

2 ENVIRONMENTAL ASSESSMENT

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2 ENVIRONMENTAL ASSESSMENT

In carrying out the Poole and Christchurch Bays SMP it is important to understand the relationship between the areas of value to nature conservation and coastal processes, and understand how coastal defences can alter the coastal processes and therefore have an impact on the nature of the environment.

In addition coastal defences may also have an impact on the landscape of an area, depending on the type of defence used, and the significance of this may depend upon the importance placed upon a particular landscape.

This chapter outlines the strategic process undertaken for the environmental appraisal of the Poole and Christchurch Bays SMP based on the key requirements of the European SEA Directive (2001/42/EC) and EC Habitats Directive (92/43/EEC). It contains the following sections; environmental assessment within the SMP2, SEA and AA.

2.1 Environmental Assessment within the SMP Process

2.1.1 Existing Environment

The coastline of Poole and Christchurch Bays has a very rich natural environment, much of which is recognised for its international or national value to nature conservation and is associated with the following areas of international importance:

- Dorset Heathlands
- Dorset Heaths
- Avon Valley
- River Avon
- Poole Harbour
- Solent Southampton Water
- Dorset Heaths (Purbeck & Wareham) & Studland Dunes
- Isle of Wight Downs
- Isle of Portland to Studland Cliffs
- South Wight Maritime
- Solent Maritime
- St Albans Head to Durlston Head

There are also extensive stretches of the coastline that are of national nature conservation interest, mainly for their ecology and/or geology or geomorphology. Large areas of intertidal mudflats, sandflats, reedbeds, saltmarsh and coastal lagoons of high conservation interest occur in Poole and Christchurch Harbours, which provide important feeding grounds for large populations of internationally important bird species such as waders, gulls and waterfowl. The River Avon is an ecologically important chalk stream that drains into Christchurch Harbour, and the Avon Valley shows a greater range of habitats and a more diverse flora and fauna than any other chalk stream valley in Britain.

Studland is an area of particular importance for its coastal geomorphology, dune system and heathland habitat, and has been designated a Biogenetic Reserve, which is one of only five coastal Biogenetic Reserves in Britain. The majority of the coastline has also been designated a Sensitive Marine Area (SMA).

Geologically, much of the coastline is of national and international importance and covers the majority of cliff frontage along Poole and Christchurch Bays (and Harbours), Studland Bay, Swanage Bay and Durlston Bay. In fact, the majority of this cliff frontage has been selected as Geological Conservation Review (GCR) sites and form part of the Dorset and East Devon Coast World Heritage Site (from the south side of Swanage Bay to Durlston as the naturally exposed cliffs display sediments, rocks, fossils, and other features of the landscape that make a special contribution to the understanding and appreciation of earth science and the geological history of Britain.

The above combination of selected natural environmental assets, supported by natural processes, associated with this particular SMP creates a coastline of great value, with a tourism economy of national importance. However, these existing environmental assets could quite easily be damaged by inappropriate coastal defences.

The current state of the Poole and Christchurch Bays SMP environment is described in the Thematic Review presented in Appendix D of this report. These studies identified the key features of the natural and human environment of the coastline, including a commentary on the characteristics, status, relevant designations, as well as the importance of these features and the “benefits” they provide to wider society.

This is supplemented by the Coastal Processes report, in Appendix C, which identifies the contemporary physical form of the coastline and the processes operating upon it.

2.1.2 The Appraisal Process

A SMP provides an assessment of the risks associated with coastal evolution and provides a framework to address these risks to people and the developed, historic and natural environment in a sustainable manner. The SMP is a non-statutory, policy document for coastal defence management planning, which takes account of other existing planning initiatives and legislative requirements, being 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 SMP 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 being set out in Appendix A.

2.1.3 Stakeholder Engagement

A wide variety of stakeholders have been involved in the development and the review process of the SMP, with regular consultation having been undertaken. This is one of the key changes from the first SMP, with this involvement having:

- Been undertaken throughout the development of the SMP;
- 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.

Stakeholders for the SMP have included representatives from local authorities, government agencies and industry. This group has met periodically throughout the development of the SMP to input information and review outputs as the SMP has progressed. The CSG for the Poole and Christchurch Bays SMP has comprised representatives from local authorities, Natural England (NE) and the Environment Agency (including the National Environmental Assessment Service (NEAS)), with a remit to agree the various stages of the SMP as it progresses. The views of those whom the SMP policies will affect have therefore been involved in its development, which has ensured that all relevant issues have been considered.

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

2.1.4 Environmental Objectives

An integral part of the SMP development process has been the identification of issues and definition of objectives for future management of the shoreline. 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 NAI (Appendix C), which identifies the likely physical evolution of the coast without any future defence management and hence potential risks to shoreline features.

The definition and appraisal of objectives has formed the focus of engagement with stakeholders during development of the SMP (as identified in Appendix B). The full list of issues and objectives defined for this SMP is presented in Appendix E, which is supplemented by background information provided in the Thematic Studies (Appendix D).

Appendix G includes consideration of how the objective and hence the environment, would be affected under a NAI scenario, while Section 5 provides and draws together the overall potential environmental effects of the preferred policies.

2.1.5 Environmental Effects of the Preferred Plan

The rationale for development of the preferred plan within each PDZ is reported in Section 4, which includes a summary policy statement for each MA, containing the environmental implications of the various scenarios recorded. A summary of how the preferred plan might perform with respect to different themes is presented in Section 5.

Within the MA Summary Statements in Section 4, further detail of the implications of the preferred plan for all of the internationally, nationally, regionally or locally designated environmental areas are presented, as well as an identification of any mitigation measures that would be required in order to implement the policy. This is further supported through undertaking of an AA of the Plan, with the supporting information being provided in Appendix J, with a brief overview below in Section 2.2.

2.2 Strategic Environmental Assessment (SEA)

2.2.1 Background

The Defra SMP guidance (Defra, 2006) states that the environmental effects of all policies must be considered before deciding which policies will be adopted. Consideration should be made with regards to both the positive and negative effects of

options on wildlife and habitats, populations and health, soil, water, air, climate factors, landscape, cultural heritage and the intrinsic relationship between these.

Under Directive 2001/42/EC of the European Parliament and of the Council, and the associated Environmental Assessment of Plans and Programmes Regulations 2004, the Strategic Environmental Assessment (SEA) must be made of plans and programmes that are required by legislative, regulatory or administrative provisions. SMPs clearly set a framework for future development and have much in common with the kind of plans and programmes for which the Directive is designed. As a result, it is recommended (Defra, 2006) that operating authorities assess policies using the approach described in the Directive, with the legislative act which transposes the Directive into domestic law being the Environmental Assessment of Plans and Programmes Regulations (SI 1633, 2004). The intention of the Directive is to *"provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development"*.

The SEA provides a systematic appraisal of the potential environmental consequences of high-level decision-making (i.e. plans, policies and programmes). By addressing strategic level issues, SEA aids the selection of the preferred options, directs individual schemes towards the most appropriate solutions and locations and helps to ensure that resulting schemes comply with legislation and other environmental requirements.

Within the SEA process and in a manner analogous to that used throughout the SMP (Defra, 2006), the term environment is used to cover landscape and natural beauty, wildlife, habitats, and buildings, sites and objects of archaeological, architectural or historical interest, human health, population, water, air, climatic factors and material assets. The SEA process is divided into two distinct elements, the scoping stage and the environmental report. The purpose of the scoping stage is to establish the environmental baseline and identify the key environmental issues to be considered during subsequent stages of the SEA, including the development of assessment criteria which provides the basis for the assessment of SMP policy. With this in mind, the overall aims of the SEA associated with this SMP were to:

- Provide for a high level of environmental protection;
- Ensure that likely significant effects on the environment of the implementation of the SMP are identified, described and evaluated, so that they can be taken into account before the plan is adopted; and
- Evaluate reasonable alternatives for their likely significant effects, taking into account the objectives and geographical scope and the SMP policies, so that these can inform the nature and content of the SMP.

2.2.2 Evaluation of the Plan and Alternatives

The function of a SMP is to consider the coast as a whole from the perspective of managing coastal flood and erosion risk. The behaviour of the Poole and Christchurch Bays coastline is driven by its geological and geomorphology make-up and it is therefore evident that no one aspect of the coastal environment (in terms of its physical behaviour, natural or built) dominates. There is a complex interdependence between different values along this coast that means that a decision taken within one policy unit has the potential to 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.

2.2.3 Monitoring Requirements

In assessing the Poole and Christchurch Bays SMP, areas of uncertainty have remained which were critical to the implementation of shoreline management. The SEA process has developed mitigation and monitoring to address specific issues identified throughout the development of the SEA. The need for this is management area specific and should largely be the responsibility of the operating authorities or coastal managers within that area. This not only would then provide the information necessary to inform the on-going development of the plan but also provides essential contact between the development of the coast at this local level and decisions being made.

In addition, there are seen to be important linkages at an SMP scale. In finalising the Plan, these have been brought together in the development of the main action plan, introducing overall coherence for monitoring the SMP area, which will be delegated to one organisation. The approach to and requirement for monitoring is discussed in Section 7. Detailed monitoring and definition of mitigation requirements will be undertaken as part of on-going management and development of strategy studies.

2.3 Appropriate Assessment (AA)

2.3.1 Background

The need for an AA arises under the requirements of the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora) and its implementation in the UK under the Conservation (Natural Habitats & co.) Regulations 1994. Under Regulation 48(1), an AA is required for a plan or project, which either alone or in combination with other plans or projects, is likely to have a significant effect on a European (*Natura 2000*) site and is not directly connected with or necessary for the management of the site. A European site is defined as being either a Special Area of Conservation (SAC) or a Special Protection Area (SPA) (sites designated under Council Directive 79/409/EEC on the conservation of wild birds), with Planning Policy Statement 9 (PPS9) (ODPM, 2005a) specifying 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 'international sites'.

AA is the process to support a decision by the 'Competent Authority', in this case Bournemouth Borough Council, as to whether the proposed plan or project would have an adverse effect on the integrity of any international site. The phrase "the integrity of the site" is not defined in the Habitats Directive or the Habitats Regulations; however, Government Circular: Biodiversity and geological conservation – statutory obligations and their impact within the planning system (ODPM, 2005b) states that "*the integrity of a site is the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified...If the proposal would adversely affect integrity, or the effects on integrity are uncertain but could be significant the decision-taker should not grant permission*". Adverse effect is similarly quantified as one that prevents the site from maintaining the same contribution to favourable conservation status of the qualifying feature(s) for which it was designated.

Where it is not possible to determine that a plan or project under consideration will not have an adverse effect on the integrity of a European or Ramsar site, 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 conservation status and integrity of the 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. Conservation objectives 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 for English European Marine Sites are the responsibility of NE.

2.3.2 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 AA to determine the impacts of the plan on sites designated under the Habitats and Birds Directives.

The Office of the Department for Communities and Local Government (DCLG) has produced draft guidance on how to determine the need for an AA 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, while more specific guidance on assessing Shoreline Management Plans in terms of the Habitats Regulations is available from the Environment Agency. These three documents: "Planning for the Protection of European Sites: Appropriate Assessment" (DCLG, 2006), "The Assessment of Regional Spatial Strategies under the Provisions of the Habitats Regulations – Draft Guidance" (English Nature, 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. These documents relate explicitly to land use plans; however, given that SMPs have the potential to influence 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 and SMPs, and the relevant elements of guidance relating to RSS have therefore been adapted here for SMP use.

An AA is therefore 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 international sites.

2.3.3 Identification of Competent Authority for the SMP

One of the first steps in assessing SMPs under the Habitats Regulations is identification of the competent authority. In this instance, Royal Haskoning is undertaking the technical analysis which forms the basis of the appropriate assessment, but the ultimate responsibility for signing off the appropriate assessment and ensuring compliance with

the Habitats Regulations falls to the competent authority. In this instance, the **competent authority** is **Bournemouth Borough Council**.

2.3.4 Requirement for an Appropriate Assessment (AA) for the SMP2

During the development of the Poole and Christchurch Bays SMP, the opportunity has been presented to align the development of SMP policy with the requirements of the Habitats Regulations, allowing for the development of SMP policy which takes into account site integrity.

Nonetheless, on the basis of the nature of SMPs, in terms of their critical role in determining key coastal processes, and thus the extent and status of internationally designated natural habitats along the coastline of Poole and Christchurch Bays, *it can not be concluded that there would not be a likely significant effect of the SMP on the site*. The SMP has therefore been subject to an AA.

The full detail of the AA for the *Natura 2000* sites associated with the Poole and Christchurch Bays SMP is provided as Appendix J.

2.3.5 Requirement for Imperative Reasons of Over-riding Public Importance (IROPI) for the SMP2

For the Poole and Christchurch Bays SMP2, the package of works associated with IROPI will be submitted in August 2010 to Defra.