

1 INTRODUCTION

1.1 The Shoreline Management Plan

A Shoreline Management Plan (SMP) provides a large-scale assessment of the risks associated with coastal evolution and presents a policy framework to address these risks to people and the developed, historic and natural environment in a sustainable manner. In doing so, an SMP is a high-level document that forms an important part of the Department for Environment, Food and Rural Affairs (Defra) strategy for flood and coastal defence (Defra, 2001). The plan provides broad scale assessment of these risks, as well as quite specific advice to operating authorities in their management of defences. Through this, and through the identification of issues covering a wide spectrum of coastal interests, the SMP supports the Government's aims, as set out in Defra's strategy "Making Space for Water" (Defra, 2005):

- To reduce the threat to people and their property; and
- To deliver the greatest environmental, social and economic benefit, consistent with the Government's sustainable development principles.

This SMP2 document, developed on behalf of the Northumbria Coastal Authorities Group (NCAG), sets out the results of the first revision to the original Shoreline Management Plan for the area of Northumberland and North Tyneside coast extending from the Scottish Border south to the River Tyne (Figure 1.1).

Similar high-level documents exist for assessing the risks from flooding in river catchments. These are referred to as Catchment Flood Management Plans. In preparing this SMP2, we have taken account of the emerging information from the following relevant CFMPs:

- North East Northumberland Catchment Flood Management Plan – Final Main Stage Report (Environment Agency, September 2008).
- Wansbeck and Blyth Catchment Flood Management Plan – Final Main Stage Report (Environment Agency, July 2008).
- Tyne Catchment Flood Management Plan – Consultation Summary Report (Environment Agency, July 2006).

These CFMPs are available from the Environment Agency through the website 'www.environment-agency.gov.uk'.

1.1.1 Principles

The SMP is a non-statutory policy document for coastal defence management planning. It takes account of other existing planning initiatives and legislative requirements, and is intended to inform wider strategic planning. It does not set policy for anything other than coastal defence management. However, from this perspective, it aims to provide the context to, and the consequences of, management decisions made in other sectors of coastal management.



Title:
NCAG SMP2 Frontage

Project:
NCAG SMP2

Client:
Northumbrian Coastal
Authority Group

Date:
Sept 2008

Scale:
1:480,000

Figure:
1.1

Drawn:
TC

Checked:
NC



The SMP2 promotes management policies for a coastline into the 22nd Century that achieve long-term objectives without committing to unsustainable defence. It is, however, recognised that due to present day objectives and acceptance, wholesale changes to existing management practices may not be appropriate in the very short-term. Consequently, the SMP2 provides a timeline for objectives, policy and management changes; i.e. a 'route map' for decision makers to move from the present situation towards the future.

The original SMP for this area (known as SMP1) was completed in 1998. Since that time, over some sections of the coastline, more detailed strategy studies have been undertaken and these, together with monitoring of the whole frontage by the coastal Local Authorities, have improved our understanding of how the coast behaves. In addition, many lessons have been learnt with respect to how the SMP process should be conducted, and indeed how we should be viewing the management of the shoreline. Defra (2001, 2003) undertook a review of the results from SMP1 documents around England and Wales, considering their strengths and weaknesses, and leading to revised SMP guidance. Some of this guidance is targeted at achieving greater consistency in the assessments and improved presentation of the information in the plans, but there are also more fundamental issues that have been identified, which this and other SMP2s must address.

One significant issue is the inappropriateness of certain policies which, when tested in more detail with a view to being implemented, may be found to be unacceptable or impossible to justify; either in terms of economics, the environment, or from a perspective of what communities need from the coast. It is, therefore, important that the SMP2 must be realistic given known legislation and constraints; neither promising what cannot be delivered nor delivering in the broader perspective that which fails against the values of the coastal zone. There will be no value in a long-term plan which has policies that are driven by short-term politics or works which prove to be to the detriment of the area when considered several years in the future.

Equally, the plan must also remain flexible enough to adapt to changes in legislation, politics and social attitudes. The plan, therefore, considers objectives, policy setting and management requirements for three main epochs; from the present day, looking ahead to the medium-term, and looking ahead to the long-term, corresponding broadly to time periods of 0 to 20 years, 20 to 50 years and 50 to 100 years respectively. There is a need to have a long-term sustainable vision, which may change with time, but should be used to demonstrate that defence decisions made today are not detrimental to achievement of that vision.

The plan covers an area both of significant environmental value, but also having a strong history of human settlement and present use. These uses and interests are not inherently opposed. In reality it is the natural attraction combined with the historical coastal use which gives this area of the coast its distinct character and considerable value to man in the present day. While individual core objectives or aims may therefore be set, and indeed are set, with respect to each specific aspect of the area, the aim of the SMP2 must be to develop policy where, as far as possible, these specific objectives are not set in conflict. The underlying principle for the development of the SMP2 has been to consider the specific circumstance of the differing sections of the coast and through this understanding, attempt to deliver greatest benefit to the totality of coastal communities in an area.

1.1.2 Objectives

The objectives of the SMP2 process (as distinct from the objectives for management of the coast) are as follows:

- To provide an understanding of the coast, its behaviour and its values.
- To define, in general terms, the risks to people and the developed, natural and historic environment within the SMP2 area over the next century.
- To appraise different policy approaches and identify the preferred policies for managing those risks or creating opportunity for sustainable management.
- To examine the consequences of implementing the preferred policies in terms of the objectives for management.
- To set out procedures for monitoring the effectiveness of the SMP policies.
- To inform others so that future land use and development of the shoreline can take due account of the risks and preferred SMP2 policies.
- To comply with international and national nature conservation legislation and biodiversity obligations.

1.1.3 Policies

The generic shoreline management policies considered in this SMP2 are those defined by Defra, and they are represented by the statements:

- **No Active Intervention (NAI):** a decision not to invest in providing or maintaining defences.
- **Hold the Line (HTL):** maintaining or upgrading the level of protection provided by defences
- **Advance the Line (ATL):** building new defences seaward of the existing defence line.
- **Managed Realignment (MR):** allowing the shoreline to realign, landwards or seawards, sometimes with management to initiate and control change.

(Note: all the above policies will need to be supported by strategic monitoring and must, when implemented, take due account of existing Health and Safety legislation.)

In developing this SMP2 we have identified the preferred policies from the above generic list, but importantly have also stated in some detail in accompanying text the intent of the policy such that it is the overall intent, not necessarily solely the definitions given above, that drive future management decisions.

1.2 Structure of the SMP2

The preferred plan and policies presented in this SMP2 are the result of collating information from numerous studies and the assessments of how the coast may perform. There is, therefore, a need to draw these threads together to provide clarity for different readerships. To this end, the documentation to communicate and support the plan is provided in a number of parts. At the broadest level these are divided into two; the Shoreline Management Plan itself, and a series of supporting appendices.

1.2.1 Shoreline Management Plan Report Structure

This document provides the plan for the future and the policies required for it to be implemented. This is intended for general readership and is the main tool for communicating intentions. Whilst the justification for decisions is presented, it does not provide all of the information behind the recommendations, this being contained in other documents. The SMP2 is presented in seven parts:

Section 1 Introduction: gives details on the principles, aims, structure and background to its development.

Section 2 Environmental Assessment and Appropriate Assessment: provides details of how the SMP2 meets the requirements for adequate environmental assessment at a strategic level.

Section 3 Basis for Development of the Plan: presents the basis for development of the Plan, providing a broad overview of the Plan area, describing the concepts of sustainable policy and providing an understanding of the constraints and limitations on adopting certain policies.

Section 4 Appraisal of Options and Rationale for Preferred Plan: It has been frequently stated that there is as much value in the thought process of developing the SMP2 as there is in the actual policies themselves. This section, therefore, aims to lead the reader through this process. The section starts with a discussion of large segments of the coast (called Policy Development Zones; PDZ). Within these zones the coast is described and the way in which the coast might behave, if present management is continued into the future or if no further defence work was undertaken, explained. This is then discussed in relation to the objectives for management and the individual policies for sections of the coast derived (Policy Units; PU). These units are finally grouped in to areas of management (Management Areas; MA), pulling together policy units which have a basic interdependency. For each Management Area statements are prepared setting out a summary of the intent, the necessary actions over different time scales, and the impacts of the preferred policies. Starting from an initial 6 Policy Development Zones, the coast is defined by 101 Policy Units which are drawn together as 27 Management Areas.

Section 5 Summary of Preferred Plan and Implications: brings together the overall plan, highlighting important issues in relation to the future management of the coast.

Section 6 Policy Summary: provides a very brief summary of policies. It is appreciated that many readers will focus upon the local conclusions of the SMP2. However, it is important to recognise that the SMP is produced for the coast as a whole, considering issues beyond specific locations. Therefore, this summary should be read in the context of the wider-scale issues and policy implications, as reported and developed in Section 4 and supported by information in the Appendices.

Section 7 Action Plan: This provides a programme for future activities which are required to progress the SMP2 delivery between now and its next review in around 10 years time. Individual preliminary Action Plans for each Management Area are also presented in Section 4 within the Management Area statements.

1.2.2 The Supporting Appendices

The accompanying documents provide all of the information required to support the SMP2. This is 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 eleven Appendices:

Appendix A SMP Development: This reports the history of development of the SMP, describing more fully the plan and policy decision-making process.

Appendix B Stakeholder Involvement: Details of the stakeholder involvement process are provided here, together with information arising from the consultation process.

Appendix C Baseline Process Understanding: Includes baseline process report, defence assessment, No Active Intervention (NAI) and With Present Management (WPM) assessments and summarises data used in assessments.

Appendix D Natural and Built Environment Baseline (Thematic Review): This report identifies the environmental features (human, natural, historical and landscape) in terms of their significance and how these need to be accommodated by the SMP.

Appendix E Issues & Objective Evaluation: Provides information on the issues and objectives identified as part of the Plan development, including appraisal of their importance.

Appendix F: Scenario Testing: Presents the policy assessment and objective achievement for No Active Intervention scenario and the preferred SMP2 policy.

Appendix G: Economic Appraisal: Presents the economic analysis undertaken in support of the Preferred Plan

Appendix H: Estuary Assessment: Examines the need or extent to which estuaries are included in the SMP process.

Appendix I: Appropriate Assessment: Provides the information needed for the competent authority to be able to carry out an Appropriate Assessment at the strategic level under the requirements of the EU Habitats Directive (92/43/EEC) and its implementation in the UK under the Conservation (Natural Habitats *et.c.*) Regulations 1994 under Regulation 48(1).

Appendix J: Metadatabase and Bibliographic Database. This is provided to the operating authorities on CD.

Appendix K: Water Framework Directive Assessment: Provides an assessment required under the EU Water Framework Directive (2000/60/EC) to ensure that the preferred policies will not have an adverse impact on the ecological status or ecological potential of designated waterbodies within the SMP2 area.

Appendix L: Non-Technical Summary for the Strategic Environmental Assessment: Provides a stand-alone non-technical summary of the Strategic Environmental Assessment, which has been integrated into this SMP2 document, as required by Directive 2001/42/EC of the European Parliament and of the Council, and the associated Environmental Assessment of Plans and Programmes Regulations 2004.

1.2.3 GIS and Databases

The SMP2 provides a future management framework. It is accepted that our understanding of the coast can be improved, addressing the many areas of uncertainty that we are presently confronted with. There will also be changing circumstance not only as the coast evolves but as our use of the coast changes. During the development of the SMP, information on issues, on processes and our assumptions with respect to different aspects, such as the condition of defences or erosion rates, have been recorded.

This information is held within databases linked through to a Geographical Information System (GIS). This system is provided in association with the actual plan so that, as new information emerges, this may be used to update the management system. The intent is two-fold. First, that information is recorded and may be compared with our existing knowledge such that better informed management decisions can be made as management of the coast continues. Secondly, that at such a time that the SMP requires review, hard won information is readily available to this review process.

One important feature of this information is in the responses and issues which were raised during the consultation process. This data is recorded in the issues, features and objective database used for developing and appraising policy. Management of this information will help those managing the coast in the future to identify issues at a local scale, ensuring that views can be readily identified during the actual implementation of the Plan. The degree of effort all those consulted have put in to developing the Plan is fully appreciated. The storage of information on issues raised should help ensure that peoples' concerns are recognised in the future.

1.3 The Plan Development Process

1.3.1 The Need for Revision

The original SMP1 for the area was completed during 1998. It has always been recognised as part of the shoreline management planning process that plans should be reviewed on a regular basis. The review undertaken through SMP2 has been part of this process.

Whilst SMP1 covered the coastline from St. Abb's Head to the River Tyne, SMP2 now extends from the Scottish Border to the River Tyne. The section of coastline between St. Abb's Head and the Scottish Border does not display significant coastal process

interactions with the coastline further south and therefore this separation is now appropriate given the devolved powers of the Scottish Parliament since completion of SMP1.

Initiated by the findings of the SMP1, a considerable effort has been put in place over the ten years since its publication to ensure that we are now in a better position to make judgements with respect to the coast than we were during the SMP1. There have also been changes in legislation and guidance. In this first revision, therefore, the development of the Plan has been able to draw upon and has had to take account of:

- Results from an extensive programme of coastal monitoring of the beach and cliff or dune behaviour and inspections of coastal defences that commenced in April 2001 following a recommendation made in SMP1 for improved data collection.
- Latest research studies undertaken since the last SMP, such as Defra's national Futurecoast study which investigated longer term future coastal change around the whole of England and Wales.
- Issues identified by the several coastal defence strategy plans which have now been produced to cover parts of the SMP area.
- Issues identified by the several coastal defence schemes that have now been constructed in parts of the SMP area.
- Changes in legislation (e.g. the EU Directives, the emerging guidance with respect to the Water Framework Directive).
- Changes in national flood and coastal defence planning requirements (e.g. the need to consider 100 year timescales in future planning, modifications to economic evaluation criteria etc.).

The past decade has been one of quite rapid change in understanding and managing flood and coastal erosion risk. With the manner in which the SMP2 has now been organised and with the understanding that shoreline management must remain an ongoing process providing a platform for more local decision making, it is anticipated that subsequent reviews of this Plan may be undertaken in around 10 years time, although this interval would ultimately be driven by the scale of change on the coast itself.

1.3.2 Review and Development Procedure

The Northumbrian Coastal Authorities Group¹ has, since its inception, always been a broadly based body acting to co-ordinate management of, and exchange information about, the coast. This group comprises representatives from Berwick-upon-Tweed Borough Council², Alnwick District Council², Castle Morpeth Borough Council², Wansbeck District Council², Blyth Valley Borough Council², North Tyneside Council, the Environment Agency, Natural England, the Northumberland Coastal Area of Outstanding Natural Beauty, and other interested parties such as the Port of Tyne, Port of Blyth, North East Sea Fisheries, and Scottish Borders Council.

In the process of developing the SMP2, we sought involvement from numerous organisations or individuals, with principal periods of consultation being conducted in October 2007, July 2008, October 2008 and a 3-month period of public consultation on the draft plan from November 2008 to January 2009.

¹ This Group became subsumed within the wider 'North East Coastal Group' with effect from 1st October 2008.

² This authority became part of the unitary Northumberland County Council with effect from 1st April 2009.

The main activities in producing the SMP have been:

- Development and analysis of issues and objectives for various locations, assets and themes.
- Thematic reviews, reporting upon human, historic and natural environmental features and issues, evaluating these to determine relative values of the coast.
- Analysis of coastal processes and coastal evolution for baseline cases of not defending and continuing to defend as at present.
- Agreement of objectives with the Coastal Authorities Group and through public consultation, and from this determining the possible policy scenarios.
- Development of policy scenarios which consider different approaches to future shoreline management.
- Examination of the coastal evolution in response to these scenarios and assessment of the implications for the human, historic and natural environment.
- Determination of the preferred plan and policies through review with the Coastal Authorities Group and through public consultation, prior to compiling the draft SMP2 document.
- Consultation on the proposed plan and policies.

The final stage of development involved consideration of the various responses obtained from the consultation on the preferred plan and revision, where appropriate, of the document before its finalisation and formal acceptance. Key changes between draft and final status are documented in Appendix B.