

2 ENVIRONMENTAL ASSESSMENT AND APPROPRIATE ASSESSMENT

2.1 Environmental Assessment

2.1.1 Background

Directive 2001/42/EC of the European Parliament and of the Council, and the associated Environmental Assessment of Plans and Programmes Regulations 2004, requires that a Strategic Environmental Assessment (SEA) be carried out by certain plans and programmes that are required by legislative, regulatory or administrative provisions. The Directive is intended to ensure that environmental considerations are taken into account alongside other economic and social considerations in the development of relevant plans and programmes. Whilst it has been determined that SMPs are not required by legislative, regulatory or administrative provisions, they do set a framework for future development and have much in common with the kind of plans and programmes for which the Directive is designed. Therefore, Defra has recommended that environmental appraisal of the SMPs be undertaken in line with the approach of the Directive.

This section identifies how the Northumberland and North Tyneside SMP2 achieves the requirements of the 2004 Regulations. The text is sub-divided into sections representing the key requirements of the Regulations, and identifies the sections of the SMP2 documentation in which the relevant information is presented. In order to ensure that the 2004 Regulations are being met the guidance document produced by the Office of the Deputy Prime Minister entitled “*A Practical Guide to the Strategic Environmental Assessment Directive*” (ODPM 2005) was consulted.

2.1.2 The Appraisal Process

An 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 and 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.

Full details on the background to the SMP2 and the appraisal process are set out in **Sections 1** and **3**, with the exact details of the procedure followed in development of the Plan set out in Appendix A.

Rather than produce a standalone SEA, the approach within this SMP2 has been to make the environmental assessment integral to the process of setting the policies. This was done through initial consultation with relevant stakeholders. Leading on from this a biodiversity workshop was run with all relevant stakeholders as part of a wider process of extensive consultation. A comprehensive list of issues and objectives was then produced for the whole SMP area (**Appendix E**), from which SEA receptors were scoped for each policy development zone (PDZ).

In order to ensure that environment issues were integral to the policy development, environmental statements were included within the appraisal of options for each PDZ

(Section 4) along with the physical coastal processes statement. Any environmental issues were then taken forward as key issues and objectives with further extensive consultation, from which came the detailed policy development for each Management Area.

2.1.3 Stakeholder Engagement / Consultation

Stakeholders have been involved in the SMP2 appraisal process, through regular consultation with a broad range of organisations and individuals that have an interest in the coast. This involvement has:

- been undertaken throughout development of the SMP2;
- given people and organisations an opportunity to comment on the environmental appraisal of options; and
- allowed representations made by the organisations, communities and the public to be taken into account in the selection of policy options.

The Northumbrian Coastal Authority Group (NCAG) includes representatives from interests including local authorities, nature conservation, industry and heritage. This group has met periodically throughout the SMP2 development process to input information and review outputs as the study progressed.

The Project Management Group (PMG) comprises a representative from each of the local authorities, the Environment Agency, Natural England, and the Northumberland Coast Area of Outstanding Natural Beauty (AONB), attending with a remit to agree the various stages of the SMP2 as it progressed. Again, this group has met throughout the plan development.

There have been several opportunities for public involvement with the SMP process. These were:

1. At the beginning of the SMP process, a website was created to keep the public informed of developments and allow feedback (www.northumberland-smp2.org.uk). During initial consultation, the PMG identified individuals and organisations that had a stake in the coastline (a full list can be found in **Appendix B**). These stakeholders were sent a leaflet (including the website address) explaining the SMP process, and the fact that at this initial stage they were being asked their views on the issues surrounding their coastline in general, rather than on SMP policy, as these has not yet been formulated. At this stage, leaflets were publicly available in all council offices and in many public buildings.
2. A Biodiversity Workshop was run with all relevant stakeholders as part of a wider process of consultation (further details can be found in Appendix B).
3. From both the initial consultation and the Biodiversity Workshop a comprehensive issues and objectives table was drawn up (**Appendix E**) that informed the scoping process.
4. Draft policies were then drawn up that took into account the initial environmental consultation and appraisal. Once these draft policies had been drawn up the SMP went out to full public consultation. Public meetings were held in each

local authority which were fully advertised and well attended (see **Appendix B** for details).

Full details of all stages of stakeholder engagement undertaken during development of the draft SMP2 are presented in **Appendix B**. This includes the copies of briefing materials.

Appendix E details the issues and objectives that were brought up through public consultation. These issues and objectives have informed the main decision making process. The SEA directive suggests various receptors that should be included in any SEA. The themes within **Appendix D** and **Appendix E** address the various receptors as shown below (note: some SEA receptors are covered by more than one theme):

Issues and Objectives Appendix E	Thematic review Appendix D	SEA Receptor
Environment	Natural Environment	Biodiversity Fauna and flora Water
	Contaminated land	Soil
	Landscape and character	Landscape Material assets Population
Heritage	Historic environment	Cultural heritage
Commercial	Current and future land use	Population Material assets
Recreational		Population
Hard assets		Material assets Population

It can be seen from the above table that Air, Human Health and Climactic Factors are not included. Air and Human Health were scoped out of the assessment as a receptor because the SMP is a high level document regarding management of risk from coastal erosion and sea flooding and as such are not applicable to this plan (see Scoping, below). Climatic Factors (especially sea level rise) are integral to the assessment of the SMP and have been considered within each PDZ (Physical Characteristics section).

Details of individual issues and objectives can be found in **Appendix E**. There were, however, general themes relating to each of the receptors as detailed above that could apply to the whole SMP2 area. These were:

- Environment
 - Threat of invasive species
 - Loss of habitat, particularly salt marsh and rocky shore and opportunities for habitat creation
 - Recreational disturbance of protected habitats
 - Inadequate management of designated sites
 - Coastal squeeze
- Commercial
 - Erosion / flood risk threatening material assets
- Heritage
 - Erosion / flood risk threatening heritage asset
- Hard asset
 - Erosion / flood risk threatening development zones and material

- assets
 - Redevelopment plans within the coastal zone
- Recreational
 - Erosion / flood risk of recreational assets (e.g. beach, golf course)
 - Erosion / flood risk for coastal access

2.1.4 The Existing Environment

The current state of the environment is described in the “Thematic Review”, presented in **Appendix D**. The coastline covered by this plan has a rich diversity in its physical form, human usage and natural environment. This includes dramatic cliffs, river valleys, large urban areas fringing the coast and extensive areas of agricultural land. The whole stretch of coastline covered by this SMP2 is designated and protected for its heritage, landscape, geological and biological value of international importance. This combination of assets creates a coastline of great value, with a tourism economy of regional importance.

The Thematic Review in **Appendix D** identifies the key features of the natural and human environment of the coastline, including commentary on the characteristics, status, relevant designations, and commentary related to the importance of the features and the benefits they provide to the wider community. This thematic review has been used to inform the environmental statements that have been included within the appraisal of options for each PDZ (**Section 4**).

Appendix D covers all environmental designations and plans in the regions including:

- Natura 2000 sites.
- Sites of Special Scientific Interest.
- Areas of Outstanding Natural Beauty.
- European Marine Site.
- Natural Area profiles.
- Local Biodiversity Action Plans.
- Local Nature Reserves.
- Heritage Coast.
- RSPB reserves.
- National Trust property.
- Sites of Nature Conservation importance.
- Geological Conservation Review sites.
- Landscape Character Assessments.
- Scheduled Ancient Monuments.
- Registered Battlefields.
- Registered Parks and Gardens.
- Marine Heritage Features.
- Regional and local land use plans.

All of the above designations and plans have informed the policy making process. Where relevant, discussion has been made of these features or plans in the appraisal of options for each PDZ (**Section 4**).

2.1.5 Scoping

The Scoping stage of the SMP had implications for both the SMP and the SEA process as described below:

SMP Scoping

An integral part of the SMP2 development process has been the identification of issues and definition of objectives for future management of the shoreline through an extensive scoping and consultation exercise with all relevant stakeholders. This was based upon an understanding of the existing environment, the aspirations of stakeholders, and an understanding of the likely evolution of the shoreline under the hypothetical scenario of No Active Intervention (**Appendix C**), which identifies the likely physical evolution of the coast without any future defence management, and hence potential risks to shoreline features.

These objectives include all relevant plans, policies etc. associated with the existing management framework, including all identified opportunities for environmental enhancements. The definition and appraisal of objectives has formed the focus of engagement with stakeholders during development of the SMP2 (as identified in **Appendix B**). The full list of issues and objectives defined for this SMP2 is presented in **Appendix E**, which is supplemented by background information provided in the Thematic Studies (**Appendix D**).

Appendix F (Scenario Testing) includes consideration of how the objective, and hence the environment, would be affected under the No Active Intervention scenario. This Appendix also includes an assessment of how objectives have been met under the policy options considered feasible for that frontage, with consideration of international and national designations and biodiversity. **Section 5** draws together the overall potential environmental effects of the preferred policies.

SEA Scoping

Running parallel to the SMP Scoping, and using the same mechanisms such as public consultation and the collation of a full list of issues and objectives, the SEA Scoping process ensured that the SEA integral to the SMP covered the likely significant environmental effects of the plan. Annex 1 of the SEA Directive sets out various receptors which are suggested as being assessed for likely significant environmental effects. These receptors are:

- Biodiversity.
- Population and human health
- Fauna and flora.
- Soil.
- Water.
- Air.
- Climatic factors.
- Material assets.
- Cultural heritage.
- Landscape

Air, Human Health and Climactic Factors have been scoped out when assessing environmental impacts within this SMP2. Air and human health have been scoped out

of the assessment as the SMP is a high level strategic document regarding management of coastal defence and as such impacts regarding human health or air quality are not applicable to this plan. Climatic factors (especially sea level rise) are integral to the development of policy within the SMP. In this way the SMP cannot have impacts upon Climatic Factors, rather the Climatic Factors impact upon the SMP.

2.1.6 Evaluation of the Plan and Alternatives

The function of the SMP2 is to consider the coast as a whole from the perspective of defence management. As detailed in **Section 1** 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.

Having undertaken detailed analysis of its physical behaviour and, through consultation, taking into account the wide and varied interests and objectives for coastal management, a high level analysis was carried out as to the primary characteristics of different sections of the coast. Overall the coast is strongly dominated by its underlying geology. Within this imposed structure, it has become evident that not one aspect of the coast in terms of its physical behaviour, natural or built environment dominates. There is a complex interdependence between different values along this linear coast that meant that a decision taken within one policy unit would possibly affect the adjacent policy units.

It was, therefore, considered inappropriate that a simple rigid procedure of option appraisal over individual sections of the coast could be undertaken in deriving policy. If this was to be carried out there would be a multiplier effect along the coastline such that each policy unit would need to be assessed not only for the four options detailed above, but for each option in combination with one of four options for the two adjacent units. This would result in each policy unit (of which there are 101) being assessing 32 times, resulting in a total of 3232 assessments. The continuity of balancing interactions could only therefore be maintained through a scenario approach to analysis. Inevitably, the full length of coastline had to be broken down into PDZs within which such an holistic approach could be adopted. Within these PDZs, the way in which the coast would develop and the impact this would have in respect of different specific objectives was considered for the No Active Intervention and With Present Management scenarios. This highlighted areas of concern, of benefit and of potential conflict.

The objective led scenario approach was then extended, through discussion, to consider how different areas within a zone might be managed to create additional benefit or avoid damage to the overall environment. From this, policies, based on those defined in **Section 1**, have been derived for individual frontages in a logical coherent manner, to

provide an overall scenario that best delivers national and local objectives. While not necessarily discussed in detail, this approach naturally excludes specific policy options which are not technically realistic, would lead to truly unsustainable approaches to defence, or would run counter to progressing the values identified for an area.

Inherent within this process has been the examination of how different policy scenarios would dictate or be influenced by future evolution of the shoreline and how these policies could potentially impact on the environmental receptors that are relevant for a particular PDZ. Assessment of the objectives developed during the Scoping stage was done on a scenario led basis. Three scenarios were assessed, in line with policy development. These scenarios were:

- No Active Intervention
- With Present Management
- Preferred Policy

An assessment was carried out for each of the scenarios broken down by PDZ and Management Area (MA). Should any significant impacts be identified, appropriate avoidance, mitigation or enhancement strategies have been included underneath the assessment tables. The whole process of scenario appraisal and subsequent definition of proposed policies is presented in **Section 4**. The process has been openly driven by the incorporation and consideration of all detailed objectives reported in **Appendix E**. A comparison of how well policies address these objectives, compared to how they might be addressed by a general policy of no active intervention is provided in the appraisal tables of **Appendix G**.

The rationale for development of the preferred plan within each PDZ is reported in **Section 4**, including a summary policy statement for each Management Area. Within the narrative of the detailed discussion regarding policy development, potential environmental issues, impacts and objectives have been discussed.

Outside of the SEA process, the Management Area Summary Statements in **Section 4** further detail the implications of the preferred plan for all of the internationally, nationally, regionally or locally designated environmental areas for the Habitats Regulations.

2.1.7 Non-Technical Summary

In accordance with the Regulations, **Appendix L** sets out a non-technical summary of the integrated SEA that has been carried out during the production of the Northumbria Coast SMP2. In line with guidance from the Office of the Deputy Prime Minister (ODPM) this document provides a non-technical summary of the information provided under the following headings:

- **Section L2.**
- Baseline environment (**Section L3**), including:
 - current state of the environment;
 - likely evolution without the plan; and
 - any existing environmental issues.
- Environmental protection objectives (**Section L4**).

- Likely significant environmental effects (**Section L5**).
- The measures envisaged to prevent, reduce or offset any significant adverse effects (**Section L6**).
- An outline of the reasons for selecting the alternatives dealt with (**Section L7**).
- A description of measures envisaged concerning monitoring in accordance with Article 10 (**Section L8**).

2.2 Appropriate Assessment

The need for an 'Appropriate Assessment' arises under the requirements of the EC Habitats Directive (92/43/EEC) and its implementation in the UK under the Conservation (Natural Habitats &c.) Regulations 1994. Under Regulation 48(1):

"A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which:

- is likely to have a significant effect on a Natura 2000 Site in Great Britain (either alone or In-Combination with other plans or projects); and*
- is not directly connected with or necessary to the management of the Site,*

shall make an appropriate assessment of the implications for the Site in view of that site's conservation objectives."

A Natura 2000 Site is either a Special Area of Conservation (SAC) or a Special Protection Area (SPA). Government policy, as outlined in Planning Policy Statement 9 (PPS 9), is that wetlands of international importance designated under the Ramsar Convention (Ramsar Sites) should also be subject to the provisions of the Habitats Regulations. Ramsar Sites, SPAs and SACs, are collectively referred to hereafter as 'Natura 2000 Sites'.

Appropriate Assessment is the process to support a decision by the 'Competent Authority', as to whether the proposed plan or project would have an adverse effect on the integrity of any Natura 2000 Site. PPS9 defines a site's integrity as the:

"... coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or population of the species for which the site is classified. An adverse effect on integrity is likely to be one that prevents the site from maintaining the same contribution to favourable status for the relevant feature(s), as it did when the site was designated."

Only where the plan or project can be determined as not having an adverse effect on any Natura 2000 Site can it be approved by the Competent Authority.

Where it is not possible to determine that a plan or project under consideration will not have an adverse effect on Natura 2000 Sites, then alternative solutions which avoid harming site integrity must be sought. If alternatives are not possible, then the plan or project can only proceed on the basis of imperative reasons of over-riding public importance (IROPI). If IROPI is agreed by the Secretary of State, then compensatory measures must be secured to offset damage done by the plan or project, such that the overall coherence of the SAC/SPA network is maintained.

The favourable conservation status of a Natura 2000 Site is defined through the Site's conservation objectives, and it is against these objectives that the effects of the plan or project must be assessed. Conservation objectives set out the physical, chemical and biological thresholds, and limits of anthropogenic activity and disturbance which are required to be met to achieve the integrity of the Site and serve both as criteria against which Site condition can be assessed and reported against, and also as a basis for assessing plans or projects which may affect the Site. Conservation objectives for European Marine Sites are set out in the relevant Regulation 33 documents (so called as their production is a requirement of Regulation 33 (2) of the Habitats Regulations) for each site, which are the responsibility of Natural England in England.

It should be noted that there are instances along this coastline where defences have been put in place that have not been consented. These defences will not have undergone assessment under the Habitats Regulations. Where these defences are in direct contradiction to the intent of this plan, this should be addressed at a local authority level.

2.3 Appropriate Assessment in the Land Use Plan Context

On the 20th October 2005, the European Court of Justice (ECJ) ruled that the UK had not transposed the Habitats Directive into law in the proper manner. Land use plans were incorrectly described under the UK Habitats Regulations, as not requiring an Appropriate Assessment to determine the impacts of the plan on Natura 2000 Sites.

At present, the Department of Communities and Local Government (DCLG) has produced draft guidance on how to determine the need for an Appropriate Assessment for a given plan and the provision of an assessment if one is considered to be required. Natural England has provided an internal draft document relating to the provision of Appropriate Assessments for Regional Spatial Strategies and Sub-Regional Strategies. More specific guidance on assessing Shoreline Management Plans (SMPs) in terms of the Habitats Regulations is available from the Environment Agency.

These three documents: "Planning for the Protection of Natura 2000 Sites: Appropriate Assessment" (DCLG, 2006); "The Assessment of Regional Spatial Strategies under the Provisions of the Habitats Regulations – Draft Guidance" (Natural England, 2006); and "Appropriate Assessment of Flood Risk Management Plans Under the Habitats Regulations" (Environment Agency, draft document) currently provide the most cohesive source of guidance relating to the provision of Appropriate Assessments for Shoreline Management Plans. Although these documents relate explicitly to land use plans, given that SMPs have the potential to influence planning decisions on the development of land, this guidance has been applied in this report to SMP policy. In this respect, there are clear parallels between Regional Spatial Strategies (RSSs) and SMPs, and the relevant elements of guidance relating to RSSs have therefore been adapted here for SMP use.

In 2006, Royal Haskoning provided the Department for Environment, Food and Rural Affairs (Defra) with a guidance note relating to Appropriate Assessment provision for SMPs. This guidance was provided following the completion of an Appropriate Assessment for the River Tyne to Flamborough Head SMP2 and has been a fundamental consideration in establishing the scope of this particular Appropriate

Assessment. However, the draft Environment Agency work instruction “Appropriate Assessment of Flood Risk Management Plans under the Habitats Regulations” provides specific advice on undertaking Appropriate Assessments of SMPs, and the approach and methodology adopted here will also take consideration of this guidance.

The Appropriate Assessment is simply a mechanism to establish the actual scale and implications of impacts and to provide a determination on whether a course of action is acceptable or unacceptable, in terms of its impacts on the integrity of Natura 2000 Sites.

The exercise, to provide an Appropriate Assessment for the SMP, provides the opportunity to determine whether the impacts of the SMP would have an effect on the integrity of International sites, by means of a specific assessment exercise. The full details of the Appropriate Assessment are provided in Appendix K.