held a public consultation meeting last Thursday night 11 February 2010. We would like it to go on record that this meeting was not publicised in the local media, nor was it directly publicised to any of the local residents.”

“I was surprised to learn that you have developed such a plan and that I have not been informed or involved in such discussions.”

“Your consultation has been in name only, and has made no genuine attempt to involve the local communities”.

“I am rather concerned at the way the above "consultation" is being conducted. I can see that it will be OK from the point of view of experts and organisations, but for members of the public - whose views you say you want - it leaves a great deal to be desired.”

“In the spring and summer months, the area is visited by large numbers of people from outside the area, to say nothing about the many more who have holiday accommodation locally. Because of the timing of the consultation period, these people will not be offered the opportunity to take part in the consultation process.”

SMP2 Team Comments

The SMP2 team included key stakeholders, Elected Members and Parish Councillors whilst developing the draft SMP2. Due to the technical nature of choosing proposed policies, we decided to involve members of the public once the plan had been reasonably developed. We then went through the public consultation stage to let local people have their say on the proposed policies.

At the start of public consultation each Local Authority contacted the Parish Councils and local councillors in their area to inform them of public consultation and the public consultation events. It is understood that in some areas, this information did not reach all of the councillors or was not passed on to residents.

To advertise the consultation and make people aware of meetings, posters were put in Local Authority buildings and libraries, and advertised on Local Authority Websites and the Coastal Group website. Press releases were issued about the consultation and local events (from which much coverage was received).

In some contentious areas further meetings were held to try and address the concerns of residents.

Members of the public did not need to attend a public meeting to be able to comment on the document, as questions about or responses to the draft SMP2 could be emailed or sent to the SMP2 team.

Although the consultation was not during the summer season, we did receive a number of responses from outside the North West England and North Wales coastal area. Hosting the consultation on the Coastal Group's website helped to make the document available to people who were not local.

4 Consultation Strategy and Responses received: Sub-Cell 11a – Great Orme's Head to Southport

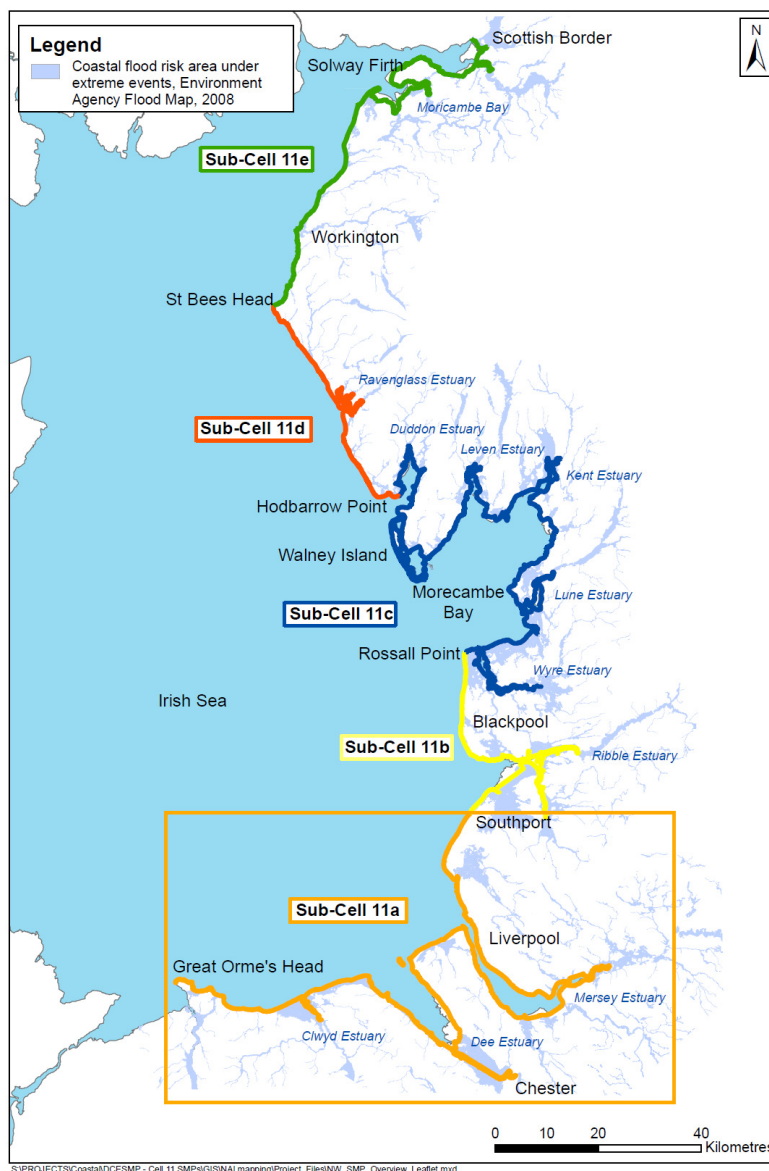


Figure 3: Map showing the location of Sub-Cell 11a, Great Orme's Head (North Wales) to Southport.

4.1 Consultation Strategy Sub-Cell 11a

In Sub-Cell 11a (between Great Orme's Head in North Wales and Southport), we used the following ways to raise awareness of the SMP2 consultation.

Examples of consultation materials including stakeholder letters, press releases, press articles, cabinet reports, Coastal Forum Reports and meeting notes are included in [Annex B5](#).

[Coastal Group website](#)

A list of local consultation events and the full draft SMP2 consultation document, including appendices and maps were included on and downloadable from the North West England and North Wales Coastal Group website (<http://www.mycoastline.org>). A consultation response form was also available to download or complete on online.

Press Notices / Press Briefings

A press release was issued by Denbighshire County Council (DCC) in November 2009 on behalf of Denbighshire County Council, Conwy County Borough Council and Flintshire County Council. A feature on the public consultation was also included on the Denbighshire County Council website.

Wirral Metropolitan Borough Council issued press releases on 7th December 2010, about the public consultation, and providing information about the public meeting on 10th December 2010. Articles were included in the Wirral Globe on 7th December 2009 and the Wirral News on 9th December 2009.

A press release was issued by Sefton Council on the 4th December 2009 to advertise the SMP2 consultation. In addition a video was available to view online on the council's website: www.sefton.gov.uk/

Stakeholder Letters

Wirral Council sent letters to coastal golf clubs including Heswall, Caldy, Leasowe, Royal Liverpool and Wallasey Golf Clubs). Letters were also sent to residents at Heswall, informing them of the SMP2.

A letter to residents informing them of the SMP2 and draft policies went out with the SMP2 leaflet to public buildings and libraries along the Sefton frontage.

Cabinet Reports

A Wirral Council report was presented to the 'Streetscene and Transport Services' Cabinet in September 2009 regarding the SMP2 public consultation.

A Sefton Council Executive Report about the SMP2 consultation was presented to the Southport Area Committee on the 28th October 2009, the Formby Area Committee on the 29th October 2009, and the Crosby Area Committee on the 4th November 2009. The SMP2 was also taken to the following area committees:

- Formby Parish Council on the 6th October 2009
- Hightown Parish Council on the 16th November 2009

Coastal Forum Reports

A Coastal Forum report was produced and meetings with the Wirral Coastal Area Forums were held throughout October 2009, informing them of the background to the SMP2 and the consultation process.

Informal discussions regarding the SMP2 consultation were also undertaken with professional partners through the Sefton Coast Partnership.

Draft SMP2 Documents

The draft SMP2 documents and leaflets were made available for the public to view at the following locations.

- Conwy: all Council Offices and Public Libraries;
- Denbighshire: Council offices in Rhyl, Prestatyn, Denbigh and Ruthin; Public Libraries in Rhyl, Prestatyn and Rhuddlan; Town Council offices in Rhyl, Prestatyn and Rhuddlan;
- Flintshire: Mold County Hall, Flint Council Offices, and Public Libraries at Mold, Holywell, Bagillt, Flint, Connah's Quay, Queensferry, Mancot, Broughton, Saltney, Buckley as well as Mobile Libraries;
- Wirral: Public Libraries, Eastham, Irby, Heswall, Hoylake, Leasowe, Moreton, Seacombe, Wallasey, Wallasey Village and West Kirby; at Birkenhead, Bromborough, Wallasey Town Hall and Cheshire Lines Building;
- Sefton: Public Libraries.

Copies were also provided for all County Councillors, local MPs and Assembly Members, and Councillors at Rhyl and Prestatyn Town Councils.

4.2 Public Events and Stakeholder Meetings

Two public meetings / workshops were held in December 2009 to publicise the SMP2 consultation and allow stakeholders and members of the public to come and ask questions/find out more information about the SMP2 and the draft policies. Public events were held at the following locations:

- North Wales, 7th December 2009 at Kinmel Manor, Abergele
- Wirral, 10th December 2009 at Kings Gap Court Hotel, Hoylake

In addition, a separate meeting was set up to discuss the draft policies relating to Caldy Golf Club and the West Kirby frontage. The meeting was held at Caldy Golf Club on 14th January 2010.

The notes from the three meetings are included in Annex B5.

4.3 Consultation Responses

Responses were received from over 60 residents, businesses, Parish Councils and other organisations. Responses were received in a variety of forms:

- letters;
- consultation response forms (hand written and electronic); and
- e-mails.

A summary of issues raised during public consultation relating to specific policy areas are included in the following sections. Annex B10 includes all SMP2 public consultation responses. A comment and/or action taken by the SMP2 team is also included for each response.

4.4 Area Specific Responses

4.4.1 Great Orme to Little Orme - 11a1

There was overall support from consultees for the draft policies along this coastline. The aim is to allow the currently undefended cliffs of Great Orme and Little Orme to continue changing naturally with no active intervention, whilst reducing risk to Llandudno by maintaining the present defences with a hold the line policy. The main responses and queries received are summarised below:

- Consultees agreed with and supported the preferred policies.
- However, there were concerns raised by the Environment Agency (EA) Wales that the short term policies were not ambitious enough in terms of managed realignment. They felt that managed realignment is often a sustainable short term option and as such should be considered for locations on the whole of the north Wales coast.

SMP2 Team Comments

It has been identified that there are no opportunities for managed realignment in this area, due to limited realignment space available, location of infrastructure (such as roads and railway), properties along the coast and the large area of Llandudno which is at flood risk.

No changes to the draft policies have been made following public consultation.

4.4.2 Little Orme to Clwyd Estuary - 11a2

There was mixed support from consultees for the draft policies along this coastline. The long term plan is to continue managing flood and erosion risks to this currently developed shoreline which includes the main road and rail links to the region with a hold the line policy. The main responses and queries received are summarised below:

- Concerns were raised by EA Wales and the RSPB that the short term policies were not ambitious enough in terms of managed realignment. They felt that managed realignment is often a sustainable short term option and as such should be considered for the locations on whole of the north Wales coast.
- There was concern over how the existing defences limit movement of shingle around the coast and the effect this would have on designated sites and breeding bird colonies.

SMP2 Team Comments

Managed realignment was considered at a number of locations along this area of coast. However, this was rejected due to the need to construct longer lengths of defence, limited realignment space available due to the road, railway, levels of the land and the limited potential to create habitats in the longer term as sea levels rise. Following the public consultation the SMP2 team have reviewed some initial work by EA Wales to identify possible sites for managed realignment along the North Wales coast. The results of this review show that no

locations have been identified for managed realignment in the long term along this area of coast. The team do however recognise that short term managed realignment or habitat creation opportunities could be considered and could contribute towards Biodiversity Action Plan (BAP) targets. This could happen in conjunction with a hold the line policy along parts of the coast and this is now reflected in the SMP2 Action Plan.

The SMP2 team recognise that some of the defences along the North Wales coast can block sediment movement along the coast, which in turn could potentially have adverse effects on designated sites and wildlife. Therefore in the SMP2 Action Plan we have recommended that there should be a sediment movement and beach management study along the North Wales coast to develop a strategic approach. We also recommend looking into managing and modifying coastal structures to help prevent loss of beaches and intertidal areas.

No changes to the draft policies have been made following public consultation.

4.4.3 Clwyd Estuary - I1a3

Public feedback was supportive for the draft policies within the Clywd Estuary. The draft plan is to continue managing risk to the settlements along the coast, which include Kinmel Bay, Towyn, Rhyl and Prestatyn, whilst investigating opportunities for managed realignment elsewhere within the estuary. The main responses and queries received are summarised below:

- Managed realignment policies were welcomed, however concerns were raised by EA Wales that the short term policies were not ambitious enough in terms of managed realignment. They felt that managed realignment is often a sustainable short term option and as such should be considered for locations on the whole of the north Wales coast.
- It was considered that action should be taken to stop building on the flood plain to reduce risk to properties. However, another consultee raised concern regarding the opportunities for managed realignment, and its impact on the Local Development Plans and Unitary Development Plans.

SMP2 Team Comments

Following the public consultation the SMP2 team have reviewed some initial work by EA Wales to identify possible sites for managed realignment along the North Wales coast. The results of this review show that there are some locations within the Clwyd Estuary that may be suitable for managed realignment. However, the SMP2 team decided that it was not appropriate to propose managed realignment until a suitable plan for delivering this realignment has been developed and all the potential options have been sent to stakeholders for their views. This delivery plan is currently in development in the form of the Environment Agency's Tidal Clwyd Flood Risk Management Strategy and the next stage of consultation will start later this year. This is to allow public consultation on any proposed realignment. The team recognise that after this, there may be opportunities for managed realignment sooner and the policy description will reflect this.

The SMP2 team have worked closely with Local Authority planning departments to identify large-scale developments in the area, which either have planning permission or have submitted a planning application. A development in Rhyl was identified - opportunities for managed realignment identified in the SMP2 will not impact on this development.

No changes to the draft policies have been made following public consultation.

4.4.4 Clwyd Estuary to Point of Ayr - I Ia4

There was general support for the draft policies in this area, which includes Rhyl and Prestatyn. The plan is to continue managing flood and erosion risk to the developed areas of the coastline through hold the line policies. The proposed policy for the dune system at the Point of Ayr is for managed realignment, allowing the dunes to behave naturally. This policy will allow limited maintenance of the dune system to help it continue to act as a natural defence. The main responses and queries received are summarised below:

- It was felt that natural dune change should be allowed to continue, including the natural roll-back of dunes. This was particularly noted at the western end of the dune system where there are rock/stone defences. It was suggested that further development should be prevented in this area to allow this roll-back.
- There was concern about the proposal to use dredged sand from the Dee estuary for beach replenishment as the aim was to keep this sand within the estuary. However, sand may be available from dredging the channels in the Port of Mostyn.
- It was noted that the future of Prestatyn Town is reliant on the future of tidal defences in the town.
- Managed realignment policies were welcomed, however concerns were raised by EA Wales that the short term policies were not ambitious enough in terms of managed realignment. They felt that managed realignment is often a sustainable short term option and as such should be considered for locations on the whole of the north Wales coast.

SMP2 Team Comments

Managed realignment was considered at a number of locations along this area of coast. However, this was rejected due to the need to construct longer lengths of defence, limited realignment space available due to the road, railway, levels of the land and the limited potential to create habitats in the longer term as sea levels rise. Managed realignment is however, recommended as the draft policy at the Point of Ayr. This would occur through managing dunes and beaches. It is believed that the dunes will naturally roll-back and action will need to be taken to allow space for this natural roll-back, together with maintenance of the dune system to help it continue to act as a natural defence.

Following the public consultation the SMP2 team have reviewed potentially feasible sites for creating habitat through a managed realignment policy along the North Wales coast as identified by EA Wales. The results of this review show that there are no locations along this section (apart from the Point of Ayr) that are suitable for managed realignment.

No changes to the draft policies have been made following public consultation.

4.4.5 Dee Estuary - I Ia 5

There were mixed views regarding the draft policies within the Dee Estuary. The majority of responses were about the eastern side of the Dee Estuary. The main aims of the SMP2 are to continue to protect assets where appropriate, whilst allowing the estuary to change naturally where possible. The main responses and queries received are summarised below:

- A potential managed realignment scheme has been put forward between Mostyn to Flint Marsh.

- Concerns were raised by EA Wales that the short term policies were not ambitious enough in terms of managed realignment. They felt that managed realignment is often a sustainable short term option and as such should be considered for locations on the whole of the north Wales coast.
- Concern was raised about former waste disposal sites close to the estuary which may cause pollution or may need expensive work to improve the area under a no active intervention policy. Respondents were concerned that the draft SMP2 failed to identify that some sites are already threatened by flooding or erosion now and not just at risk from future sea level rise.
- There was concern that a no active intervention policy in the medium and long term at Caldy Golf club would result in the club incurring substantial losses on past investment and reduced future income and could have effects on the environment. Concern was also raised that this could have knock on effects for Dee Sailing Club as pollutants could be released from landfill and such a policy could have implications on maintaining slipways etc.
- Concern was raised regarding the rights of residents and landowners to protect their property and the potential property blight effects of the draft long term policies of no active intervention (PUIIa 5.7 Thurstaton Slipway to Croft Drive, Caldy & 5.8 Croft Drive Caldy to West Kirby Marine Lake). Respondents felt strongly that the plan should reflect their wish to continue defending their property with private funding. It was felt that there was reasonable expectation that existing private maintenance of defences would continue to protect property and businesses, and that no active intervention was therefore not a suitable long term policy
- There was concern about the proposed hold the line policy at Hilbre Island, where there are no man made defences and some parts of the shoreline are eroding.

SMP2 Team Comments

The long term vision for the Dee is to continue to protect assets where necessary but where possible to allow space for natural, long term change in the estuary. The draft SMP2 identified a number of areas with potential opportunities for managed realignment within the estuary which broadly match the areas identified by EA Wales. However, the team decided that it was not appropriate to propose managed realignment as the headline policy in the short term until a suitable plan for delivering this realignment has been developed and all the potential options have been sent to stakeholders for their views. Work on establishing this delivery plan is currently underway in the form of the Environment Agency's Tidal Dee Flood Risk Management Strategy and the next stage of consultation will be started later this year. The team supports this work and recognises that there may be opportunities for managed realignment sooner and therefore the policy description will reflect this.

The existence of landfill sites and their potential risks to the estuary was recognised by the draft SMP2 and an estuary wide study has been recommended in the Action Plan. This will investigate ongoing and future risks to management of the estuary. Responses received on specific areas where contamination is a real risk now, will be directly passed on to the EA Wales Tidal Dee Flood Risk Management Strategy team for consideration.

Following review of consultation responses and further information submitted during the public consultation, the medium and long term no active intervention policy at Caldy Golf Club has been revised. Evidence put forward by Caldy Golf Club indicates that they will continue to fund maintenance of the defences in front of the golf club. Consequently the hold the line policy will be extended to the short, medium and long term subject to a private funding agreement being in place.

Similarly, the draft policies for the area between Croft Drive, Caldy and West Kirby Marine Lake have been revised after the consultation responses were reviewed. Responses indicated that about 40% of the defences are privately owned and evidence has been submitted to confirm that property owners will continue to contribute to the cost of these defences being maintained. As such, the hold the line policy in the short and medium term has been extended to the long term, subject to a private funding agreement being in place.

The draft hold the line policy at Hilbre Island is recommended due to the flood protection that the island provides to the mainland, the way that it controls the way that the estuary works and its amenity value. The Local Authority advised that a no active intervention policy would not be appropriate due to health and safety issues on the island.

The following revisions to the draft policies have been made as a result of the consultation:

I Ia 5.7 - Thurstaton Slipway to Croft Drive, Caldy - changed to **Hold The Line** (0-20 years), **Hold The Line** (20 to 50 years), **Hold The Line** (50 to 100 years) subject to a private funding contributions agreement.

I Ia 5.8 - Croft Drive Caldy to West Kirby Marine Lake – changed to **Hold The Line** (0-20 years), **Hold The Line** (20 to 50 years), **Hold The Line** (50 to 100 years) subject to a private funding contributions agreement in the long term.

4.4.6 North Wirral - I Ia6

There was general support for the draft policies along the North Wirral coast. The main aim in this area is to continue managing flood and erosion risk to property and infrastructure (such as roads and amenities), whilst acknowledging the need to look at more sustainable ways to provide this protection in the future. The main responses and queries are summarised below:

- A number of responses related to the need to ensure that the North Wirral coast is continually monitored.
- Concern was raised about of the cost of realigning defences compared to maintaining defences in their current position and the associated cost of removing contaminated material to allow for any potential realignment.
- Wirral Council have suggested renaming some of the policy unit areas along the frontage for clarity.

SMP2 Team Comments

The Cell II Regional Monitoring Strategy (CERMS) is an ongoing project throughout North West England and North Wales and carries out a variety of monitoring activities. There are number of actions in the Action Plan which will help to inform a coastal defence strategy for Wirral.

There may be opportunities to create a more natural dune system in some areas along this coast in the long term. There may also be difficulty getting funding to rebuild defences in their current position when they fail. Therefore we have recommended investigating options for managing defences and looking at any potential contamination, the results of which will inform the long term policy. These investigations would be part of a strategy study following on from the SMP2 which will confirm how this area of coast will be managed in the

future by looking at coastal risks; financial implications of actions and social and environmental benefits of options. The results of this will help to guide the long term approach in this area.

No changes to the draft policies have been made following public consultation, however, the names of some policy units have been revised based on Wirral Council's recommendations.

4.4.7 Mersey Estuary - 11a7

Consultees generally supported the draft policies in the Mersey Estuary where the long term plan is to manage flood and erosion risk to property and infrastructure in the narrows and the southern shore, and allow parts of the upper estuary to change more naturally. Managed realignment at strategic locations will potentially reduce flood risk upstream and create habitat for wildlife. The main responses received are summarised below:

- It was queried whether managed realignment is the best policy in the Upper Estuary. The EA have questioned whether the cost of realigning defences can be justified (even given the potential environmental benefits of realignment).
- The Runcorn Bridge to Pickerings Pasture policy unit boundary has been questioned, due to the need for the Terrace Road area of Widnes to have a hold the line policy.
- Concern was raised about the no active intervention policy to the south and east of Garston due to of the potential effects that this would have on Liverpool City and its infrastructure, including potential future expansion and development plans.
- There are some areas where there are landfill sites, but it is not clear who is responsible for managing these sites or what the plan suggests as the most sustainable way forward in such cases.

SMP2 Team Comments

It is important for the SMP2 to identify potential sites to create new habitat to help offset for the potential loss of internationally designated habitat elsewhere, due to the impacts of hold the line policies and predicted sea level rise. It is likely that identified sites would secure funding however this would need to be linked into the EA's regional Habitat Creation Programme.

The Runcorn Bridge to Pickerings Pasture policy unit ends at Runcorn Bridge because this is a natural hard point in the estuary. However, the team would agree that locally the hold the line policy should include the Terrace Road area and any potential managed realignment would therefore be east of this location.

The no active intervention policy south and east of Garston is with the same as current shoreline management practice along this frontage. The eroding cliffs near the airport are within the Site of Special Scientific Interest, and the no active intervention policy allows for a naturally functioning coast. Defra guidance states that the SMP2 has to consider existing assets (which can include sites with approved planning permission) when deciding on policies, but should not suggest policies in anticipation of future development. Any future expansion and development of Liverpool Airport which would need flood or erosion protection must have full environmental assessments and any new defences would need to be part-funded by the developer. Speke Hall is a National Trust property and as indicated in their response, the National Trust has been involved in the consultation process and supports the draft policies for this location.

The SMP2 acknowledges that there are a number of landfill sites within the Mersey estuary and that there needs to be further detailed studies to look at long term options for these.

No changes to the draft policies have been made following public consultation, however, the boundary of PU I Ia 7.7 has been revised to include Terrace Road.

4.4.8 Seaforth to River Alt - I Ia8

There was general support for the draft policies for this area. The plan suggests managing erosion risk to property and infrastructure where appropriate whilst allowing natural processes to continue as far as possible. The main responses received are summarised below:

- The description “allow natural process to continue” sounds like no active intervention, yet the headline policy is managed realignment.
- It was queried whether a hold the line in policy unit 8.3 Hightown to mouth of the River Alt (east bank) is affordable in the long term.

SMP2 Team Comments

In order to encourage the dunes to be stable and to grow in this area, it is necessary to manage the structures in the River Alt that keep channels away from the dunes. The managed realignment policy will therefore allow natural processes to continue on land but will allow these structures to be maintained.

Although the draft policy between Hightown to mouth of the River Alt (east bank) is hold the line, this is likely to mainly involve managing the dunes which act as a natural defence and therefore the associated costs of holding the line are limited. This approach is consistent with many other areas in a similar situation.

No changes to the draft policies have been made following public consultation

4.4.9 Formby Dunes - I Ia9

Public feedback was supportive for the draft policies along this shoreline. A managed realignment policy for the Formby dune system will encourage natural change but allow action to be taken to protect the dunes where/if necessary. The main responses received are summarised below:

- Sefton Council carry out coastal monitoring in this area and both Sefton Council and the National Trust in Formby actively manage the dunes. Concerns have been raised about the description of managed realignment which reads 'minimal intervention'. It is thought that this should be substituted with the word 'active' in the light of the research and work being routinely undertaken.
- While there are some negative implications predicted with a managed realignment policy, on balance the implications are mainly positive. The draft policies and draft Action Plan are supported by Sefton Council.
- The National Trust noted that they are working with partners to produce a coastal adaptation strategy which will set out how coastal change is dealt with and how all parties can maintain the benefits gained from this stretch of coast.

SMP2 Team Comments

The SMP team recognise that a number of parties are working actively with Sefton Council to manage the Formby Dune System. However, to be consistent with other policy areas we need to use the words “limited” or “minimal” to describe how action will be carried out under a managed realignment policy. However “limited intervention” is more appropriate in this case and therefore the policy description will be changed.

The SMP2 team welcome the support for the draft policy. Development of future land use plans is fully supported by the SMP2 Action Plan.

No changes to the draft policies have been made following public consultation.

5 Consultation Strategy and Responses received: Sub-Cell 11b – Southport to Rossall Point, Fleetwood

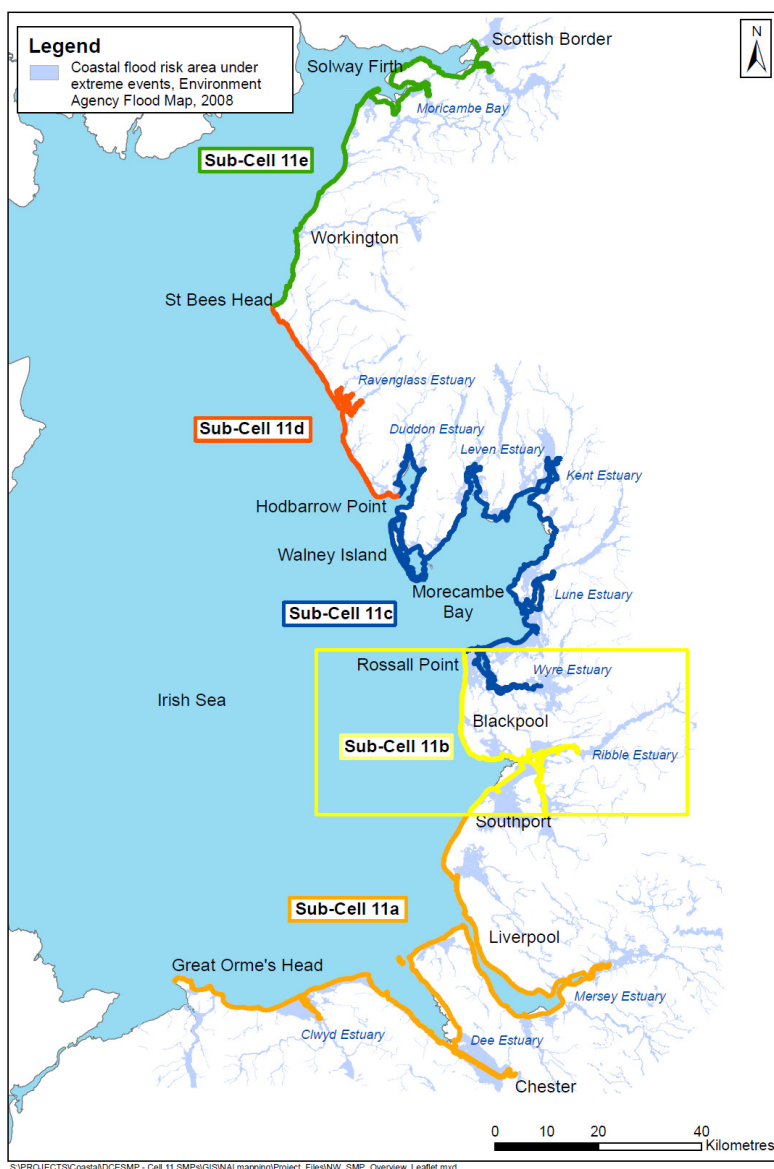


Figure 4: Map showing the location of Sub-Cell 11b, Southport to Rossall Point, Fleetwood.

5.1 Consultation Strategy Sub-Cell 11b

In Sub-Cell 11b (between Southport and Rossall Point, Fleetwood), we used the following ways to raise awareness of the SMP2 consultation.

Examples of consultation materials including press releases, cabinet reports and meeting notes are included in [Annex B6](#).

Website

A list of local consultation events and the full draft SMP2 consultation document, including appendices and maps were included on and downloadable from the North West England and North Wales Coastal Group website (<http://www.mycoastline.org>). A consultation response form was also available to download or complete on online.

Press Notices / Press Briefings

A press release was issued by Blackpool, Fylde and Wyre Councils on 11th December 2009.

Press coverage

An article on the SMP2 consultation was published in the Lancashire Evening Post on 18th December 2009.

Cabinet Reports

A Cabinet Report informing councillors about the start of the SMP2 consultation process was presented at a Wyre Borough Council Cabinet Meeting that was held on 7th Sept 2009.

Blackpool Council informed the relevant Portfolio holder of the start of the consultation process through the regular 'Members Information Bulletin'.

Coastal Forums

Meetings were held with Cleveleys, Poulton and Fleetwood Forums and Wyre Flood Forum.

Draft SMP2 Documents

Copies of the draft SMP2 documents were displayed in all public libraries in Wyre Borough Council between December 2009 and February 2010. They were also displayed in all council buildings which included the Civic Centre, Cleveleys Site Offices and Marine Hall from December 2010. The full Consultation documents were also available on the Wyre Borough Council website.

The full consultation documents were also available at Blackpool Town Hall and Westgate House between December 2009 and February 2010.

5.2 Public Events and Stakeholder Meetings

Three public meetings / workshops were held between November 2009 and February 2010 to publicise the SMP consultation and allow stakeholders and members of the public to come and ask questions/find out more information about the SMP and the draft policies. Public events were held at the following locations:

- West Lancashire, 23rd November 2009 at West Lancashire Investment Centre (meeting notes are included in Annex B6)

- Blackpool, 15th December 2009 at the Savoy Hotel, Blackpool (meeting notes are included in Annex B6)
- Pilling Parish Council, 10th February 2010 at the Pilling Memorial Hall

5.3 Consultation Responses

Responses were received from over 10 residents, businesses, Parish Councils and other organisations.

Responses were received in a variety of forms:

- letters;
- consultation response forms (hand written and electronic); and
- e-mails.

Summaries of issues raised about specific areas during the consultation are included in the following sections. Annex B11 includes all SMP2 public consultation responses. A comment and/or action taken by the SMP2 team is also included for each response.

5.4 Area Specific Responses

5.4.1 Ribble Estuary - 11b1

There was general support for the draft policies within the Ribble estuary, where the aim is to continue managing risks to Southport and Lytham by maintaining the natural estuary system. Within the Ribble and Douglas estuaries, the aim is to establish a balance between the cost of protecting homes and land and maintaining the natural environment. This may include looking at opportunities for managed realignment where possible. The main responses and queries received are summarised below:

- Support has been expressed for managed realignment in both the Ribble and Douglas estuaries. However, it is felt that where managed realignment is proposed in the long term bringing this policy forward should be considered.
- A no active intervention policy should cover the whole of the area from Naze Point to Warton Bank (policy unit 11b 1.14), as managed realignment at Poolstream (Bush Farm Creek in the SMP2) may no longer be necessary.
- Concern was raised about the apparent lack of sand dune management at St Annes.
- Concern was raised about how the loss of the training walls in the Ribble will affect the way the coast works.

SMP2 Team Comments

A large number of managed realignment opportunities have been identified in the SMP2 in the Ribble. Carrying out many realignment schemes together could have significant implications on the way the estuary works and therefore we have recommended staggering any realignment over a period of time.

In some locations managed realignment is the draft policy for the medium term, while in others studies are recommended to take place in the medium term to look at further opportunities to set back defences in the long term and implement where practicable.

The SMP2 action plan recommends that an estuary wide study is undertaken to investigate various managed realignment opportunities in the long term and develop plans to implement where practicable to create a more sustainable defence alignment. The SMP2 team propose to add consideration of the impacts of deterioration of the training walls on coastal processes to the proposed study. In addition there are a number of linked studies being undertaken to support the SMP2, including a sediment study which will further consider the implications of large scale managed realignment in the Ribble, and help inform future management of the estuary.

Following discussion with EA NW the SMP2 team is satisfied that proposing localised managed realignment at Bush Farm Creek is no longer appropriate and consequently the policy has been revised to indicate no active intervention for the full policy unit PU 11b 1.14 Naze Point to Warton Bank.

The draft SMP2 policy of hold the line for the St Annes frontage describes implementation as maintaining the existing defences to an adequate standard where present as well as maintaining the dunes as a natural defence through dune management. Details regarding these management activities are beyond the scope of the SMP2. However, Fylde BC, during the course of the SMP, has produced and adopted a local Sand Dune Management Action Plan <http://www.fylde.gov.uk/environment/conservation/sand-dunes/dunes/>.

The following revisions to the draft policies have been made as a result of the consultation:

PU 11b 1.14 Naze Point to Warton Bank - change to **No Active Intervention** (0-20 years), **No Active Intervention** (20-50 years), **No Active Intervention** (50-100 years) for the whole frontage.

5.4.2 St Annes to Rossall Point - 11b2

There was support for the draft policies for this frontage where the main aim is to continue managing risk to property and infrastructure through providing defences on existing lines, with some improvements where required. This will be achieved by hold the line throughout with managed realignment in the short term between St Annes and Blackpool to allow the dunes to function naturally whilst considering options for a secondary defence. The main comment received related to:

- Concern regarding the potential loss of the beach in the future under rising sea levels and implications this would have on tourism and recreation.

SMP2 Team Comments

The SMP2 has recognised that it is likely to become increasingly difficult to retain beaches along the frontage as sea levels rise in the future. In order to help address this, the SMP2 has recommended the need to develop a long term beach management strategy along the Blackpool frontage to deal with the long term trend of beach erosion. This concurs with Blackpool Council's response which acknowledge support for future management options to sustain the beach, including the development of a long term beach management strategy.

No changes to the draft policies have been made following public consultation.

6 Consultation Strategy and Responses received: Sub-Cell 11c – Rossall Point Fleetwood to Hodbarrow Point

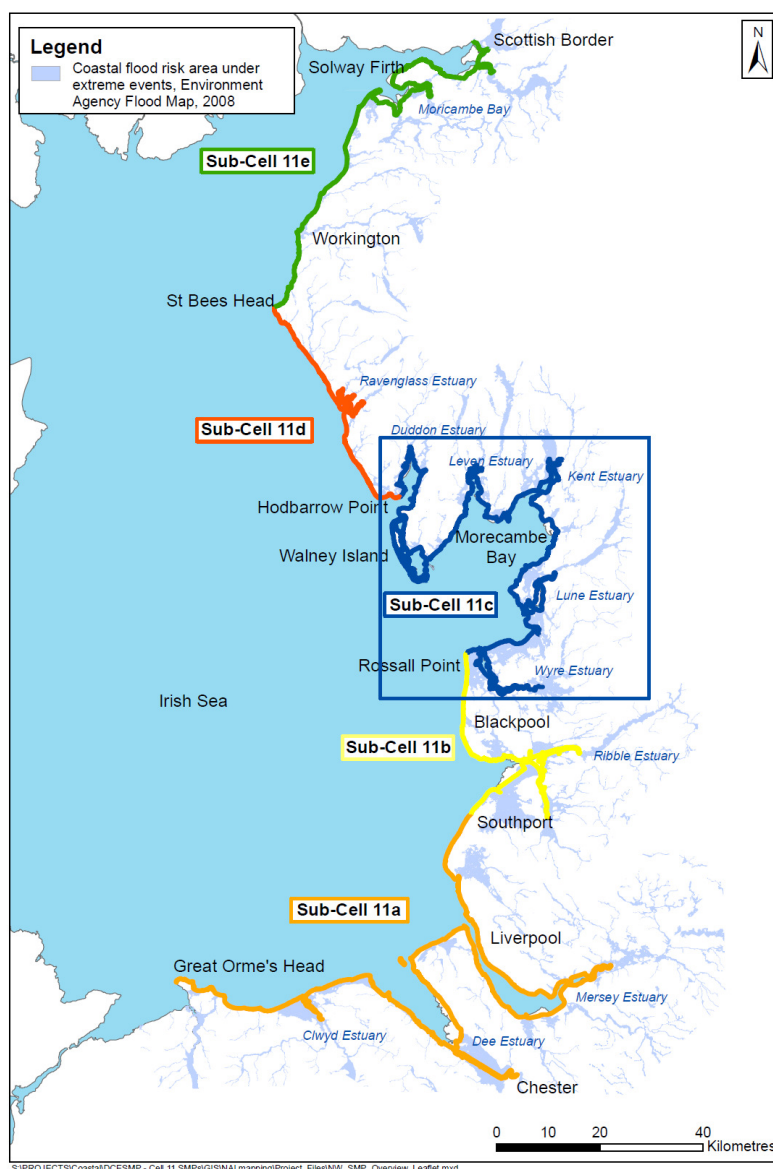


Figure 5: Map showing the location of Sub-Cell 11c, Rossall Point, Fleetwood to Hodbarrow Point.

6.1 Consultation Strategy Sub-Cell 11c

In Sub-Cell 11c (between Rossall Point, Fleetwood and Hodbarrow Point near Millom), we used the following ways to raise awareness of the SMP2 consultation.

Examples of consultation materials including stakeholder letters, press releases cabinet reports and meeting notes are included in [Annex B7](#).

Website

A list of local consultation events and the full draft SMP2 consultation document, including appendices and maps were included on and downloadable from the North West England and North Wales Coastal Group website (<http://www.mycoastline.org>). A consultation response form was also available to download or complete on online.

Press Notices / Press Briefings

A number of consultation meetings were advertised on the Lancaster City Council website and in an advertisement in the Lancaster Guardian Public Notices section on 12th February 2010.

Examples of consultation materials including press releases for consultation meetings are included in Annex B7.

Cabinet Reports

A Cabinet Report informing councillors about the start of the SMP2 consultation process was presented at a Wyre Borough Council Cabinet Meeting that was held on 7th Sept 2009.

A report was presented to the Lancaster City Council Cabinet on 9th October 2009 to provide an update on the development of the SMP2 and the plans for the consultation.

A report was presented the South Lakeland District Council Community Services Overview and Scrutiny Committee on 18th January 2010, explaining the importance of the SMP2 and outlining the proposed draft policies.

A Copeland Borough Council (CBC) Executive report was presented to the members on 22 September 2009 regarding the SMP2 public consultation.

6.2 Public Events and Stakeholder Meetings

Three public meetings / workshops were held between December 2009 and January 2010 to publicise the SMP consultation and allow stakeholders and members of the public to come and ask questions and find out more information about the SMP and the draft policies. Public events were held at the following locations:

- Lancaster, 8th December 2009 at Lancaster House Hotel, Lancaster (Notes from the meeting are included in Annex B7)
- Barrow, 14th December 2009 at Forum Twenty Eight, Barrow (Notes from the meeting are included in Annex B7)
- Kendal, 25th January 2010 at South Lakeland District Council Town Hall, Kendal

Further meetings requested by residents at Sunderland Point and Thurnham, were held as follows:

- Sunderland Point, 6th January 2010 at Overton Memorial Hall

- Ben Wallace MP, 22nd January 2010, Great Eccleston
- Geraldine Smith MP, 5th February 2010, Morecambe
- Thurnham Village Institute, 12th January 2010
- Thurnham, Glasson Village Hall, 5th February 2010
- Thurnham, Glasson Village Hall, 8th March 2010
- Regional Flood Defence Committee site visit, 26th March 2010

Following extension of the consultation period, further meetings were held:

- Overton, Sunderland Point and Heysham, 16th February 2010 at Morecambe Town Hall, Morecambe
- Carnforth, Bolton-le-Sands, Hest Bank and Silverdale, 17th February 2010 at Carnforth Railway Station, Carnforth

6.3 Consultation Responses

Responses were received from over 120 residents, businesses, Parish Councils and other organisations.

Responses were received in a variety of forms:

- letters;
- consultation response forms (hand written and electronic); and
- e-mails.

A summary of issues raised about specific areas during the consultation relating are included in the following sections. Annex B12 includes all SMP2 public consultation responses. A comment and/or action taken by the SMP2 team is also included for each response.

6.4 Area Specific Responses

6.4.1 Fleetwood and Wyre Estuary - I Ic I

There were a small number of responses received for the Fleetwood and Wyre Estuary frontage. Here the long term plan is to continue providing protection to the outer reaches of the estuary, through hold the line, to protect the large areas of flood risk and development. Although this will constrain natural development of the outer estuary, there is a plan to allow the upper reaches to function more naturally and opportunities for managed realignment will be pursued. The main responses and queries received are summarised below:

- A number of consultees (RSPB, EA NW, Wyre BC) raised the potential for managed realignment in sections of policy unit 1.5 (Stanah to Cartford Bridge and Cartford Bridge to Shard Bridge). The consultation draft SMP2 policy of hold the line then no active intervention is considered to take a passive approach to seeking these opportunities. A long term policy of managed realignment would also enable promotion of habitat creation.
- The issue of the recent Cumbria floods was raised, and the question asked whether the existing coast protection system would have worked if similar problems affected the Wyre coastline. It was also

suggested that the Environment Agency should be preventing further housing development on flood plains.

SMP2 Team Comments

During the policy assessment stage the SMP2 team assessed both managed realignment and no active intervention in policy unit 11c 1.5 Stanah to Cartford Bridge and Cartford Bridge to Shard Bridge. Under both policies the shoreline is expected to evolve in a very similar manner, however, under no active intervention unless individual landowners took on maintenance, existing defences would be allowed to fail and the unprotected areas would be progressively inundated up to naturally higher ground. This scenario was considered more viable due to the topography of the chosen areas and the general lack of assets at risk which means there is likely to be no economic justification for further defences.

However, the SMP2 team recognise that under a managed realignment policy the shoreline would also be allowed to realign back to high land but in a more proactive, managed way, which could be more conducive for habitat creation purposes. We therefore propose to revise the draft policy to managed realignment, which will allow flexibility in the approach to managing change. The stated approach for the first epoch allows for earlier implementation and will recognise potential for Biodiversity Action Plan habitat creation.

The Cumbria problems in 2009 were related to very heavy rainfall, resulting in very exceptional river flows, whereas the SMP2 is concerned with coastal flooding and erosion. The most recent major coastal floods affecting Fleetwood and surrounding area were on November 11, 1977, when over 5,000 properties and 7,900 acres of agricultural land were flooded. The floods were unexpected as there was no flood warning system in place at the time. Since that time there have been many improvements to the coastal defences, but the 1977 floods here and the 1990 floods at Towyn in North Wales serve as a reminder that although we can reduce the risk of frequent flooding with defences and are now able to provide warnings, it is not possible to prevent all flooding. The SMP2 has not considered in detail the standard of protection provided by the existing defences, as this is dealt with at the more detailed strategy level, but there will always be a chance that they could be overtopped under very exceptional tidal surge events.

The following revision to the draft policies has been made as a result of the consultation:

11c 1.5 Stanah to Cartford Bridge and Cartford Bridge to Shard Bridge - change to Hold The Line (0-20 years), Managed Realignment (20-50 years), Managed Realignment (50-100 years).

6.4.2 Knott End to Glasson Dock - 11c2

Significant numbers of responses were received for this frontage stretching from Knott End to Glasson Dock. The consultation draft SMP2 proposed policies were for hold the line at the western end of the frontage to manage risk to property and infrastructure, but to investigate opportunities for managed realignment in the medium and long term east of Fluke Hall. The main responses and queries received related to the proposed managed realignment in policy units 2.3 and 2.4 and are summarised below:

- There are significant concerns regarding the proposed seawall realignment which, although the actual location was not specified, may increase risks to or lead to loss of residential properties. Consultees feel that this would blight property and leave them worthless, as well as potentially leading to flooding. Residents are unclear about possible compensation or financial support to those affected. Some consultees also stated that there was no suggestion that there would be a change in policy when they bought their properties, nor was planning permission withheld. Some quoted existing agreements

between property owners and the local council or Environment Agency that defence provision would continue.

- There were further significant concerns relating to the impact of realignment on businesses, specifically farmland and caravan parks, and the knock-on effects on the local economy should these be lost. Concerns were also raised regarding the risk to Cockersands Abbey Scheduled Monument.
- Questions were asked regarding the realignment including the likely extent / location of new defences and timescales of flooding resulting from such a scheme, the possibility of privately funded defences, the likely implementation of managed realignment, whether there was economic justification for realignment and how the habitat created as a result of realignment would be managed.
- Concern was raised about future British food security, and how potential loss of large areas of farmland following realignment fits with recent government policy regarding the importance of UK food production in future.
- There was significant concern regarding the consultation process and how it was undertaken with consultees feeling that they had not been well informed. There was suggestion that the process was deliberately flawed to prevent local residents being involved. One consultee thought that there should be bi-annual consultation in the future to keep residents informed.
- A number of consultees raised the issue of human rights, feeling that the proposed realignment would breach the human rights of residents involved.
- A number of requests were made for release of reports from previous studies of the area commissioned by the Environment Agency prior to the SMP2. Subsequently further responses and questions were received on those specific studies.
- The ongoing issue of sedimentation in the outfall channels at Piling on land drainage was raised at several meetings with a request that it is considered in the action plan.

SMP2 Team Comments

The SMP2 team acknowledges the strong feelings of concern raised by many respondents. During the consultation period meetings have been undertaken with the public, with Cockerham Parish Council and with the Cockersands Forum residents group at which local concerns have been raised and the issues discussed regarding the difficulty of justifying long term affordability of the maintenance and improvements to the defences that would be required to hold the line that most respondents would prefer.

The Environment Agency and Local Authorities have permissive powers to undertake flood risk management activities but do not have a duty to do so. Unfortunately there is no right to flood protection or continuation of management of existing flood defences, and provided adequate notice is given, no right to compensation in relation to withdrawal from maintenance of defences. However, a claim for compensation may arise, for example if the existing defence were to be deliberately breached or dismantled and this was to expose properties to increased risk of flooding.

Under a policy of managed realignment properties located behind new defences would benefit from improved flood defences. There would also be the opportunity to protect local or individual properties from erosion, for example the Scheduled Monument at Cockerham Abbey, which is on slightly raised ground. The draft SMP2 did not propose any specific alignment options for a new defence, but it is considered that a large proportion of the property at risk would be defended if an alignment similar to that considered in previous studies were to be adopted. Land use for the area between the existing defences and new defence line would need to be

planned in consideration of the risks and consultation with land and property owners, but it is likely that large areas could be used for grazing and there would be habitat creation opportunities. The draft SMP2 proposed that more detailed studies were required to determine the approach to management of this frontage and this is still the case.

The SMP is a non-statutory document and does not over-ride rights, duties and powers provided through legislation, so does not contravene human rights.

In recognition of the additional information submitted and strong concerns raised over the draft policies during consultation, the SMP team consider that there remains a need to consider alternative options for managing the existing defences into the medium term, whether or not the primary defence is realigned. The headline SMP2 policy is therefore now proposed to change to “**Hold the Line OR Managed Realignment**” in both the 2nd and 3rd epochs in PU 2.4. In PU 2.3 the 2nd epoch policy will change to “**Hold the Line OR Managed Realignment**” for consistency, but remain as HTL in the 3rd epoch as there is not considered to be opportunity for phased MR in PU2.3 in the same way that there is in PU2.4.

The actual long term policy for this frontage and the approach will be developed in further consultation and studies proposed in the SMP Action Plan. The EA NW has indicated commitment to organising regular future consultation meetings with the Cockersands Forum.

The action plan will be updated to include an action for the EA to consult with Natural England over dealing with the issue of sediment accretion blocking the outfall channels at a strategic level.

The following revision to the draft policies has been made as a result of the consultation:

I Ic 2.3 Fluke Hall to Cocker Bridge – change to **Hold The Line** (0-20 years), **Hold The Line or Managed Realignment** (20-50 years), **Hold The Line** (50-100 years)

I Ic 2.4 Cocker Bridge to Glasson Dock – change to **Hold The Line** (0-20 years), **Hold The Line or Managed Realignment** (20-50 years), **Hold The Line or Managed Realignment** (50-100 years)

6.4.3 Lune Estuary - I Ic3

There were a number of concerns received regarding the draft policies for policy unit 3.7 Overton Cattle Grid to Sunderland Village. The draft plan is to continue to manage flood and erosion risk to property and infrastructure in the estuary, but to cease defence of small areas where there is no development. The main responses received are summarised below:

- Concern has been raised regarding the draft managed realignment policy in policy unit 3.7 – Overton Cattle Grid to Sunderland Village. It was suggested that the proposed realignment of the Sunderland Village access road was inconsistent with the policy for Sunderland Village itself.
- The residents of Sunderland Village have always lived their lives around the fact that access to the village is cut off most days over high tide, and they accept that access will be restricted for slightly longer periods in the future. However, being cut off by the tide is one of the essential characteristics of life at Sunderland Point.

- There was suggestion that the evidence base for policy change within the Lune Estuary is inadequate and the data interpretation is flawed.

SMP2 Team Comments

The consultation draft managed realignment policy I Ic 3.7 Overton Cattle Grid to Sunderland village was recommended to allow for future re-alignment of the road and the defence together. However, there is no clear source of funding for realigning the road and concerns expressed during consultation have indicated a desire for the road to remain where it is. Following review of concerns raised and consideration of information put forward during the consultation process the SMP2 team agree that maintaining the existing defence alignment in the short to medium term could be more cost effective, but at the broad scale analysis for the SMP even this is not justified over the long term. In the long term, realigning the embankment to the existing secondary defence could potentially lead to creation of habitats required for BAP targets and therefore be a trigger to enabling a scheme that would allow adaptation. Removing the road from the marsh may be beneficial for the internationally designated sites. The SMP2 team have therefore revised the draft policy for Overton Cattle Grid to Sunderland Village HTL / HTL / MR where the defences could be realigned to the existing set back defence protecting Overton in the long term, subject to future studies.

The draft SMP2 documents recognised that there is uncertainty in the physical processes within the Lune estuary and the SMP2 team is aware that there are conflicting views on the impact of erosion at Sunderland Point on the overall coastal risks in the estuary. The SMP2 team also acknowledge that sea level rise may not yet be being realised, but the allowances that we have to plan for show increasing rates in the future. The draft SMP2 action plan for the estuary already includes a number of studies which are recommended to inform future policy and management of the estuary. However, we propose to add the need to monitor and consider in more detail the impacts of the training walls on both flood risk and evolution of the designated habitats, including an action to determine responsibility for these structures.

The following revisions to the draft policies have been made as a result of the public consultation:

I Ic 3.7 Overton Cattle Grid to Sunderland village - change to **Hold The Line (0-20 years), **Hold The Line** (20-50 years), **Managed Realignment** (50-100 years)**

6.4.4 Sunderland Village to Potts Corner - I Ic4

Many responses were received during consultation for this shoreline where the proposed draft preferred policy is for no active intervention throughout the SMP2 period due to a lack of economic justification for funding defence improvements, and the benefits to the natural environment that would result. The main responses and queries received are summarised below:

- There was significant concern regarding the policy for no active intervention.
- Consultees were concerned about loss of property in the long term, and loss of property value and insurance in the short term. There were also concerns regarding loss of farmland and the loss of intertidal marsh habitats, and impact on the historic environment.
- Some consultees felt that a policy of no active intervention would breach human rights of the residents of Sunderland Village.

- Impact on recreation and tourism was raised, with consultees concerned that the policy would affect the large numbers of visitors to Sunderland Point and Village.
- Further concerns were raised regarding the potential impact on the wider environment, if Sunderland Point was abandoned and its sheltering effect was lost through erosion. There was suggestion that the evidence base for policy change within the Lune Estuary is inadequate and the data interpretation is flawed.
- One consultee suggested that the policy unit should be sub-divided due to the presence of a secondary embankment which ran from the Overton defence to midway between Sunderland Point and Potts Corner.
- Several responses were received indicating that the heritage values of the many listed buildings had not been considered properly in the draft SMP2.
- The preparation of the SMP2 was questioned, with consultees feeling that there was an insufficient rigour of analysis. One consultee stated that the whole SMP2 process was flawed due to the categorisation of each unit into one of four policies, and the need to use too-narrowly defined economic criteria.
- It was suggested that there were inconsistencies in policies, with Sunderland Village being no active intervention, but other similar areas having proposed policies of hold the line, in the first epoch or throughout. Places mentioned included Roa Island and Askam-in-Furness.
- The consultation process was criticised with consultees feeling that there was insufficient time to respond and to properly study the vast amount of information.

SMP2 Team Comments

The previous SMP proposed a policy of Hold the Line, but capital schemes to implement that policy have not been found to be viable for public funding over the last ten years. However, this has resulted in residents and the community association working with the local authority with support from Defra grants under a pilot scheme to implement local property resilience measures rather than constructing large scale defences. The draft SMP2 proposed policy of No Active Intervention for the coastal defences allows for a continuation of existing practices as long as sustainable, which was anticipated as being the next 20 to 50 years, and so is not a major change in approach to present shoreline management practice.

The SMP2 is a non-statutory document and does not over-ride rights, duties and powers provided through legislation, so does not contravene human rights.

It is agreed that in the medium and long term road access to Sunderland village will become progressively more restricted due to sea level rise, which will reduce access for tourism but there has been strong opposition from consultees to the suggestion in the draft SMP2 to re-route the road away from the marsh (see PU 3.7).

The SMP2 team note that there is uncertainty over the impact of erosion at the point on the wider Lune estuary and there have been conflicting studies on the impact. It is now proposed to split the Policy unit to allow for a managed realignment policy at the point which would allow for limited intervention to reduce the rate of erosion whilst further monitoring is undertaken.

The secondary embankment protecting Overton and Middleton has been discussed with EA NW and it was agreed that Policy Unit 4.1 needs to be further split to the north of Sunderland Brows Farm, where this embankment joins the coast. This will be in accordance with preliminary drafts of the proposed policies discussed with stakeholders and reported in Appendix G.

The heritage importance of Sunderland Point has been highlighted by several respondents. While the conservation area and listed buildings are recognised in the objective appraisal in Appendix G, the SMP2 team agree that the summary impact assessment in the main SMP2 document needs to give more weight to the heritage impacts for this location.

The SMP2 has been prepared in accordance with national guidelines. The more detailed analysis called for needs to be part of more local studies. At SMP level the appraisal is objective led and not driven primarily by economics. The review of SMPI has to take into account existing practice and the results of studies since SMPI. Although there are only four generic policies, the SMP2 is able to suggest how the approach to policy might be undertaken which can be very different by location.

The SMP2 team has reviewed the items raised for consistency checks and consider that there is no conflict, as the situations are very different at the quoted locations. A viability study was undertaken for Roa Island in advance of the SMP2 and this confirmed the viability of the HTL policy. There are many more houses there and an important lifeboat station and the causeway to Roa Island is not tidal. Askam is not at flood risk and erosion risk could be managed very economically.

Following requests, further public meetings were undertaken and the response date for ongoing discussions was extended to 31st March 2010.

The following revisions to the draft policies have been made as a result of the consultation:

I Ic 4.1 Sunderland Village – (New policy unit) **No Active Intervention** (0-20 years), **No Active Intervention** (20-50 years), **No Active Intervention** (50-100 years) (continue individual property / community defences and property adaptation)

I Ic 4.2 Sunderland Point – (New policy Unit) **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years), **Managed Realignment** (50-100 years)

I Ic 4.3 Sunderland Point to Secondary Embankment - (New policy unit) **No Active Intervention** (0-20 years), **No Active Intervention** (20-50 years), **No Active Intervention** (50-100 years)

I Ic 4.4 Secondary Embankment to Potts Corner - (New policy unit) **Hold The Line** (0-20 years), **Hold The Line** (20-50 years), **Hold The Line** (50-100 years)

6.4.5 Potts Corner to Heysham - I Ic5

Just one comment was received regarding policy area I Ic5 where the draft SMP2 policy is to continue to provide protection to the power station and port of Heysham, through hold the line, but with a policy of no active intervention to the south where defences were not expected to be economically justified and natural evolution of the coastline would be allowed. The comment received is summarised below:

- Concern was raised that further discussion was needed with stakeholders along this frontage.

SMP2 Team Comments

Following receipt of this response, further public consultation events took place in the Lancaster City Council area subsequently to receipt of this response (see Section 6.2 for details).

No changes to the draft policies have been made following public consultation.

6.4.6 Heysham to Hest Bank - I Ic6

This coastline includes the town of Morecambe where the draft policy is to continue to hold the line to manage flood and erosion risk to property and infrastructure. The policy for Lower Heysham in the south is for no active intervention.

No responses were received for this area.

SMP2 Team Comments

No changes to the draft policies have been made following public consultation

6.4.7 Hest Bank to Heald Brow - I Ic7

A limited number of responses were received for this stretch of coastline. The draft plan is to undertake managed realignment in combination with no active intervention where there is higher land, whilst managing coastal risks. Policies to the north may be subject to change depending on the future of the railway and future management at Leighton Moss. The main responses and queries received are summarised below:

- RSPB would prefer to see managed realignment in the short term, hold the line in the medium term and managed realignment in the long term policy in unit 7.5 (River Keer to Heald Brow). This would enable protection of Leighton Moss SPA, ensure protection of the railway line and enable habitat creation.
- There was concern regarding the potential loss of the railway and roads at the northern end of the frontage and that general flooding of Leighton Moss would be detrimental to wildlife.
- It was suggested that flooding around Morecambe Lodge could affect the rear of properties on The Shore, which are currently protected from the front. It was requested that further defence be added.

SMP2 Team Comments

The draft SMP2 policy for PU I Ic 7.5 River Keer to Heald Brow was no active intervention for all three epochs for the private embankment frontage, but also indicates that more local investigations should be undertaken into future management options including issues related to Coatstones landfill site. Policy implementation also includes the need to monitor coastal risks to railway, and to only carry out works if the railway is at risk, or the SPA freshwater designations are threatened or management changes at Leighton Moss relative to tidal incursion. Both Natural England and RSPB who have responsibility for Leighton Moss reserve have been involved in developing the plan and have indicated that long term change at sites like this may be inevitable. While there would need to be mitigation for losses of freshwater habitat, there is potential for different wildlife opportunities as a brackish or saline tidally influenced marsh.

The SMP2 team reviewed the responses and decided to amend the policy description and action plan to also include consideration of possible habitat creation adjacent to the railway. However, the SMP2 team agrees that the policy for I1c 7.5 should remain as no active intervention. Further studies should then be available to inform policy choice in the next review of the SMP.

The linked flood risk between the shoreline south of Morecambe Lodge (PU7.1) & North east of Red Bank Farm (PU7.3) is acknowledged in the flood maps used in the SMP and both these frontages have a hold the line policy, with allowance for potential managed realignment in the medium term if practical. The area around Morecambe Lodge itself (PU7.2) is considered to be slightly raised ground and so not at risk of flooding according to the Environment Agency's flood risk mapping. The SMP2 team propose to revise the Action Plan, which currently recommends separate studies for the two frontages to ensure that the inter-linked flood risks are considered together.

No changes to the draft policies have been made following public consultation

6.4.8 Heald Brow to Humphrey Head - I1c8

Just one comment was received regarding policy area I1c8 where the draft plan is to continue to manage risk to property and infrastructure through hold the line along much of the coastline, but enable natural coastline evolution through no active intervention in undeveloped areas to the east of Arnside. The comment received is summarised below:

- Concern was raised that further discussion was needed with stakeholders along this frontage.

SMP2 Team Comments

Following receipt of this response, two further public consultation events took place along this frontage (see Section 6.2 for details).

No changes to the draft policies have been made following public consultation.

6.4.9 Kent Estuary - I1c9

There were a number of responses received for the Kent Estuary, where the draft long term plan is to return the estuary to a more natural state and create additional habitat where possible, whilst considering impact on estuary flows and economic losses resulting from loss of agricultural land. The responses received are summarised below:

- Concern was raised in relation to managed realignment within the Kent estuary, with regards to property and agricultural land loss and maintaining defences that are already there.

SMP2 Team Comments

In the past reclamation of land around the North West coast has been assisted by accretion of sediment and stable or slightly falling sea levels relative to land levels. Due to the expected impacts of climate change we now have to plan for rising sea levels, which will make coastal defences much more expensive in future and expenditure on defences is already stretched. The draft SMP does allow for maintaining the defences for up to

20 years for the whole of the estuary. However, in the longer term it may not be affordable or justifiable to continue to maintain all of the existing defences and alternative approaches need to be considered, particularly in the light of the sea level rise allowances that we have to plan for.

In the draft SMP2 opportunities for managed realignment have been identified in the medium and long term for the Kent estuary. However the SMP2 does not assume or suggest any potential alignment for managed realignment. The draft SMP2 policy is to hold the line for up to the first 20 years, during which time studies would take place to confirm longer term policy and develop the approach to medium to longer term managed realignment. It is proposed in the action plan that these studies are undertaken in the short term to consider realignment opportunities within the estuary as well as which lengths within the policy unit could be realigned and to what extent.

The SMP2 team propose that responses received about the scale of agricultural land loss and future food security and prioritisation of defences are to be considered as a broader scale issue across the whole SMP at a regional or national level in the Action Plan.

No changes to the draft policies have been made following public consultation.

6.4.10 Humphrey Head to Cark - I1c10

Two responses were received relating to the shoreline between Humphrey Head and Cark where the consultation draft preferred plan was to set back from the present shoreline, whilst continuing to manage risk to the railway and other assets including agricultural land where economically justifiable. The realignment would be undertaken in a phased and controlled manner to ensure risk to people and property continues to be managed. The responses received are summarised below:

- One consultee had concern relating to the justification of the policies, with specific concerns regarding inaccurate baseline data, incorrect application of assumptions regarding effects of climate change; contradictions between policy conclusions in the appendices and preferred policies; and confusion of the application of SMP policy to private frontages. Clarification was requested regarding the right of the landowner to provide private defences over all 3 epochs, and whether there was any compensation available if this was not the case.
- There was concern over the proposed loss of a large area of valuable agricultural land. It was felt that the uncertainty which the policies imply would lead to a loss of investment in the land.

SMP2 Team Comments

A direct response was provided to the consultee, a commercial organisation and landowner that has recently invested substantially in defence improvements. Further correspondence requesting a meeting was then received. The correspondence is documented in Annex B12.

The SMP2 team notes that the consultation draft policy allowed for Hold the Line in the short term, followed by phased Managed Realignment over the medium and long term. This would take into account the economics of maintaining the defences on their existing alignment and allow a long term return to a more natural coast and avoiding adverse impacts on the internationally designated sites. Following review of the consultation responses, the SMP2 team has changed the medium term policy to recognise that the caravan park section of the frontage has substantially new defences and that there is a commitment to private funding to maintain

these for at least the short and medium term to protect the caravan park. The policy will therefore remain as Hold the Line for the short term, followed by a revised medium term policy of Managed Realignment and local Hold the Line subject to private funding. The long term policy will remain as Managed Realignment.

The alignment of any new defences would need to be agreed before the phased medium and long term realignment, but land and properties behind the new defence line would benefit from improved protection. The SMP2 team notes that the national guidance is clear that SMP2 analyses and proposed policies must be based on existing assets at risk and not allow for or encourage future development in coastal risk areas.

The following revisions to the draft policies have been made as a result of the consultation:

11c 10.2 Humphrey Head to Cowpren Point change to - **Hold the Line** (0-20 years), **Managed realignment and local Hold the Line (subject to private funding agreement)** (20-50 years), **Managed realignment** (50-100 years)

6.4.11 Outer Leven Estuary - 11c11

Only one comment was received regarding the Outer Leven Estuary, where the aim is to manage risk to the railway and agricultural land where economically justifiable, but to generally allow the shoreline to set back from the present alignment and respond to coastal change through policies of no active intervention and managed realignment along much of the frontage. The comment received is summarised below:

- Concerns have been raised regarding the policies potentially impacting flood risk management for the area around Canal Foot, Ulverston. At extreme high tides it is thought that properties would flood and much of the East Ulverston Ward would flood if defences to the north of the Leven viaduct (in 11c 12) were breached.

SMP2 Team Comments

The draft SMP2 allows for managing the flood risk to Canal Foot and surrounding area by consideration of flood risks from the Conishead frontage and subject to further studies creating a set back embankment in future.

At Canal Foot itself the proposed SMP allows for a Hold the Line policy which can manage risks to the flood pathway to the wider area along the canal, and this will allow the local authority and the Environment Agency to take action to manage the risks if necessary and justified.

The potential for flood risk from north of the viaduct is recognised in the SMP2 policy maps. The proposed policy in 11c 12.3 was Hold the Line followed by Managed realignment and then No Active Intervention in the long term, which would allow for consideration of the risks at the next stage of studies and a set back defence to be constructed in future if necessary.

No changes to the draft policies have been made following public consultation.

6.4.12 Leven Estuary - 11c12

There were only a few responses received regarding the Leven Estuary. The preferred plan is to manage risk to property and infrastructure where economically justifiable, with realignment of flood defences elsewhere.

This would lead to loss of or reduction in quality of areas of agricultural land but allow expansion of saltmarsh. The main responses and queries received are summarised below:

- There were concerns regarding the dangers of flooding inland due to breaching or realignment of defences near Barrow End Rocks, as happened in 2002. This could not only affect isolated properties but also local infrastructure as far away as the Ulverston Canal.
- There was support for a return to a more natural area adjacent to the valuable RAMSAR site of Morecambe Bay, but concerns regarding the flood risks, implications for drainage and impacts on the access roads crossing the mosses.

SMP2 Team Comments

The flood risks are recognised in the SMP2 policy maps and do need to be taken into account in the development of the next stage of studies. The proposed draft policies allow for Hold the Line for up to 20 years whilst further investigation and monitoring are considered, as allowed for in the draft Action Plan, prior to implementing Managed Realignment to set back the defences, at which time a new set-back defence could be constructed if necessary.

No changes to the draft policies have been made following public consultation.

6.4.13 Bardsea to Piel Island - I1c13

Limited responses were received for this frontage which stretches from Bardsea to Piel Island. The draft plan is to allow natural coastal evolution where possible, although local defences would be permitted where there are assets at risk. To the south the policy is dependent on economic justification for the defence of the coast road so that it can remain at its current position. The main responses and queries received are summarised below:

- Questions were raised regarding clarity of the policies of no active intervention with private funding of defences permitted.
- Concern was raised regarding coastal erosion and its impacts on the area, including parts of the A5087 Coast Road and sites of historical and environmental importance.
- Concerns were raised about the consistency of treatment of Scheduled Monuments and the importance of Piel Castle.

SMP2 Team Comments

Where no active intervention is the draft policy (PU 13.1 Bardsea to Newbiggin) this means that there is very unlikely to be public investment in coastal defences along the length of the frontage. However, the policy statement also acknowledges that there are localised defences along the frontage at present and that maintenance of these may continue to be permitted subject to consent. In addition, depending on the level of risk and the technical, environmental and economic acceptability there may be a case for local authority or Environment Agency funded localised defences. The SMP team therefore propose to include in the Action Plan an action to develop an adaptation strategy to facilitate future local flood or erosion risk protection or resilience work to isolated properties along the frontage.

The draft SMP Policy for the frontage which includes the A5087 Coast Road (PU 13.2 Newbiggin to Rampside) allows for hold the line, followed by possible realignment of the road in appropriate locations by the Highway Authority if economically justified in the future.

The draft policy statement for Piel Island proposes a general no active intervention policy for the island, with the proviso that localised defences, eg at Piel Castle would be permitted, subject to consent. The no active intervention policy allows for the natural sections of coast to remain as such to maintain the character of the island. Although localised defences may be permitted at Piel Castle, they are not likely to have a wider impact. The draft action plan already includes an action to consider in more detail the impacts of the SMP2 policy on Piel Castle.

However, the SMP2 team also now propose to add in the need to include for consideration of appropriate recording or mitigation for impacts on the historical environment under no active intervention policies on Piel Island and other frontages to the north in the policy statement area.

No changes to the draft policies have been made following public consultation

6.4.14 Walney Island - 11c14

There were a variety of responses received regarding Walney Island. The draft plan is to allow natural coastal evolution along much of the coast, while defending key locations including the narrowest part of the island, adjacent to the landfill site. Overall, this will help make the defended sections more sustainable and be compatible with the designated sites to the south and north of the island. A policy of hold the line applies to the landward side of the Island where economically and environmentally justifiable. The main responses and queries received are summarised below:

- The proposed policy of managed realignment has been questioned along the West Shore Park frontage as it appears that the beach is recovering, which suggests that material is by-passing the groyne. There is a need for short term intervention at this frontage for up to 15 years to manage risks while allowing for relocation of properties and facilities.
- Consultees suggested that Walney Island should be protected, due to its important role protecting Barrow-in-Furness and to protect local residents, including those living in houses that have just been built.

SMP2 Team Comments

The draft SMP2 policy of managed realignment at West Shore Park was recommended to help address the issue of sediment entrapment by the groyne to the south of the frontage, while also managing risk to West Shore Park itself now and into the future. The responses have now been taken into consideration by the SMP2 team and the policy statement will be updated to reflect the need for short term intervention to manage risks while the approach to relocation of properties and facilities is developed.

The SMP2 recognises the strategic importance of Walney Island and its role in providing protection to Barrow and the adjacent mainland. However, as the island is not expected to breach through erosion even well beyond the 100 year timescale of the SMP, and the fact that expenditure on flood defences is subject to national

prioritisation, it is unlikely to be affordable or environmentally acceptable to defend the whole island in the future.

No changes to the draft policies have been made following public consultation

6.4.15 Walney Channel (Mainland) - I1c15

Only one comment was received relating to the Walney Channel, where the preferred plan is to manage risk to property, industry and infrastructure within Barrow-in-Furness through a policy of hold the line. However, where there is little risk, the policy will be no active intervention. The comment received related to a typographic error in the policy statements.

SMP2 Team Comments

No changes to the draft policies have been made following public consultation

6.4.16 Duddon Estuary - I1c16

A number of responses were received regarding this frontage. The long term draft plan is to allow the shoreline to return to a more natural coastline by realigning or withdrawing from defences where appropriate. Risk to property and infrastructure would continue to be managed where economically and environmentally viable. The main responses and queries received are summarised below:

- One consultee felt that there are a number of places where a policy of managed realignment with tidal exchange would be more appropriate and allow proactive habitat creation (Policy units I6.3, I6.4, I6.6 and I6.12).
- There were concerns regarding the risk to the railway and farmland within policy unit I6.8 (inner Duddon Estuary). It is considered that with minimal maintenance the existing embankment could last for at least 50 years and therefore hold the line should be adopted for at least the short and medium term.
- The location of the sub-cell I1c to I1d boundary, which the draft SMP located at Haverigg was questioned as it had been expected to be at nearby Hodbarrow Point.

SMP2 Team Comments

The SMP2 team agree that a headline policy of managed realignment would be a more proactive option, however, there is likely to be limited justification for flood and coastal defence expenditure to do so. Therefore, the SP2 team has decided to acknowledge in the policy statement for the Duddon, that there may be potential opportunities for regulated tidal exchange and intertidal habitat creation landward of railway in a number of locations.

In relation to PU I6.8 the SMP2 team has reviewed the consultation responses and now propose to change the policy to hold the line in the short term, pending further consultation and investigation of managed realignment opportunities. The comments about marsh management and the existing condition of the defence have been noted and will be taken into account during the next stage of studies. Importantly, realignment or withdrawal from maintenance of defences would not necessarily apply to the whole policy unit I6.8 frontage

and the detail of the approach to delivery of the policy will be developed during more local consultation and further studies.

Location of the boundary between the sub-cells had been based on the boundaries report developed before the present study started but there was confusion in the report. Following discussion amongst the SMP2 team the boundary will now move to Hodbarrow Point.

The following revisions to the draft policies have been made as a result of the consultation:

PU 11c 16.8 Duddon Estuary (Both banks upstream of Viaduct and the right bank south to Green Rd Station) - change to Hold The Line (0-20 years), Managed Realignment (20-50 years), Managed Realignment (50-100 years)

Revise sub-cell boundary to Hodbarrow Point, which means that PU 16.2, Hodbarrow Nature Reserve & Lagoon will be the First unit in the 11d area.

7 Consultation Strategy and Responses received: Sub-Cell 11d – Hodbarrow Point to St Bees Head

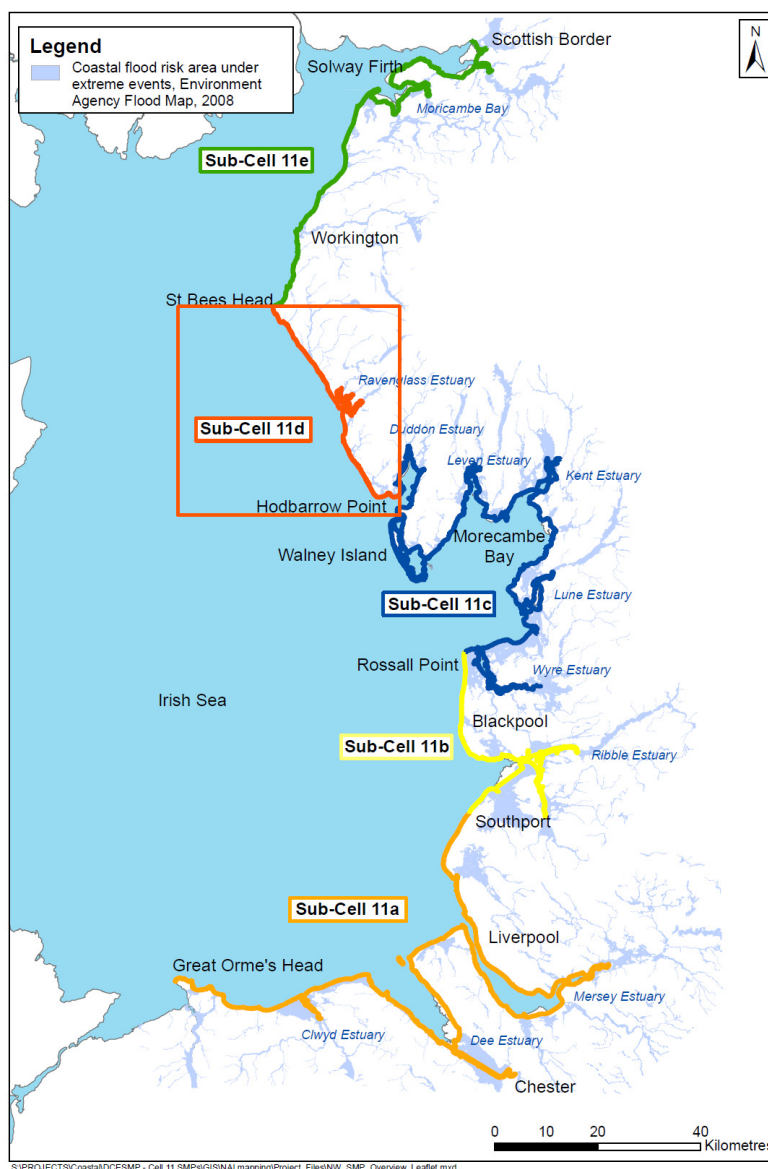


Figure 6: Map showing the location of Sub-Cell 11d, Hodbarrow Point to St Bees Head.

7.1 Consultation Strategy Sub-Cell 11d

In Sub-Cell 11c (between Hodbarrow Point near Millom and St Bees Head), we used the following ways to raise awareness of the SMP2 consultation.

Examples of consultation materials including stakeholder letters, cabinet reports and meeting notes are included in [Annex B8](#).

Website

A list of local consultation events and the full draft SMP2 consultation document, including appendices and maps were included on and downloadable from the North West England and North Wales Coastal Group website (<http://www.mycoastline.org>). A consultation response form was also available to download or complete on online.

Stakeholder Letters

Copeland Borough Council sent letters to a number of residents in targeted locations, including Millom Marshes, Selker to Eskmeals, Braystones, Nethertown and Coulderton Beach informing them of the SMP2 consultation.

Cabinet Reports

A Copeland Borough Council (CBC) Executive report was presented to the members on 22 September 2009 regarding the SMP2 public consultation.

Draft SMP2 Documents

Copies of the main Draft SMP2 Document were made available for viewing from October 2009, in the following locations:

- Members Room CBC,
- Spatial Planning CBC,
- Development Control CBC,
- Millom CBC Office
- Whitehaven CBC Offices (this copy included SMP2 Appendices)
- Egremont Town Hall

Copies of the SMP2 were also available at the following libraries:

- Millom Library,
- Cleator Moor Library,
- Frizington Library,
- Gosforth Library,
- Whitehaven Library,
- Kells Library,
- Mirehouse Library,
- Hensingham Library,

- Egremont Library,
- Thornhill Library,
- Seascale Library,
- St Bees Library
- Distington Library.

Examples of consultation materials including stakeholder letters are included in Annex B8.

7.2 Public Events and Stakeholder Meetings

A public meeting was held at The Beacon, Whitehaven on 16th December 2009 which was open to stakeholders and the Public from Sub Cells 11d and 11e. However due to the Cumbria floods in November 2009 the meeting was not well publicised and travelling to the venue from the North was disrupted. Notes from the meeting are included in Annex B8.

A SMP2 workshop event was held at Muncaster Castle, Muncaster on 11th February 2010. Letters were sent to Councillors, parish clerks and residents inviting them to attend, although it was also requested that they forward the invitation on to others as the event was free to all. A copy of this letter and notes from the meeting are included in Annex B8.

7.3 Consultation Responses

Responses were received from over 20 residents, businesses, Parish Councils and other organisations. Responses were received in a variety of forms:

- letters;
- consultation response forms (hand written and electronic); and
- e-mails.

Summaries of issues raised about specific areas during the consultation are included in the following sections. Annex B13 includes all SMP2 public consultation responses received. A comment and/or action taken by the SMP2 team is also included for each response.

7.4 Area Specific Responses

7.4.1 Haverigg to Selker - 11d1

There was mixed support for the draft policies in this area. The draft plan between Haverigg and Selker is to allow natural coastal evolution through no active intervention as much as possible. However, property and infrastructure at Haverigg will continue to be protected by maintaining and improving the existing defences, and maintenance of existing private defences would continue to be permitted at Hartrees Hill, Silecroft subject to consent. The main responses and queries received are summarised below:

- The location of the sub-cell 11c to 11d boundary, which the draft SMP located at Haverigg was questioned as it had been expected to be at nearby Hodbarrow Point.

- Concern has been raised that implications of the potential nuclear new build, new wind farm proposals and potential expansion of the prison at Haverigg all need to be considered.
- Consultees at Hartrees Hill have expressed concern that under a no active intervention policy they will be unable to maintain or construct private defences to maintain access to the beach and to prevent breach of the natural bank.

SMP2 Team Comments

Location of the boundary between the sub-cells had been based on the boundaries report developed before the present study started but there was confusion in the report. Following discussion amongst the SMP2 team the boundary will now move to the nearby location of Hodbarrow Point. This means that the policy unit numbering will change in area 11d1.

In accordance with national guidance the SMP2 is only able to consider planning schemes and future development where planning permission is already in place. Therefore, potential schemes such as the wind farm and prison expansion at Haverigg and nuclear new build proposals at Kirkstanton have not been included in the plan as no planning consent is in place. These developments would need to go through project specific environmental impact assessments. It is however acknowledged in the policy statement that the policies along this frontage would be subject to revision in the future dependant upon the promotion of power station developments.

Policy choice is based on risk and at present the dune system at Haverigg is accreting and according to the EA flood risk maps, the prison is at low risk from flooding from the open coast frontage. As the future behaviour and evolution of the dune system is uncertain, the action plan for this area has included an action to 'Undertake beach, dune and coastal defence asset monitoring in conjunction with Cell 11 Regional Monitoring Strategy to inform strategy and future SMP reviews'. It is also acknowledged that the EA flood maps used in the SMP2 appear to underestimate flood risks landward of dune systems in some cases and therefore there is another action to 'Continue with improvements to flood risk maps and inundation modelling' in this area.

Following review of consultation responses by the SMP2 team including consistency checks against revisions made to policies in similar locations where the future intention is to continue to allow privately fund defences along the frontage, the no active intervention policy at Hartrees Hill has been revised. To allow private landowners to continue to maintain their defences, subject to consent, the policy unit will be extended to include the potential flood risk area to the north and the policy will change to hold the line for the short, medium and long term subject to private funding agreements.

The following revisions to the draft policies have been made as a result of the consultation:

Revise sub-cell boundary to Hodbarrow Point, which means that PU 16.2, Hodbarrow Nature Reserve & Lagoon will become the first unit in the 11d area and the other unit numbers change in 11d1.

Original unit 11d1.3 – **Silecroft (Hartrees Hill)** now extends further north to include the flood risk area and the policies have changed to **Hold The Line** (0-20 years), **Hold The Line** (20-50 years), **Hold The Line** (50-100 years) subject to private funding agreements.

7.4.2 Selker to Eskmeals - 11d2

There were significant concerns raised by consultees regarding the Selker to Eskmeals coast where the draft plan was to return to a naturally functioning system without defences or interventions, through a policy of no active intervention throughout. The main responses and queries received are summarised below:

- There were concerns about loss of property at Eskmeals, and the impacts of this on residents. One consultee suggested that as payers of council tax, they could reasonably expect that the local council would protect their property and well-being.
- However, the issue of greater concern to the majority of consultees was the potential loss or realignment of the Eskmeals road. There were a number of issues relating to this:
 - Concern was raised regarding erosion of the road which provides access to local properties, Bootle and the MoD range.
 - Responses assumed that any realignment of the road would be over working farmland and therefore there would be significant impacts on this local business. Many consultees felt that defending the road on its current alignment would be a more appropriate solution than rerouting.
 - Impact on the important MoD facilities if the road access was lost, and indirect impact on the local economy. The contributions that the MoD make to Cumbrian economy were quoted.
 - There were concerns regarding the timing involved with a plan for road realignment which would require planning, agreement, consultation etc. It was felt that the existing road could be lost before the new road was constructed, causing major problems and that short term protection was therefore essential.
- There were also concerns regarding the potential loss of habitat at Eskmeal dunes.
- A number of consultees felt that the consultation had been poorly executed, with a lack of publicity, short time-scale for responses following the Muncaster meeting and the meeting presenter was unable to respond adequately to detailed questions asked, particularly with regard to compensation and funding of relocations.
- MOD indicated that the consultation draft policy of No Active Intervention is not acceptable to them in Ild 2.2 at the area fronting Eskmeals Firing Range. They considered that although there are not any formal defences in this area at present, maintenance of defences for the Range must be permissible for the future because any loss of real estate would be detrimental to the operation of the range and there are hard assets that cannot be simply 'rolled back'.

SMP2 Team Comments

The draft SMP2 policy for Ild 2.1, which included Stubb Place, was based on previous local studies that had already indicated that in the long term re-aligning the road would be economically preferred in the long term over building coastal defences for the road in its present location. The draft Action Plan therefore proposed that the Highway Authority and the MoD should consider the justification for and appropriate timing for relocation of the road at Stubb Place. However, following review of concerns raised the SMP2 team acknowledges that the proposed further investigations into the practicality of relocating the road will take time and that short term actions will be required to keep the road open in the mean time. The SMP2 team therefore now propose a revised policy of Managed Realignment at Stubb Place, which will allow short term measures to be undertaken to keep the road operational while a longer term solution is developed, which may or may not involve re-routing the road.

The consultation meeting at Muncaster was arranged at short notice shortly before the end of the consultation period following requests and responses indicating that the proposed additional Silloth meeting was too far away and the potential attendees had not been informed of or able to attend the Barrow meeting in December. Answering detailed questions about allocation of funding for schemes between the coast protection authority, the highway authority and the MoD are beyond the scope of the SMP2 studies and need to be considered formally between the responsible bodies. Defra is presently funding several coastal adaptation pathfinder projects that do include relocation of properties, but it is not certain where national funding may be available in future.

The SMP2 team note the concern raised by the MoD and that although there are no formal defences, beach management activities are apparently undertaken occasionally at Eskmeals Range. As there are no hard defences and the range is integral with and adjacent to the internationally protected habitats of the Drigg Coast and Eskmeals dune system, introduction of new hard defences would require full environmental impact assessment and Habitats Regulations Approval for consent. Although such consents may be able to go through under a case for overriding public interest, if there is considered to be an adverse impact there would be a requirement for compensation under the European Habitats Directive through additional equivalent habitat creation elsewhere. The SMP2 team therefore consider that most appropriate policy, in line with current practice and the existing policy under SMPI, would be Managed Realignment. This would allow present practices to be continued where necessary but would also allow for future testing of options to “roll back” hard assets or replace further inland when they reach the end of their residual lives in the medium or long term. It would also allow for future installation of localised hard defences at essential locations if necessary.

The following revisions to the draft policies have been made as a result of the consultation:

Id 2.2: move boundary with Id 2.1 to south of Stubb Place and change whole frontage to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years), **Managed Realignment** (50-100 years)

7.4.3 Ravenglass Estuary Complex - Id3

There was little support for the draft policies in the Ravenglass estuary area. The draft plan is to allow the estuaries to evolve naturally without further intervention. However, risk to Ravenglass itself and the Cumbrian coast railway will continue to be managed. The main responses and queries received are summarised below:

- There were a number of responses regarding how the roads around the estuary already flood regularly at peak tides and need defending or raising now, particularly the main A595 near Muncaster Bridge. Issues were also raised about blockage of drainage and the need for maintenance of defences.
- There were concerns regarding possible abandonment of properties due to flooding and inaccessibility, and whether there was compensation available for relocation of residents.
- There were responses about the consistency of treatment of Scheduled Monuments such as Ravenglass Roman Fort.

SMP2 Team Comments

The no active intervention policy would allow natural evolution of the shoreline and provide space for rollback of saltmarsh as sea levels rise. Continuation of natural processes is beneficial to the international and national designated sites that include the estuaries around Ravenglass. In addition, the SMP2 broad level economic

assessment for this section indicates that there is unlikely to be sufficient economic justification for new defences other than at Ravenglass. The Roman Fort site has been and still is suffering erosion seaward of the railway and the draft SMP2 Action Plan proposed that the site was considered in more detail to determine if protection or mitigation such as recording should be undertaken.

Although the SMP2 has noted the need for raising the road at Muncaster Bridge the SMP2 only deals with coastal flood and erosion defence management and therefore management of the roads lies with the Highways Authority.

The local authorities and the Environment Agency have powers to undertake flood risk management if they can justify and afford to do so but do not have a legal duty to do so. As there is no right to publicly funded coastal defence there is no provision for compensation from central or local government funds to offset any loss due to flooding or erosion suffered by property and landowners. However, the government is presently undertaking some pilot projects developing coastal adaptation approaches and it is possible that there may be changes in policy in future to promote adaptation or relocation where it is not sustainable or affordable to defend.

No changes to the draft policies have been made following public consultation

7.4.4 Drigg Point to Seascale - I Id4

There were no responses received on the draft policies for this stretch of coastline where the plan is to allow a policy of naturally functioning coastline through no active intervention throughout.

SMP2 Team Comments

No changes to the draft policies have been made following public consultation

7.4.5 Seascale to St Bees - I Id5

There were some concerns raised over the draft policies for the coastline from Seascale to St Bees where the draft plan is to continue to manage risk along the coast from Seascale to Sellafield, whilst promoting a naturally functioning coastline elsewhere whilst monitoring and managing risk to the railway. The main responses received are summarised below:

- The proposed lack of protection for the properties located on the beach at Braystones was of significant concern, including the impact on residents, the effect on the railway since the properties were thought to provide protection to the railway line and the visual impact of abandoning properties and defences in the longer term

SMP2 Team Comments

The draft SMP2 recognises that protecting properties on the shingle bank seaward of the railway is not likely to be sustainable in the long term due to sea level rise. The government is presently undertaking some pilot projects developing coastal adaptation approaches and it is possible that there may be changes in policy in future to promote adaptation and relocation where it is not sustainable or affordable to defend.

The draft SMP2 allows for monitoring risk to the railway and taking action to extend defences to the embankment if it becomes necessary in future.

The SMP2 team has considered the responses received and the comments made at the meetings. An additional item will be added to the SMP2 Action Plan to develop an adaptation strategy, consider provision of EA flood warnings, clarify responsibility for maintaining emergency access and allow for ongoing liaison with the residents association. In order to facilitate these additional actions and to allow for ongoing local beach management by residents the short term policy will be revised to Managed Realignment.

The following revisions to the draft policies have been made as a result of the consultation:

II d 5.5: Braystones, Nethertown and Coulderton - change to **Managed Realignment** (0-20 years), **No Active Intervention** (20-50 years), **No Active Intervention** (50-100 years)

7.4.6 St Bees - II d6

There were no responses received on the draft policies for this stretch of coast where the plan is for no active intervention along the undefended cliffs to the south, to allow them to continue eroding naturally, and long term realignment of the St Bees shoreline to enable a beach to be sustained whilst realigning defences to continue to manage risk. In the short and medium term, existing defences would be maintained.

SMP2 Team Comments

No changes to the draft policies have been made following public consultation

7.4.7 St Bees Head - II d7

There was support to allow the coastline to continue functioning naturally through no active intervention at St Bees Head.

SMP2 Team Comments

No changes to the draft policies have been made following public consultation

8 Consultation Strategy and Responses received: Sub-Cell 11e – St Bees Head to the Scottish Border

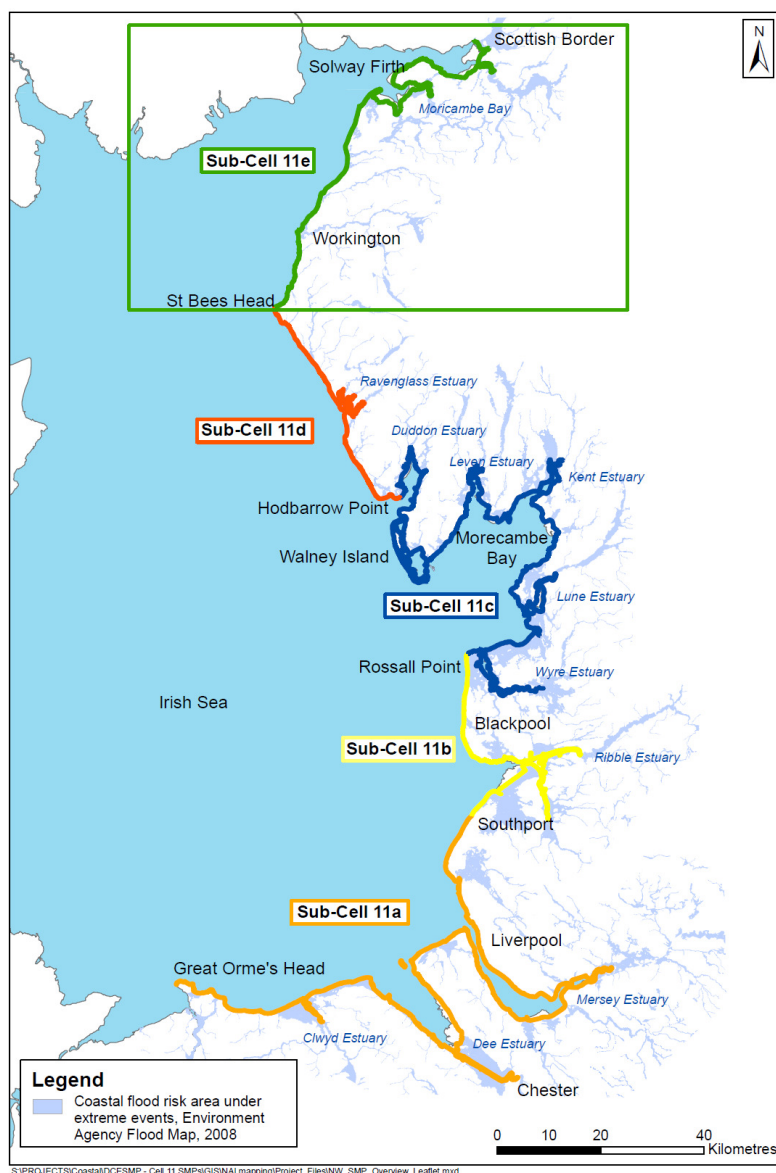


Figure 7: Map showing the location of Sub-Cell 11e, St Bees Head to the Scottish Border.

8.1 Consultation Strategy Sub-Cell 11e

In Sub-Cell 11e (between St Bees Head and the Scottish Border), we used the following ways to raise awareness of the SMP2 consultation.

Examples of consultation materials including press releases, cabinet reports and meeting minutes are included in [Annex B9](#).

Website

A list of local consultation events and the full draft SMP2 consultation document, including appendices and maps were included on and downloadable from the North West England and North Wales Coastal Group website (<http://www.mycoastline.org>). A consultation response form was also available to download or complete on online. The consultation was also advertised on the Allerdale Borough Council website.

[Press Notices / News Releases](#)

Allerdale Borough Council issued a news release on 13th January 2010.

[Cabinet Reports](#)

A Copeland Council Executive report was presented to the members on 22 September 2009 regarding the SMP2 public consultation.

[Draft SMP2 Documents](#)

Copies of the main Draft SMP2 Document were made available for viewing from October 2009, in the following locations:

- Members Room Copeland Borough Council (CBC)
- Spatial Planning CBC,
- Development Control CBC,
- Millom CBC Office
- Whitehaven CBC Offices (this copy included SMP2 Appendices)
- Egremont Town Hall

Copies of the SMP2 were also available at the following libraries:

- Millom Library,
- Cleator Moor Library,
- Frizington Library,
- Gosforth Library,
- Whitehaven Library,
- Kells Library,
- Mirehouse Library,
- Hensingham Library,
- Egremont Library,

- Thornhill Library,
- Seascale Library,
- St Bees Library
- Distington Library.

8.2 Public Events and Stakeholder Meetings

A public meeting was held at The Beacon, Whitehaven on 16th December 2009 which was open to stakeholders and the Public from Sub Cells 11d and 11e. However due to the Cumbria floods in November 2009 the meeting was not well publicised and travelling to the venue from the North was disrupted. Notes from the meeting are included in Annex B9.

A public event was held on 26th January 2010 at the Solway Resource Centre in Silloth. The programme began with a presentation by Halcrow before leading into a question and answer session, followed by an opportunity to browse exhibition material and ask individual questions of project team members. Letters were sent to parish clerks advertising this event. A copy is included in Annex B9.

8.3 Consultation Responses

Responses were received from over 10 residents, businesses, Parish Councils and other organisations. Responses were received in a variety of forms:

- letters;
- consultation response forms (hand written and electronic); and
- e-mails.

Summaries of issues raised about specific areas during public consultation relating to policy are included in the following sections. Annex B14 includes all SMP2 public consultation responses. A comment and/or action taken by the SMP2 team is also included for each comment.

8.4 Area Specific Responses

8.4.1 St Bees Head to Whitehaven - 11e1

There was support to allow a naturally functioning coastline through no active intervention along this stretch of coastline between St Bees Head and Whitehaven.

SMP2 Team Comments

No changes to the draft policies have been made following public consultation

8.4.2 Whitehaven to Workington - 11e2

The draft plan is to continue managing flood and erosion risk to the key regional centres of Whitehaven and Workington, and to continue to protect the railway. Where possible, the coastline will be allowed to evolve naturally. The one response received is summarised below:

- Concern was raised regarding the rapid erosion at Parton. There is concern that tidal water would flood through the tunnel under the railway to flood properties and that the railway embankment is at serious risk of tidal erosion.

SMP2 Team Comments

The draft policy of hold the line will allow for continued future management of risks to assets in the village of Parton as well as the railway. However, the responsibility of maintaining the railway defences lies with Network Rail and any concerns raised will be passed on.

No changes to the draft policies have been made following public consultation

8.4.3 Workington to Maryport - I le3

A limited number of responses were received for this stretch of coastline, where the draft plan is to continue managing risk to the key towns of Workington and Maryport whilst allowing the coast to evolve naturally where possible. The main responses and queries received are summarised below:

- It was queried why there is no inclusion of a County Wildlife Site.
- One consultee raised the issue of the coastline south of the SSSI at Maryport and suggested potential options for management along this frontage and commented on the removal of shingle accumulations south of the harbour entrance at Maryport.
- A consultee who is a significant landowner in the area expressed surprise that the plan had been developed and asked to be included in further consultation.

SMP2 Team Comments

As the SMP2 is a high level document, and covers a large area of coast (between North Wales and the Scottish border) the SMP2 team decided to only include environmental areas designated for their international and national conservation importance. County Wildlife Sites will however need to be taken into consideration during development of more local scale coastal defence strategy plans and schemes.

The draft policies have been proposed to seek the best approach to managing the flooding and erosion risks. The removal of shingle from the beach, if undertaken on a large scale or over a long period of time could increase coastal flood or erosion risks elsewhere. With regards to the hold the line policy between Siddick and Risehow it is not anticipated that the suggested large groynes would be required, however, the detail of how to 'hold the line' will be considered as part of strategy plans and schemes.

No changes to the draft policies have been made following public consultation.

8.4.4 Maryport to Dubmill Point - I le4

Consultees were concerned with the draft policies in this area. The draft plan is to manage flood and erosion risks to Maryport and Allonby, while allowing the coast to evolve naturally in other locations. The main responses and queries received are summarised below:

- There were a number of concerns regarding the policy of no active intervention in policy unit 4.3 (Maryport Golf Course to Allonby). It was felt that this coastline should be protected due to risk to the road and to the proposed site of a cycleway which would be part of the National Cycle network. The gabions at the Salt pans were thought to be a successful coast protection measure.
- One consultee wished to inform the team of the ongoing proposal for a project to enlarge the water impoundment area of Maryport Harbour, which could potentially lead to the realignment of the River Ellen to the north of the harbour, and an improvement to sediment supply along this coastline.

SMP2 Team Comments

The draft policy for policy unit 4.3 Maryport Golf Course to Allonby is no active intervention. The SMP2 team has reviewed the consultation responses and the proposed policy has now been revised to managed realignment for the short, medium and long term. A hold the line policy was not considered viable due to the need to allow the coast to evolve naturally. Hold the line would also be unlikely to be affordable from national budgets due to the relatively small number of assets at risk of erosion. Managed realignment, however, will allow for the risks to heritage assets, the road and other properties to be managed appropriately through minor short term works, such as the previous use of gabion baskets and adaptation measures.

As part of the SMP2 development the team has taken into account existing development and approved proposals for development that has been approved through planning. However, as this proposal to develop Maryport harbour is in its infancy it has not been considered in the SMP2. If following project specific environmental impact assessment these proposals develop and obtain planning approvals they will be picked up in the next review of the SMP when the current policy of hold the line may need to be revised.

The following revisions to the draft policies have been made as a result of the consultation:

4.3 – Maryport Golf Course to Allonby - changed to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

8.4.5 Dubmill Point to Silloth - 4.5

Limited responses were received for the coastline between Dubmill Point and Silloth, where the draft plan is to maintain the naturally functioning system and preserve the environmental status of the area through no active intervention. The main responses and queries received are summarised below:

- There was concern regarding the change from the SMP1 policy of hold the line to no active intervention, and the impacts on the coastline, local infrastructure and heritage features.
- Another consultee felt that designated habitats and isolated properties at Mawbray should be protected.

SMP2 Team Comments

The SMP1 policy of hold the line was only considered to be acceptable as long as no 'hard defences' were used due to the importance of Silloth Dunes and Mawbray Banks, which are environmentally designated as Sites of Special Scientific Interest. Assessments as part of draft SMP2 development looked at both hold the line and no active intervention in this location. With hold the line there was concern that hard defences would have an adverse impact on the environmental sites, and under Government Guidance the policy is not likely to be economically justified. It is understood that much of the coastline at present is naturally functioning and relatively stable (although we understand there has been some attempts to stabilise the dunes) and therefore no active intervention was found to be a favourable option. It is recognised that there are assets at risk around Beckfoot including the road and therefore the action plan recommends monitoring of risk to the village and to investigate the case for local flood defences / individual property defences or resilience measures in the medium term or when risk increases.

Due to the small number assets at risk and the need to allow the coast to function naturally, it is unlikely that public money would be available for large scale defence schemes. However, following review of the consultation responses and additional information received, the SMP2 team now proposed to change the policy to managed realignment for the short, medium and long term. This will allow responsible bodies to manage the dune system for nature conservation, take action to manage risks while relocating the coastal road; and record, relocate or protect historic environment features in the World Heritage Site as necessary where required.

The following revisions to the draft policies have been made as a result of the consultation:

I le 5.1 Dubmill Point to Silloth - change to Managed Realignment (0-20 years), Managed Realignment (20-50 years) and Managed Realignment (50-100 years).

8.4.6 Silloth to the Grune - I le6

Only two responses were received on the draft policies from Silloth to The Grune. Here the draft plan is to manage flood and erosion risk to Silloth and its amenities, whilst allowing the coastline to function naturally along the Grune through no active intervention. The responses are summarised below:

- It was queried whether the hold the line policy included replacing the wooden groynes at Dubmill Point, and it was also suggested that the breakwater at Silloth Pier should be replaced in order to provide protection to Grune Point.
- One consultee felt that the lack of protection for the Grune was inappropriate, on the basis that it acts as a natural breakwater by dissipating wave energy and providing protection to Cardurnock and Anthorn.

SMP2 Team Comments

The SMP2 is a high level plan which identifies policies to manage coastal risks but does not go into the detail of how the policies will be implemented in local solutions. The SMP2 action plan has recommended that a local coastal risk management Strategy and coastal process study should be undertaken which should confirm the policies for Silloth to Moricambe Bay (including the Grune), and address the issues of interruption of shoreline sediment transport and investigate future defence options for the frontage.

The SMP2 team have reviewed the responses and consider that they will be best addressed in the further study already recommended, which will consider the most appropriate approach to deliver the SMP2 Policy. The SMP2 team also recommends that monitoring of coastal change should continue to provide new data to inform future SMP reviews.

No changes to the draft policies have been made following public consultation.

8.4.7 Moricambe Bay - I le7

The draft plan is to allow natural coastal evolution where possible. However, draft policies of hold the line and managed realignment will be implemented to manage the risk to the majority of property and built assets. The responses and queries received are summarised below:

- It was felt that there are areas with a policy of no active intervention, where managed realignment could be implemented as a more proactive policy.

SMP2 Team Comments

The SMP2 team considered managed realignment at a number of locations in this area during the development of the SMP2. However, in some locations this policy was not considered suitable due to limited economic justification and little short term need for habitat creation. Given that there are already some additional set-back defences in a number of locations, no active intervention would allow saltmarsh to roll back naturally with sea level rise, while still providing some protection landward.

The SMP2 team has reviewed the responses and further information put forward during consultation and the draft policy is now proposed to change to Managed Realignment in a number of locations in Moricambe Bay. This will allow organisations, local land owners and responsible bodies to put in place measures to proactively adapt to future coastal changes. It will also allow opportunities for future habitat creation to be included within the Environment Agency's Regional Habitat creation Programme where appropriate.

The following revisions to the draft policies have been made as a result of the consultation:

PU I le 7.3 Wath Farm to Saltcoates including Waver to Brownrigg - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU I le 7.4 Newton Marsh - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU I le 7.5 Newton Marsh to Anthorn including Wampool to NTL - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU I le 7.7 Anthorn to Cardurnock - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

8.4.8 Cardurnock to the Scottish Border - I le8

The draft plan in this area will allow the shoreline to remain or become largely natural in form, allowing a sustainable and naturally functioning coast in the future. However, draft policies of hold the line and managed realignment allowed for managing the risk to property and infrastructure where appropriate. The main responses and queries received are summarised below:

- It was felt that there are areas with a draft policy of no active intervention, where managed realignment could be implemented as a more proactive policy.
- Managed realignment in this [and similar locations] is likely to be in combination with other units that are likely to lose similar habitats, so the SMP needs to consider the needs in combination with these other units.
- There were responses about the consistency of treatment of Scheduled Monuments and the importance of managing risk to the assets of the World Heritage Site.

SMP2 Team Comments

The SMP2 team considered managed realignment at a number of locations in this area during development of the SMP2, however, in some locations this policy was not considered suitable due to limited economic justification and little short term need for habitat creation. For consistency, in these locations the draft policy was for no active intervention for the short, medium and long term, while also allowing maintenance of existing localised private defences. Managed realignment was however, proposed between Demesne Farm and the Metal Bridge (Esk) and between the Metal Bridge (Esk) and the River Sark.

Following review of responses and further information put forward during consultation the SMP2 team now propose to extend the managed realignment policy to include the other areas where the draft policy was no active intervention. This will allow organisations, local land owners and responsible bodies to proactively adapt to future coastal changes and manage risks to the World Heritage Site Features. It will also allow opportunities for habitat creation to be included within the Regional Habitat creation Programme if required in the future.

The following revisions to the draft policies have been made as a result of the consultation:

PU 11e 8.1 Cardurnock to Bowness-on-Solway - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU 11e 8.2 Bowness-on-Solway - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU 11e 8.3 Bowness-on-Solway to Drumburgh - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU 11e 8.4 Drumburgh to Dykesfield - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU 11e 8.5 Dykesfield to Kingsmoor (Eden Normal Tidal Limit) - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU 11e 8.6 Kingsmoor (Eden Normal Tidal Limit) to Rockliffe - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU 11e 8.8 Rockliffe to Demesne Farm - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

PU 11e 8.9 Demesne Farm to Metal Bridge (Esk) - change to **Managed Realignment** (0-20 years), **Managed Realignment** (20-50 years) and **Managed Realignment** (50-100 years).

North West & North Wales Coastal Group

North West England and North Wales Shoreline Management Plan SMP2

Annex B14

Public Consultation Location Specific Responses and Comments: Sub-cell 11e

St Bees Head to Whitehaven – I le I

Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
PCR_113 EA NW	We agree with the NAI policy for the SSSI and the open ended proposals for Saltom Pit	Y	Support for draft policy is acknowledged.	No action required

Whitehaven to Workington – I le 2				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
PCR_50 Copeland BC	<p>I le 2.3</p> <p>I have major concerns concerning the rapid erosion at Parton, where the problem has accelerated further.</p> <p>The area concerned is the section after the rock armour at the south end of Parton beach, the footpath has disappeared and there is major concern now that the next problem will be that the tidal water will go through the tunnel under the railway and flood properties on Foundry Rd Parton. The railway embankment is also in serious danger of tidal erosion as well.</p> <p>With the acceleration of this erosion over the last 12 months or so would raise the question will this breach happen this winter?</p> <p>The residents of Foundry Road Parton already have continuing problems with flooding from surface water drains and occasionally sewage, tidal flooding would be the final straw.</p>	N	<p>The draft policy is HTL to continue to manage risks to assets in the village as well as the railway.</p> <p>Responsibility of maintaining the railway defences lies with Network Rail.</p> <p>JBA, on behalf of Network Rail are looking at this issue and are undertaking an over-topping analysis.</p> <p>Maintenance practices are however, outside the scope of the SMP; however we will forward your concerns onto Network Rail.</p>	No action required

Workington to Maryport – I le 3				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
PCR_113 EA NW	From Siddick to Risehow and Maryport, much of the coast is a County Wildlife Site but this doesn't seem to be referred to at all. Presumably this has been a conscious decision not to consider such sites, but if so this needs to be carefully justified given our general duty to promote conservation.		As the SMP is a high level document, and covers a large area of coast (between North Wales and the Scottish border) we have only included environmental areas designated for their international and national conservation importance. This is noted in Appendix D. County Wildlife Sites should be taken into consideration at strategy and scheme level.	No action required
PCR_216 Individual Maryport	<p>Your plan for Workington to Maryport shows leave alone for nature to take its course – that's fine but there are things to consider here.</p> <p>1) Part of that shore is a substantial breeding ground for Oystercatchers and Ringed Plovers – over time they will need some protection not from erosion but from people.</p> <p>Next point – For approx ¼ of a mile South of the SSSI site at Maryport the shoreline has stopped eroding away already – grass growing amongst the rocks by the high bank. I believe this stretch should be cleaned up as it is all covered in a thin layer (less than a metre) of slag from the old steel slag bank tipping procedures. Note that where the sewage building outfall pipe was laid and the slag dug away the shore has all but returned to a beautiful natural state. I believe it would be a great return for the investment to dig off all this hard slag and let the shore become sandy and pebbled as it was naturally.</p> <p>I also think there is a good argument for erecting some large groynes South of this stretch – it would hold up the migration of a lot of pebbles and eroded bits of slag – increase the shingle area for the birds nesting site and also reduce the amount of removal of this stuff that is currently done on a 2 monthly basis from the edge of the harbour entrance by Armstrong Contractors – By doing these few things the Flimby to Maryport stretch would be greatly enhanced – become a tourist attraction and help the harbour.</p>		<p>Response noted. However, the consultation draft SMP2 proposed a combination of Hold the Line, Managed realignment and No Active Intervention between Workington and Maryport. The draft policies were proposed to manage the flooding and erosion risks. The frontage between Risehow and Maryport is, as you say, proposed for No Active Intervention for coastal defence. The removal of shingle from the foreshore, if undertaken on large scale or long term, could increase coastal flood or erosion risk elsewhere, so consideration of this at more detailed level will be added to the SMP Action Plan.</p> <p>The frontage between Siddick and Risehow has a proposed Hold the Line policy, due to the coastal flooding risks to the railway, main road and properties located in the low lying adjacent land. While it is not anticipated in the SMP that large groynes would be required here, detailed consideration of approach is left to scheme and strategy level.</p>	Add consideration of sustainability of removal of shingle to SMP Action Plan.
PCR_223 Lord of Seaton	<p>I was surprised to learn that you have developed such a plan and that I have not been informed or involved in such discussions. I am the registered freeholder of the foreshore from the Port of Workington up to Flimby - requested title No CU205410.</p> <p>I would like to attend any meetings which involve my foreshore i.e. North of the Port of Workington, Siddick and Seaton up to Flimby. My attendance would be as landowner of affected land. Please keep me informed.</p>		Comments noted.	Add action to consult the foreshore landowner regarding any more detailed developments in this area.

Maryport to Dubmill Point – I le 4				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
<p>PCR_102</p> <p>David Mossom</p>	<p>I le 4.3</p> <p>Thank you for giving me the opportunity to present you with the letter from Crossscanonby Parish Council written to Capita Symonds in response to their extension of the Hadrians Cycleway proposals. My feeling is that the coastline between Maryport Golf Course and the Eastern end of Swarthy Hill being the boundaries of the coastline in the Parish of Crossscanonby should be protected. The Gabion baskets at the Saltpans have proved to be an unqualified success. The remaining grass between the high water mark and the B5300 is a shrinking but valuable resource. The use of the land to the south of the road for the proposed cycleway, to be funded in the main by Cumbria County Council and grant aid is dodging the erosion issue. The plan suggests a mini roundabout at Crossscanonby Road Ends. At the moment the road at that point is less than 20 meters from the last incursion by the sea. The waste bin placed there by Allerdale is almost an island. There is a Gas main nearby which is in jeopardy.</p> <p>It beggars belief that given the cost incurred due to the policy of non intervention in the river beds to the whole area following the November rains that Cumbria County Council, Allerdale and all the other agencies involved will sit back and wait for the B5300 to be swept away.</p> <p>The erosion is not natural, it is caused by the building of Maryport pier. The Gabions are a proven solution at that particular point. They are cheap. The cost of the brown signs and the other incidentals in the cycleway plan cost more than the Gabions would. The current public access would be assured the road saved, enfilading of the Saltpans would be prevented and the Gas main saved. As I said last night it is high time there was some joined up thinking by the agencies involved rather than one waiting for the other to take responsibility. Millions have been poured into Maryport. It cost, 20 or so years ago, around £60k for Allerdale to search for what was called locally a Roman bait cabin on the top of Swarthy Hill. Nothing was found so they built a fort with a digger and a dumper truck and now it is an ancient monument! Yet sadly that wonderful resource, the strip of land between the road and the sea, is to be allowed to be washed away for the want of about £300k for the clearly proven Gabion baskets.</p> <p>Thank you for your time last tuesday and I do hope my comments may in some small way help to change the Shoreline Management Plan from No Intervention to Hold The Line between Maryport Golf Club and Blue Dial.</p> <p>Also provided copy of letter to David Clare re cycleway. (PCR_110_111_112 & misc Silloth Workshop.pdf)</p>		<p>Response noted. The draft plan proposed No Active Intervention for this area, which is in Policy Unit I le 4.3. Following concerns raised during consultation, including this one, the proposed policy has now been changed to Managed Realignment in all three epochs. This will allow for the risks to the historic environment assets, the highway and other assets to be managed appropriately through adaptation and minor short term works, such as the previous use of gabion baskets. However, due to the nature and scale of assets at risk it is not expected that coastal defence measures for the whole policy unit would qualify for national funding.</p>	<p>Revise headline policy for I le 4.3 to MR/MR/MR</p>
<p>PCR_119</p> <p>Crossscanonby Parish Council</p>	<p>PU4 3(Part) MARYPORT GOLF CLUB TO BLUE DIAL FARM</p> <p>Thank you for the presentation and open discussion at your Public Consultation Workshop at Silloth on 26th January 2010 which I attended with other members of Crossscanonby Parish Council.</p> <p>At the meeting members pointed out that as well as your current consultation on a revised shoreline management plan, Capita Symons had also recently presented to Cumbria County Council a feasibility study for the construction of a cycleway known as B5300 Hadrians Gateway. This section forms part of the National cycle network which runs from Ravenglass to South Shields.</p> <p>The cycleway will be unique as it follows the length of Hadrians Wall World Heritage Site and part of the Frontiers of the Roman Empire. The Vice Chair of our Council David Mossom presented both your colleagues with our council's response to the Capita proposals which we hoped would be included in your appraisal. Further copies are available if required.</p> <p>There is also the possibility of the future coastline pedestrian way passing along this section of foreshore.</p>	<p>Y</p> <p>(in part)</p>		

Maryport to Dubmill Point – I le 4				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
	<p>In discussions with Capita Symonds members have pointed out that consideration should be given to providing an overall scheme protecting the road, the gas main and the remaining land north of the B5300 from further erosion. This would require your plan to be amended from No Active Intervention to Hold the Line. The Gabion Baskets which currently protect the Salt Pans show that in this location this type of intervention works extremely well with no major costs involved relative that is to the re siting of the road or indeed the building of a cycle path.</p> <p>Surely it would be to the benefit of all interested parties to arrange a meeting with a view to co-ordinating an overall scheme to enhance this section of coastline for the benefit of tourism and the general public.</p>			
PCR_110 Crosscanonby Parish Council	Maryport Golf Course, Swarthy Hill - Please send hard copy of predicted coastline with NAI for 20, 50 and 100 years. Also Swarthy Hill to Allonby assessments in Appendix G.			
PCR_113 EA NW	In the Maryport to Allonby section the B5300 is likely to prevent landward migration of sand dunes so it is appropriate to consider its long term position.			
PCR_148 Crosscanonby Parish Council	<p>I le 4.3</p> <p>Councillors were given an update at last night's council meeting on the above event and the current plan.</p> <p>Individual councillors present did submit their personal views but the council as a whole would like to support those views. Of the two scenarios presented for the coastline within Crosscanonby Parish we would like to see Scenario A go forward that is HTL 'Hold the line', G.2.5.4, on page 187 of the plan. We do not agree or support a 'No active intervention' as outlined in Scenario B.</p> <p>We would be grateful if these opinions be taken into account.</p>		Response noted. Due to the extent of assets at erosion risk and the need to maintain a naturally functioning coast to avoid impacts elsewhere it is not considered that the Hold the Line Scenario A could be justified or would be affordable. As a compromise the proposed SMP policy is to be revised to Managed Realignment, which will allow for minor local works to be undertaken where necessary and sustainable to do so.	Revise headline policy for I le 4.3 to MR/MR/MR
PCR_141 Holme St Cuthbert Parish Council	<p>PU 4.5 Edderside road junctions opposite shingle coast possible loss of road, have to keep B5301 road open major west coast route.</p> <p>PU 4.6 Seacroft Farm/Dubmill policy says HTL with maintenance of sea wall until study done 2015 would like findings from study shared with Parish Council. The cost of new road network has to be considered against the maintenance of the sea wall and the coast. Maintaining the viability of the B5300 for business, tourism and access to the energy coast is a major priority.</p>		<p>Response noted. The SMP policy unit boundaries will allow for some flexibility, and this road junction would need to be included in consideration of re-routing of the coastal road.</p> <p>Response noted the local authority should continue to liaise with the Parish Council during more detailed level studies.</p>	No changes proposed.
PCR_216 Individual Maryport	<p>The harbour and North to Dubmill: There is a multi million pound project in its infancy to enlarge the water impoundment area of Maryport Harbour</p> <p>3 scenarios exist but it is likely the one they will go for is to move the outflow of the river Ellen North of the harbour – this would dramatically reduce the dredging cost for the harbour authority – its main cost in fact. Also it would mean that the shore north of the harbour which is currently unnaturally starved of sediment would receive all the rich deposits from the river and become a very good area for wildlife – again very little intervention needed once this was done but a good result for the area</p>		The SMP development has taken into account existing development and proposed development that has been approved through planning. As the project mentioned is in its infancy it has not been considered. However, the SMP proposed policy for Maryport is to Hold the Line. If an Advance the Line option is proposed then subject to environmental impact assessments, it could be compatible with the SMP if the new defences are funded by 3 rd parties.	No changes proposed.
PCR_62 English Heritage	The section I le 4, 3 advocates letting the defences put in place to defend the Medieval salt pans at Allonby salt pans (inaccurately described as Roman) decay and then removing them. These defences are thought to have worked well, and were put in place with the full consent of the interested parties. Curators oppose the presumption of their removal and it is suggested that this be reconsidered and the defences maintained and renewed.		Section I le4:3 I suspect your quote is from a pre-consultation draft, because the policy approach in the latest version, as on the website since the start of October, specifically allows for local limited intervention at the heritage assets in the short term (0 to 20 years) and for this to continue over the medium and long term if is sustainable to do so.	Revise headline policy for I le 4.3 to MR/MR/MR

Maryport to Dubmill Point – I le 4				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
			Following concerns raised during consultation, including this one, the proposed SMP policy headline has now been changed to Managed Realignment in all three epochs. This will allow for the risks to the historic environment assets, the highway and other assets to be managed appropriately through adaptation and minor short term works, such as the previous use of gabion baskets.	

Dubmill Point to Silloth – I le 5				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
PCR_105 Individual, Cumbria	<p>After attending the meeting at Silloth on Tuesday I was disappointed not getting direct answers as to why the previous SMP showed to Hold The Line along the Beckfoot shoreline but now No Active Intervention?</p> <p>Myself and many other locals are extremely concerned about a particular piece just south of Beckfoot (Castle Corner) where the B5300 road is very close to a 5 metre drop and is eroding rapidly due to daily attrition, wind, rain, frost, rabbits, birds and people with metal detectors "it is where there used to be a roman burial ground, now gone". Less than 2 metres from the road edge are services such mains gas and water also BT lines-fibre optics which will soon be exposed. Would any of these bodies be responsible / concerned about the problems this erosion is to cause them? I am also unsure about the situation where, because it is the Sub base of the road being eroded, as to where the CCC Highways are responsible for doing something about it ?</p> <p>Currently communicating with M Faulkner and P Marr (CCC Highways) re extensive erosion south of Beckfoot where the B5300 which is 6m above shore level is going to collapse and endanger road users.</p>		<p><i>Direct response to email:</i></p> <p>The question about why there has been a change in policy from the previous Shoreline Management Plan is not a simple answer, which is why the answer given at the event may not have been adequate. In SMP1 Hold the Line was identified as the preferred scenario but it was only considered to be acceptable if any maintenance of the coastline was undertaken by soft engineering due to the importance of Silloth Dunes and Mawbray Banks, which are designated as Sites of Special Scientific Interest.</p> <p>In SMP2 both Hold the Line and No Active Intervention were looked at. Under the Hold the Line scenario there was concern that hard defences would negatively impact on the designated sites. Also although it was recognised that there are some assets at risk, under the updated guidance this does not make it economically viable (on a national level) to allow this headline policy. It is understood that much of the coastline at present is naturally functioning and relatively stable (although I understand there have been some attempts to stabilise the dunes) and therefore No Active Intervention was found to be the favourable option. It is recognised that there are assets at risk around Beckfoot including the road. As stated in the Action Plan the risk to these should be monitored and the case for local flood defences / individual property defences or resilience should be considered in the medium term or when risk increases.</p> <p>In answer to your question regarding whether the Highways Authority are responsible for doing anything, I am afraid I am unsure. It was mentioned by a member of the audience at the meeting that the Highways Act states that when the sub base is damaged, the Highways Authority do not need to repair it. I am afraid I am not familiar with that act so cannot really comment either way. However the Coast Protection Act only gives Coastal Authorities permissive powers for coastal defence and not a duty for coastal defence so it would be difficult to see how the Local Authority could be responsible. I think this is more of a specific legal issue and so beyond the scope of the SMP I am afraid.</p> <p>I also cannot comment on whether the companies you mention would be concerned or responsible. Certainly the utility companies have been asked to comment on the Shoreline Management Plan but being regional/national companies it can be difficult to get interest in the right areas.</p>	<p>I le 5.1 - Following consideration of this and other responses related to heritage assets the SMP2 policy is proposed to change to Managed Realignment in all three policy epochs. This will allow responsible bodies to take action to manage the risk to assets that they are responsible for, where appropriate and sustainable to do so. Managed realignment will enable limited local works to be undertaken to slow erosion whilst adaptation measures, such as relocating assets further inland or recording of historic environment sites is undertaken.</p>
PCR_113 EA NW	<p>I le 5.1</p> <p>In the Dubmill to Silloth section NAI is credited with allowing natural processes in the adjoining SAC/SPA, but the SSSI on that section (Silloth Dunes and Mawbray Bank) isn't referred to, even though it may also be affected in the next 100 years by the B5300. Given the statutory status of SSSIs it is necessary for them to be referred to, even if to make clear that the proposed options have taken them into account.</p>		<p>The SSSI has been referred to in the SEA (Appendix I), where it is noted that there is potential for some erosion of Silloth Dunes & Mawbray Bank SSSI in the short, medium and long-term as sea levels rise. However, the small area of dune system within this scenario area is currently in favourable condition and is significantly accreting, particularly on the northern side of Dubmill Point. No active intervention is likely to be beneficial to this site, and the</p>	<p>Add beneficial impact on SSSI to policy statement impacts summary.</p>

Dubmill Point to Silloth – I le 5				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
			strandline through to mobile dunes will continue to be represented, resulting in a neutral impact.	
PCR_157 Individual,	I have noticed in the last few years how fast the dunes are eroding on Mawbray banks due to the elements, as part of the banks are a Roman Cemetery a lot of artefacts are been lost to the elements. Me and a colleague have been saving these artefacts and they have been reported to and recorded by the Finds Liaison Office for Lancashire and Cumbria.		Response noted. The SMP2 Policy is proposed to change to Managed Realignment, which will allow the responsible bodies to take action to manage the impacts of the changing coast on the historic environment.	Revise headline policy for I le 5.1 to MR/MR/MR
PCR_141 Holme St Cuthbert Parish Council	<p>PU 5.1 This zone includes AONB and SSSI areas at Mawbray Banks and should be preserved for their wildlife and natural habitat. Isolated properties to the south of this zone (Mawbray Area) insuring that the policy of protecting these areas.</p> <p>The predicted erosion rates at Castles Corner at Beckfoot - this area being a world heritage site (Roman Fort and burial ground) should be protected along with the B5300 at this point south of Beckfoot which will be breached within 3 years. Not only coastal erosion from the sea but other factors have to be considered - the amount of heavy traffic along this fragile area, wildlife (rabbits and birds) are also factors along with winds, frost and metal detectors and normal daily attrition.</p> <p>A full study of Castles Corner is required as soon as possible like the study done at Dubmill, before the situation becomes irretrievable and the road is lost altogether. If a study is done, local councillors would be willing to contribute and we would like to be kept informed. Cumbria CC has been informed many times about our concerns with this section of the B5300.</p> <p>The report recognises the risk to Beckfoot, but the draft has discounted the option to hold the line, but we believe this should not be discounted, and should be actively considered to protect the assets of Beckfoot and the B5300. For the social and economic wellbeing of the area, we consider that the loss of the B5300 would cause major problems for the infrastructure of the parish and surrounding area.</p> <p>We feel that the consultation process itself is very last minute and slapdash with insufficient notice given for the meeting held at the Solway Resources Centre, Silloth. It was not given the gravitas of the subject when this plan is considering shore and coastal management for the next 100 years; we would like to be kept informed of any other proposals or changes to this plan.</p> <p>Discussions with the local community - many strongly disagree with the SMP predictions / forecasts. An oceanic physiologist and a geologist both with local knowledge disagree totally with major findings - their life time of assessing and understanding and working these natural processes in this area. The effect of the channel movements of sediments in the Solway statements in the document are not totally accurate, we can give more details if required.</p>		Response noted. Due to the limited assets at risk and need to maintain the naturally functioning coast it is unlikely that Coast Protection grant funding will be possible for large scale intervention. However, following consideration of responses and additional information received during consultation the policy is now proposed to change to MR, MR, MR to allow responsible bodies to manage dune system for nature conservation, undertake adaptation measures in for the coastal road; and record, relocate or protect historic environment features in the World Heritage Site.	Revise headline policy for I le 5.1 to MR/MR/MR
PCR_62 English Heritage	Trying to balance disparate factors is obviously extremely challenging. Curators feel that, while the tables lists social, environmental and economic justifications, considerably more weight appears to have been given to natural environment than historic environment factors. For example, there are areas like 'Dubmill Point to Silloth', where the entire environmental section relates only to the SSSI site (and advocates allowing natural processes to continue) without mentioning scheduled sites and a Roman cemetery. Undertaking no management is described as necessary to conserve the environmental status of the area – clearly this does not conserve the historic environment! There needs to be an explicit statement of how the various factors and interests are being taking into account and balanced against each other. The whole methodology for balancing costs and benefits used to put forward the tables is unclear.		<p>I agree that the Dubmill Point to Silloth (I le 5-1) SEA impacts table, which states “No known impacts on the historic environment” should be more specific and mention the assets of the WHS. The proposed policy in all 3 epochs is NAI, which is believed to reflect current practice. As you say, the whole of the coast is within the Hadrian's Wall WHS, although the specific scheduled monuments are understood to be set back from the shoreline and not at erosion risk over the SMP period.</p> <p>Beckfoot Roman Fort was built as part of the northern frontier defences, along the west coast is included in Appendix D (Annex D5, pg 19). Where it is noted that: 'visible as a slight raised platform, its unscheduled associated cemetery is the subject of ongoing coastal erosion. It is part of the Hadrian's Wall World</p>	Revise headline policy for I le 5.1 to MR/MR/MR

Dubmill Point to Silloth – I le 5				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
	<p>Further communication:</p> <p>On draft Action Plans, I agree with you that it is crucial for the relevant people to be involved in these. As you suggest, assessing the coastal risk to the historic environment features at Beckfoot and</p>		<p>Heritage site and at risk of further erosion’.</p> <p>The cemetery is not designated as part of the SM and therefore has not been included in the objectives assessment. The objectives assessments also does not mention Beckfoot Fort as it is not considered to be at risk under NAI or the policies tested, which is supported by the NWRCZA: ‘Little of the fort at Bibra/Beckfoot (NY 08964884; SAM CU255; NMR 9087; HER 625C) survives as surface expression but internal details are still clearly visible on aerial photographs and have been mapped (Fig. 9.11), along with the extensive vicus (NMR9087; HER 626 C) which survives to the north and south of the fort, as part of the Hadrian’s Wall NMP. The site is situated on a low-lying sloping ground with the highest point on the western edge which overlooks a low till sea cliff. The site is not considered to be at risk of erosion in the near future however (M. Collins, pers. comm.)’</p> <p>In the NWRCZA: ‘Beckfoot Cremation cemetery (NY 08654850; HER 591 C) is located 400m south of the Roman fort, adjacent to the location of Milefortlet 15. The site has been known about for over a hundred years and was revealed by coastal erosion. The first excavation revealed a funeral pyre in 1948 (Hogg 1949). Continuing erosion has produced further finds of pottery, wood and metalwork. Whilst the HER states that erosion and shifting dunes have obliterated the site, recent geophysical survey and trial trenching suggests otherwise, with finds of coins and other material. British Archaeology magazine for September-October 2009 records that as recently as June 2009 a complete pottery vessel containing cremated human bone was found on the foreshore. Coastal erosion in this location has been recorded at over 0.3m a year by English Heritage and milefortlet 15 (mentioned above), may have already been completely eroded.</p> <p>The site is obviously of enormous importance, particularly given that little is known of the cemeteries associated with the Roman frontier defences and, given the years of erosion, which may have seen over 30m of land lost to the sea, the site is seen as a priority for further work. The SMP 2 draft policy for this section of coastline is NAI so the erosion of the site will continue unabated. Clearly the site at Beckfoot is in need of urgent archaeological intervention. The important Roman cemetery site at Beckfoot, to the south of the fort, is one of the most significant sites identified as part of the NWRCZA which is subject to active erosion by coastal process and therefore requires immediate archaeological fieldwork.’ We therefore need to mention the risk to the unscheduled cemetery as well as in the action plan, potential adaptation / mitigation measures such as the need for recording the feature before it is lost.</p> <p>Do you agree that the action plan for this section should be amended to include a more detailed assessment of coastal risks to the historic environment features and a strategy for managing that</p>	

Dubmill Point to Silloth – I le 5				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
	developing a strategy for managing that risk would be a useful outcome. As you know, scheduled monuments are not the only significant historic assets along the coast. Also, further discussion on the impacts of the SMP policy on Piel Castle and other at risk areas would be welcome. To that end, please send current versions of the draft Action Plans for Cumbria and Lancashire and I will circulate to those people.		<p>risk?</p> <p>Following consideration of responses and additional information received during consultation, the policy is now proposed to change to MR, MR, MR to allow responsible bodies to undertake limited intervention to manage coastal risks and record, relocate or protect historic environment features in the World Heritage Site as appropriate.</p>	

Silloth to The Grune – I le 6				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
PCR_111 Allerdale BC	<p>There does not appear to be any cross cutting thematic approach between different agencies involved(SILOS)</p> <p>HTL policy - do you intend replacing the wooden 'groynes' that have been in place for more than 6 decades with rock groynes i.e. Dub Mill Point. Breakwater replacement at position of Silloth Pier to protect Grune Point.</p>	N	<p>The SMP is a high level plan which identifies policies to manage coastal risks.</p> <p>The SMP action plan has recommended that a Strategy and process study should be undertaken which should confirm the policies for Silloth to Moricambe Bay, address the issues of interruption of shoreline sediment transport and investigate future defence options for the frontage. This further study would consider the most appropriate approach to deliver the SMP Policy.</p>	No changes proposed
PCR_197 Individuals, Skinburness	<p>Evident lack of communication with other groups, illustrated by recent publication of feasibility study for barrage schemes along the Solway Firth.</p> <p>I le PU 6.3 - Grune. Lack of proposed intervention is, we consider, ill-conceived. During highest tides the sea travels angrily along the Solway. When it enters the marshland (Moricambe Bay) it is dissipated by comparison. Should this piece of land be washed away it would have devastating effects on Cardurnock and Anthorn as these areas would receive the full force of the tide. The Grune headland acts as a natural breakwater.</p> <p>Skinburness - The gap in defences here could be breached. We would hope that the strategic study would be proactive and not reactive and hope that the area will be monitored regularly. We would also suggest the need to speak to landowners and English Heritage about possible actions that may be necessary to stop any breach.</p>		<p>The SMP study has been based on the best information available at the time, and has to cater for assets already in place or where planning approvals are in place. The proposals for a barrage in the Solway are in their infancy and could only be taken into account in a general way. Thus in the policy statement for I le 8 – it is noted that “The long term flood risk management policy for the Solway Firth, as with other estuaries in the North West may change if proposals for tidal power barrages are progressed.” SMPs are expected to be reviewed on a 5 to 10 year basis.</p> <p>Response noted regarding the potential impacts of a breach of the Grune. The SMP recommends that a more detailed local study and also recommends that monitoring of coastal change continues.</p>	No action required

Moricambe Bay – I le 7				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
PCR_75 RSPB	I le 7.3 Wath Farm to Saltcoates including Waver to Brownrigg - MR would be a more proactive policy – we believe locations do exist here where MR could be possible.		<p>We considered MR at a number of locations, which were rejected due to little economic justification and little need for habitat creation to mitigate losses due to coastal defences elsewhere. Given that there are already some set-back former defences in a number of locations, NAI would allow saltmarsh to roll back naturally with sea level rise, while still providing some protection landward.</p> <p>However, following review of responses and further information put forward during consultation, the draft policy is now proposed to change to Managed Realignment in PU 7.3, 7.4, 7.5 & 7.7. This will allow organisations, local land owners and responsible bodies to put in place measures to proactively adapt to coastal changes. It will also allow opportunities for habitat creation to be included within the Regional Habitat Creation Programme.</p>	<p>PU 7.3, 7.4, 7.5 & 7.7</p> <p>Change to MR, MR, MR</p>
	I le 7.4 Newton Marsh - MR would be a more proactive policy – we believe locations do exist here where MR could be possible.			
	I le 7.5 Newton Marsh to Anthorn including Wampool to NTL - MR would be a more proactive policy – we believe locations do exist here where MR could be possible.			
PCR_113 EA NW	Further discussion is needed before confirming the wording to accompany the draft headline policy for NAI. The potential for MR needs to be reflected in some areas.			

Cardurnock to The Scottish Border – I le 8				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
PCR_75 RSPB	I le 8.3 Bowness-on-Solway to Drumburgh - We are unclear why the earlier proposed policy of MR has now switched to NAI. We previously supported MR as the policy here, and continue to do so, as a more proactive policy.		MR was considered at a number of locations, but rejected due to limited economic justification and little need for habitat creation to mitigate losses due to coastal defences elsewhere. For consistency, the policy was therefore changed to NAI for all 3 epochs but also allowing maintenance of existing localised private defences. However, following review of responses and further information put forward during consultation the draft policy is now proposed to change from NAI to MR in PU 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.8, & 8.9. This will allow organisations, local land owners and responsible bodies to put in place measures to proactively adapt to coastal changes. It will also allow opportunities for habitat creation to be included within the Regional Habitat creation Programme.	Revise NAI policies to MR in PU 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.8, & 8.9.
	I le 8.4 Drumburgh to Dykesfield - We are unclear why the earlier proposed policy of MR has now switched to NAI. We previously supported MR as the policy here, and continue to do so, as a more proactive policy.			
	I le 8.8 Rockliffe to Demesne Farm - We are unclear why the earlier proposed policy of MR has now switched to NAI. We previously supported MR as the policy here, and continue to do so, as a more proactive policy.			
PCR_113 EA NW	No real issues with the remainder - largely HTL at settlements and NAI / MR around the SAC/SPA Solway salt marshes which is as expected and in keeping with the designated status of that coast.	Y	Support for draft policy is acknowledged.	No action required
	Further discussion is needed before confirming the wording to accompany the draft headline policy for NAI. The potential for MR needs to be reflected in some areas.		The potential for MR is reflected in the draft policies along this section. MR was proposed between Demesne Farm and the Metal Bridge (Esk) and between the Metal Bridge (Esk) and the River Sark. This has now been extended to include the other PU where the headline was NAI, in order to allow a more proactive policy for habitat creation and to allow responsible bodies to undertake any necessary mitigation or adaptation measures to manage risks to the World Heritage Site Features.	Revise NAI policies to MR in PU 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.8, & 8.9.
PCR_62 English heritage	Curators do not understand what account has been taken of historic environment assets in arriving at the preferred policies. For example, it is unclear why, if historic environment assets are to be included as a consideration in SMP, that coastline with sites of World Heritage Status should have a preferred policy of No Active Intervention. As has been explained in previous rounds of the SMP exercise, World Heritage status is the highest possible international designation for HE assets. If WH sites do not qualify for proactive management, what are the chances for sites of national or local importance and what is the point of engaging in a consultation with the historic environment sector?		Turning to your response regarding World Heritage sites, the two designated areas near the Cell I I coast that I am aware of are the Liverpool Maritime Mercantile City area, and the area around Hadrian's wall. For the former, proposed SMP policy is to HTL for all three epochs. The Hadrian's wall site covers a large area of the southern shore of the Solway. The site includes a variety of different shorelines and some of the designated area is saltmarsh, seaward of the high water shoreline. Although the channels are mobile and it is a high energy environment, the shoreline of the Solway is not predicted to be at significant erosion risk. There are however, significant flood risks. Following review of responses and further information put forward during consultation the draft policy is now proposed to change from NAI to MR in PU 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.8, & 8.9. This will allow organisations, local land owners and responsible bodies to put in place measures to proactively adapt to coastal changes. It will allow for limited or local intervention where adaptation is required to protect, delay erosion or reduce flood risk to World Heritage Site features where sustainable to do so, or to provide limited protection until recording has been completed. It will also allow opportunities for habitat creation	

Cardurnock to The Scottish Border – I le 8				
Response from?	Response	Agree to draft Policies?	SMP2 Team Comments	Proposed Action
			to be included within the Regional Habitat creation Programme.	