

1 INTRODUCTION

1.1 The Shoreline Management Plan

A Shoreline Management Plan (SMP) provides a large-scale assessment of the risks associated with shoreline evolution, coastal flooding and erosion 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 SMP provides broad scale assessment of the coastal flooding and erosion risks and advice to operating authorities and private landowners on the management of their defences. The Government's principal aims in relation to coastal issues, as set out in Defra's strategy "Making Space for Water" (Defra 2005), are to:

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

This document has been developed on behalf of the Coastal Local Authorities and the Environment Agency, and with the support of other local and regional organisations with various responsibilities and powers for managing the coast. This plan provides the first revision to the combined Western Solent and Southampton Water SMP, adopted in 1998, the East Solent and the Harbours SMP, adopted in 1997,.

The 386km of coastline covered by this Plan extends from Hillfield Road, Selsey Bill, in the east, to North Point, the tip of the recurve of Hurst Spit, in the west, and includes Portsmouth, Langstone and Chichester Harbours, Southampton Water and the tidal extent of the main rivers (Lymington, Beaulieu, Test, Itchen, Hamble, Meon, Wallington, etc.); this encompasses sediment cells 5A, 5B and 5C. Figure 1 shows the area covered by the North Solent SMP.

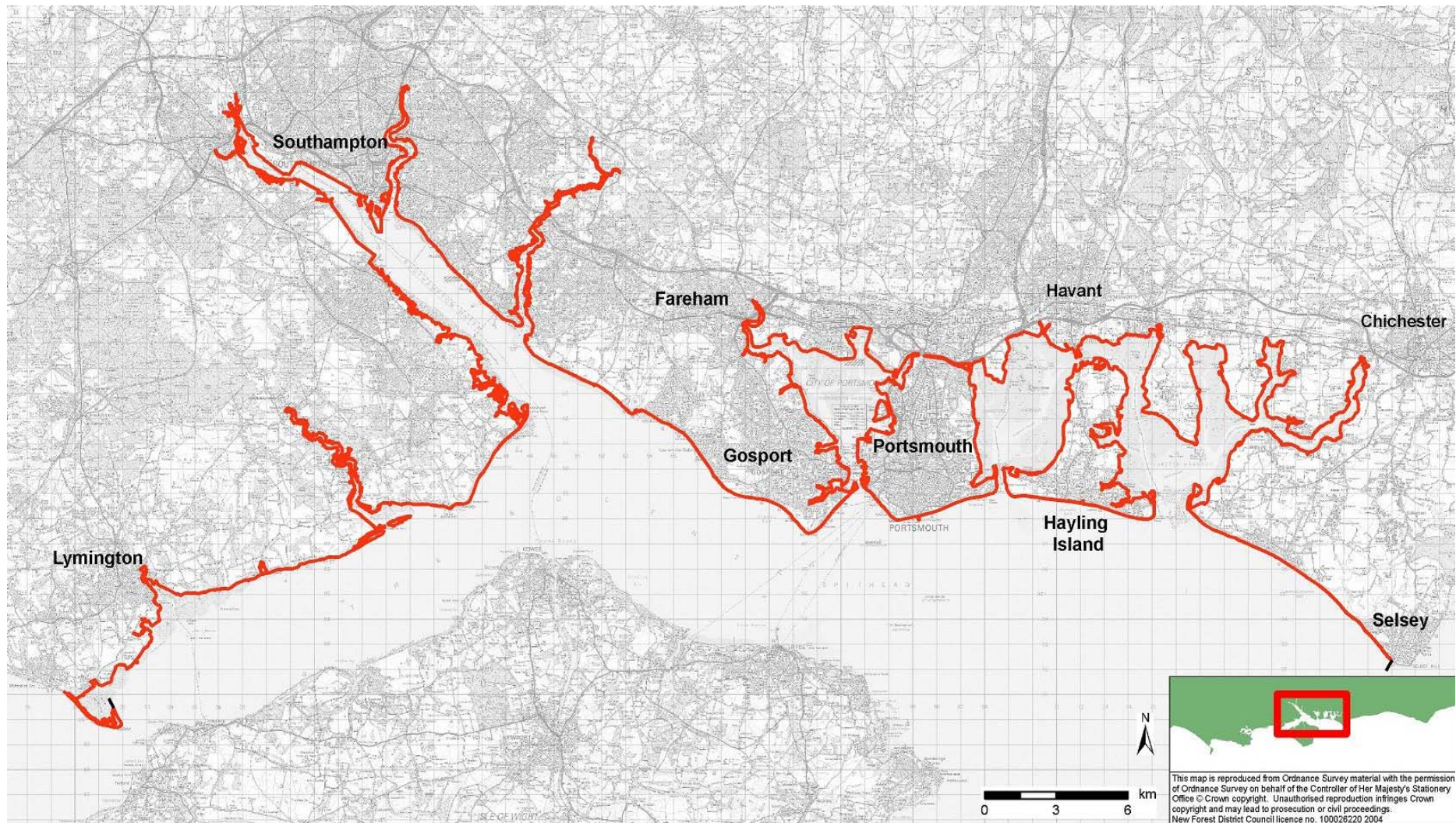


Figure 1: North Solent SMP area

The North Solent shoreline has a number of factors that make the region unusual when compared to other areas of the UK, notably:

- Approximately 80% of the shoreline has a European or International nature conservation designation as Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and or Ramsar sites, and a high proportion of the undesignated coastal areas function and support species, such as high tide roosting and feeding sites for internationally important populations of waders, wildfowl and geese. (See Figures 2 to 4). There is also a suite of national and local designated sites.
- The majority of the North Solent has high levels of residential, commercial, industrial or agricultural development. [The South East England Regional Assembly (SEERA) has proposed that approximately 4,000 new homes per year should be provided in South Hampshire between 2006 and 2026 (Partnership for Urban South Hampshire 2008 (PUSH), see <http://www.push.gov.uk>),].
- Approximately 76% of the shoreline is protected from flooding and/or erosion with structures and/or beach management. (See Figure 5). The majority of these existing defences have European and International nature conservation designated site(s) landward and seaward of the line of defence. This has significant implications when complying with environmental legislation.
- Approximately 75% of the existing defences (both publicly maintained and privately owned and maintained) will reach the end of their residual or engineering design life within 20 years; works are therefore required to manage the coastal flood risk.
- At least 60% of the shoreline is privately owned and/or the defences are maintained by third parties. (See Figure 6). Private landowners have certain permissive development rights to protect their property and to continue to maintain existing defences, provided it does not constitute 'development' of any kind without the need for planning permission but they should always check with their Local Planning Authority before carrying out any works. These rights apply and remain regardless of the SMP policies. A number of these privately owned sites and defences provide protection to areas of significant environmental importance.
- The Solent Dynamic Coast Project identified the paucity of habitat creation opportunities through which the effects of habitat loss caused by coastal squeeze could be compensated. (This research was undertaken in advance of the SMP).
There is a level of uncertainty regarding availability and likelihood of securing

public funding for defences maintained by Operating Authorities and the continued maintenance of defences by private owners. Failure or non-maintenance of defences would result in a significant risk of increased tidal flooding and adverse impacts to properties and other assets and/or loss of landholdings and environmentally important areas.

North Solent Shoreline Management Plan

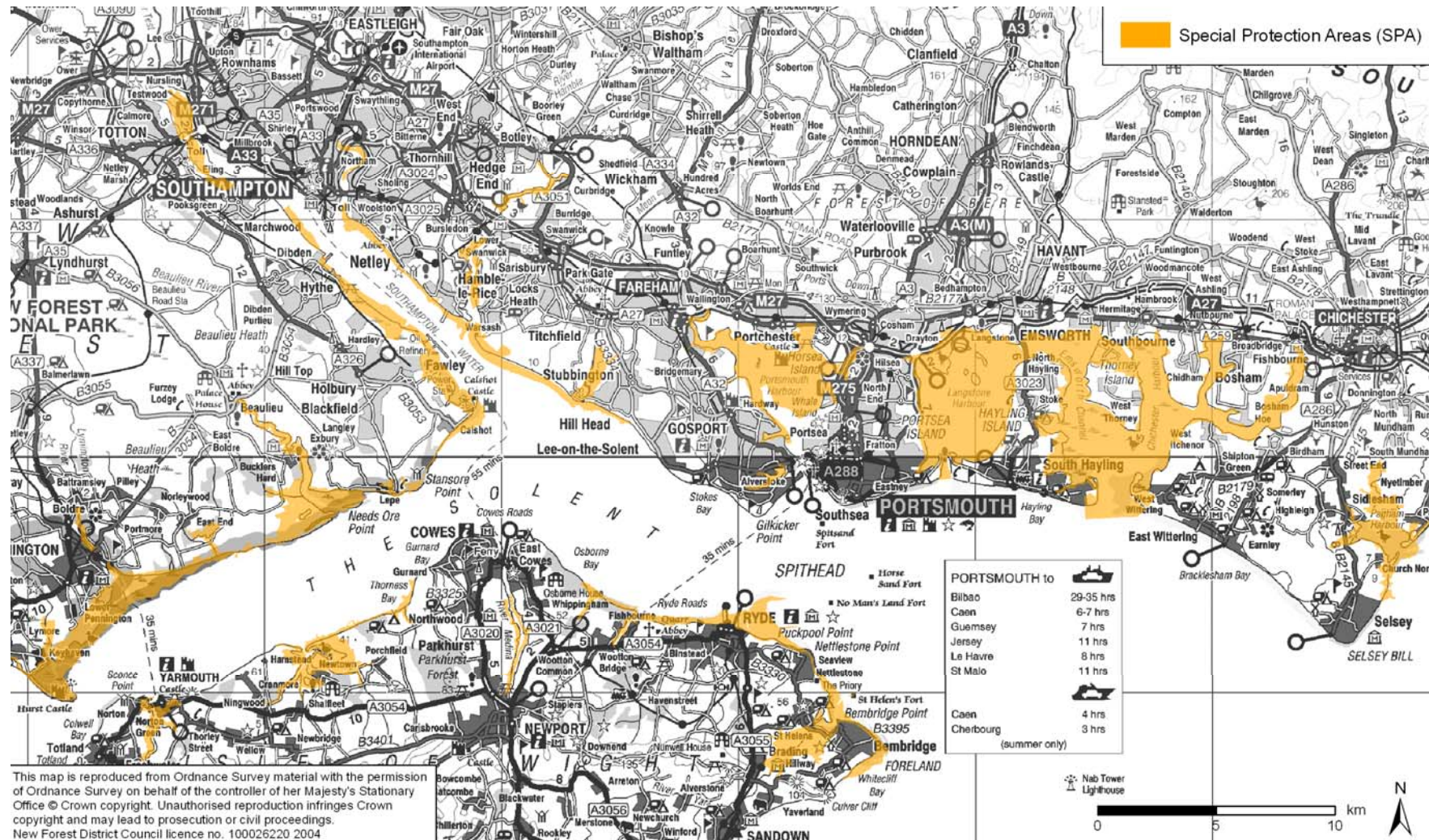


Figure 2. Special Protected Areas (SPAs) within the North Solent SMP area

North Solent Shoreline Management Plan

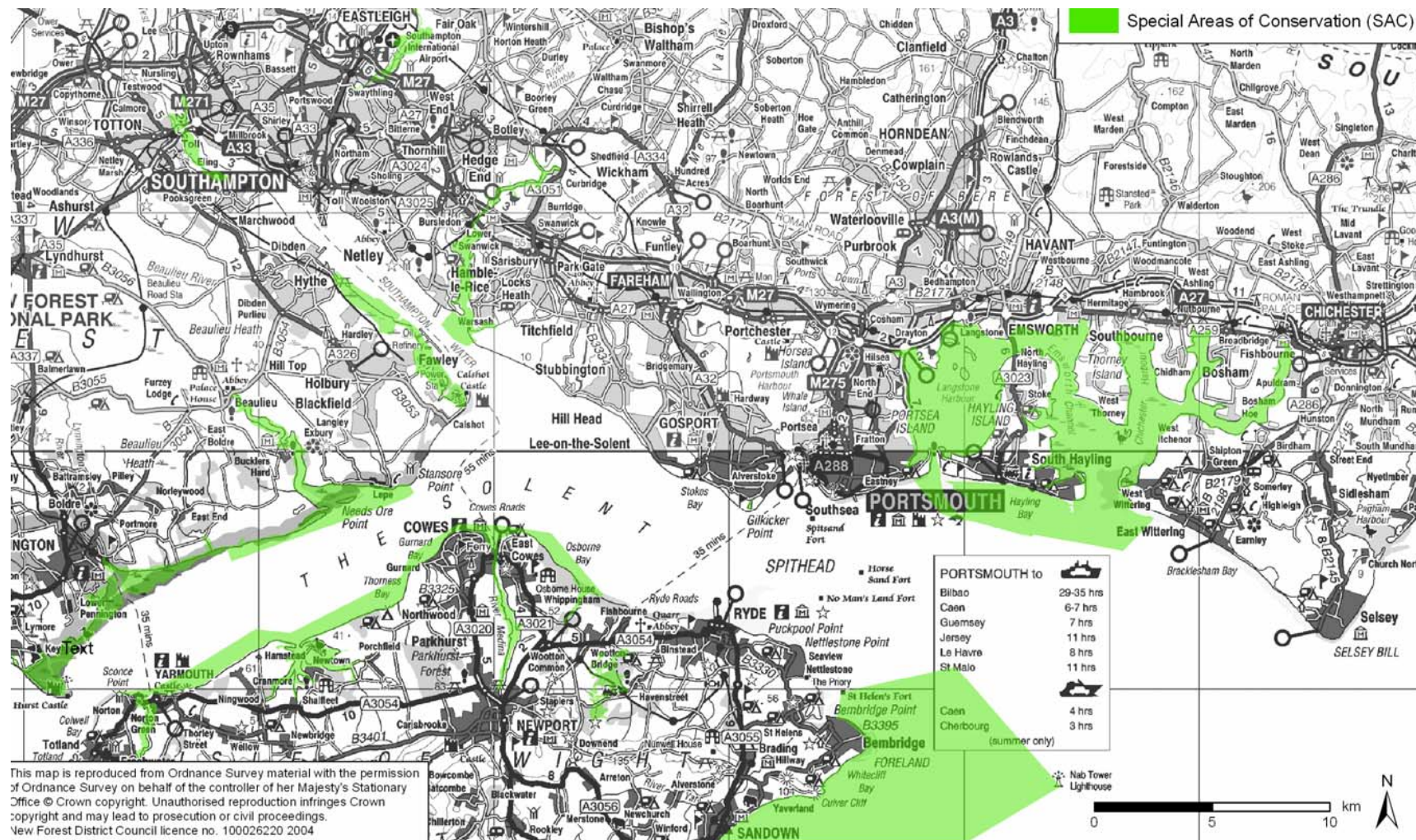


Figure 3. Special Areas of Conservation (SACs) within the North Solent SMP area

North Solent Shoreline Management Plan

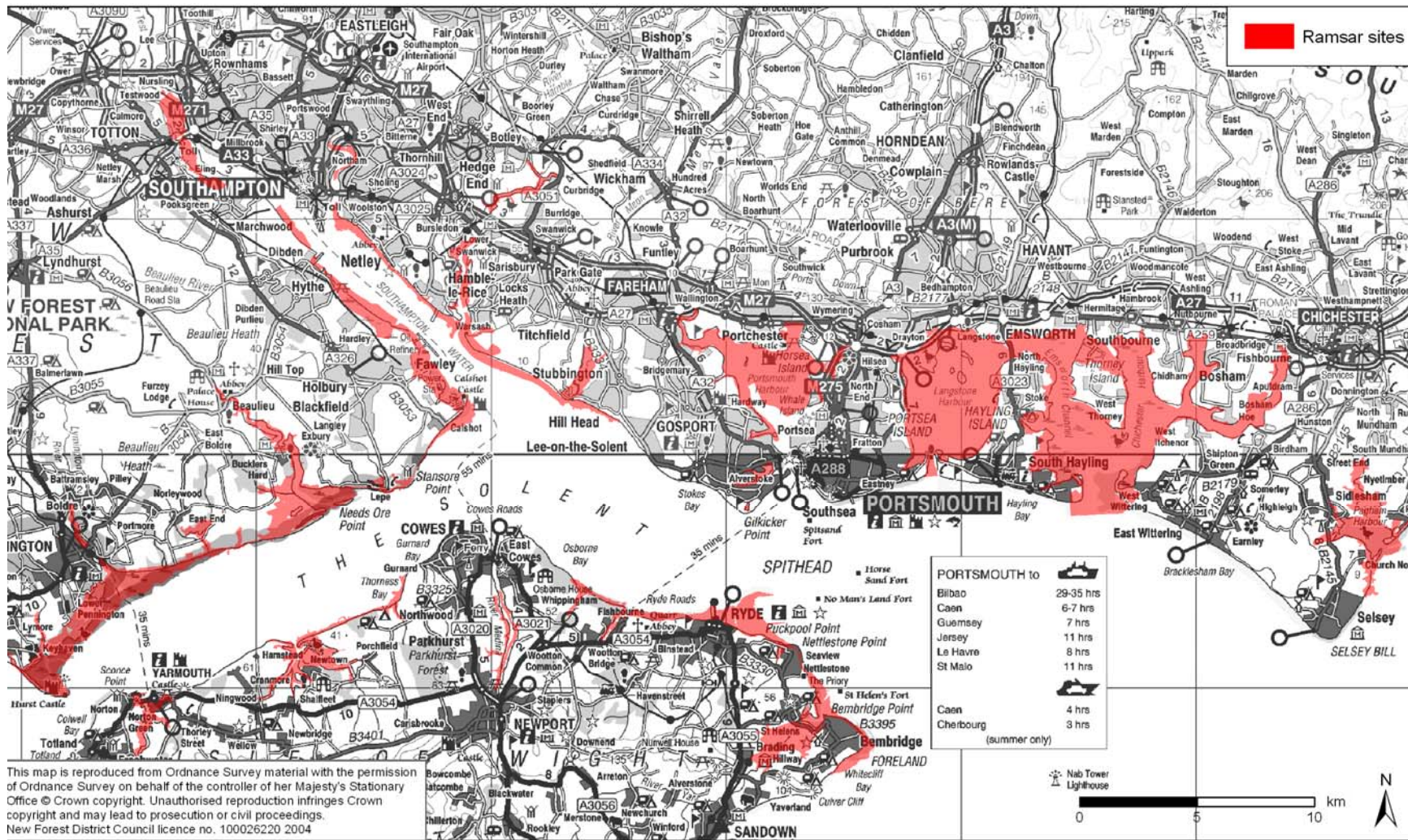


Figure 4. Ramsar sites within the North Solent SMP area

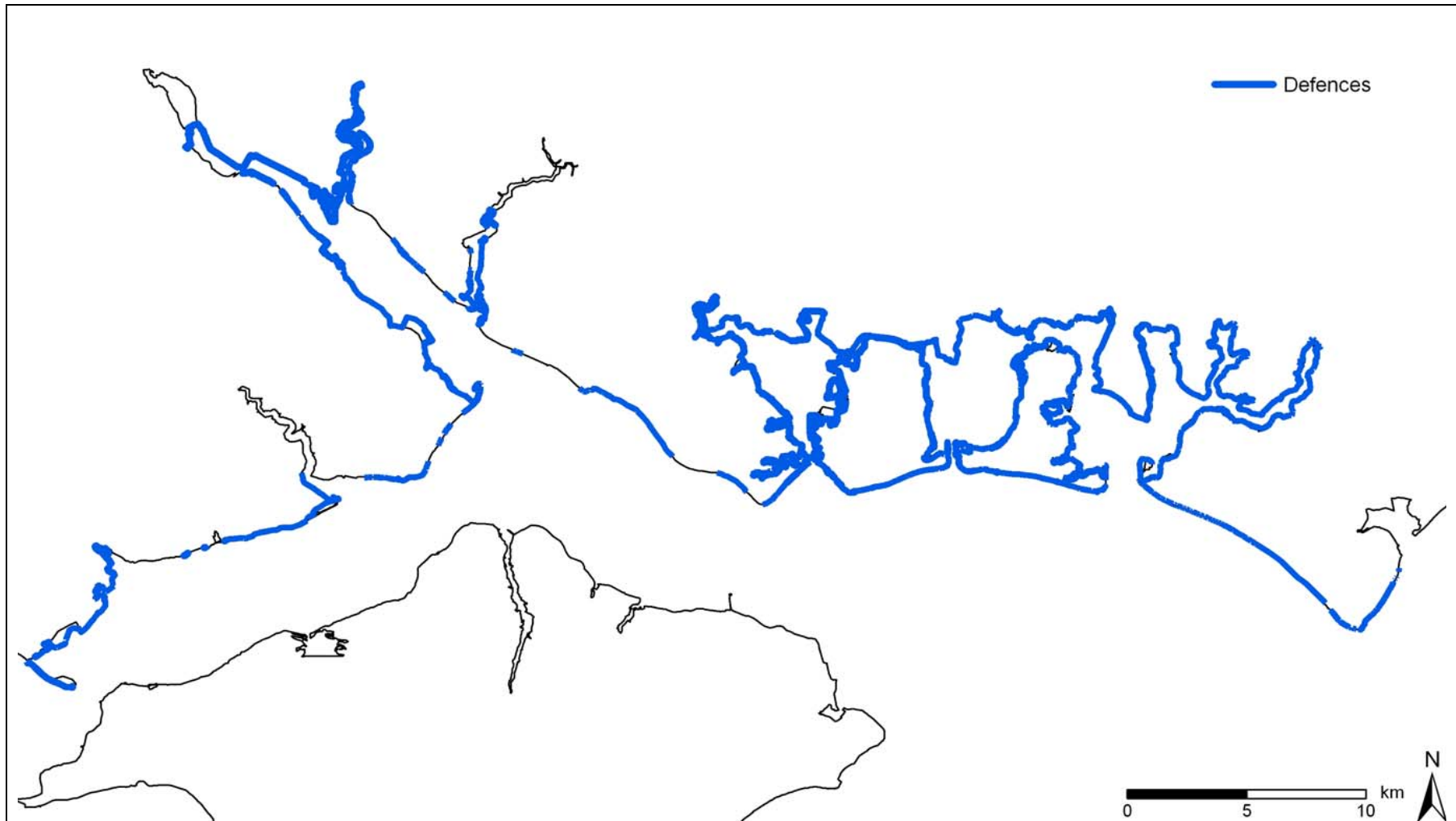


Figure 5. Existing shoreline defences across the North Solent

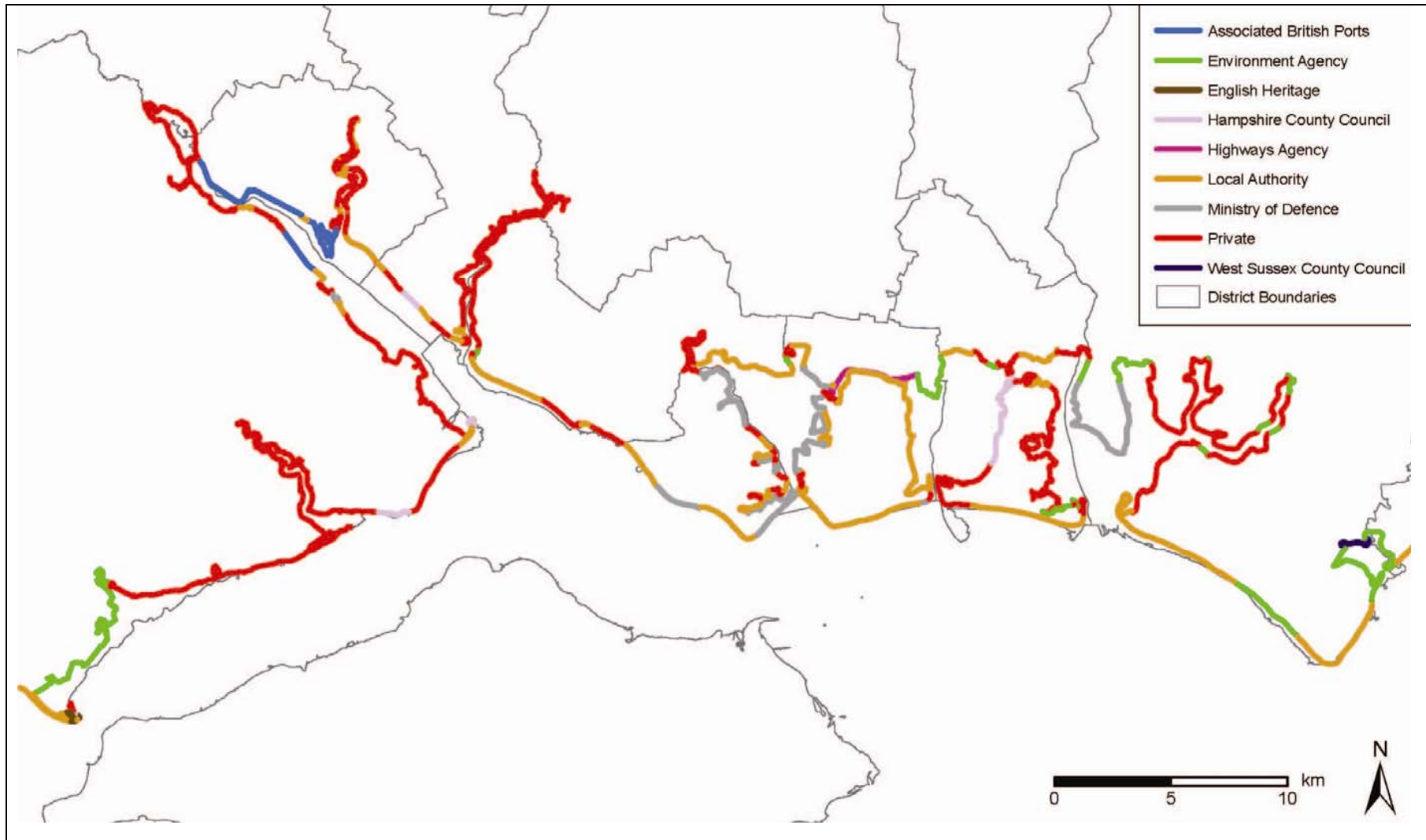


Figure 6. Shoreline Overview, indicating defence maintenance

1.1.1 Guiding Principles

The SMP is a non-statutory policy document for coastal flood and erosion risk management planning. It does not set policy for anything other than coastal flood and erosion risk management. It takes account of legislative requirements and other existing planning initiatives and is intended to inform wider strategic planning. Full details of the procedure followed in development of the SMP are set out in Appendix A.

The SMP aims to provide realistic and achievable policies that are in accordance with current legislation and constraints. The policies must also be technically sustainable, environmentally acceptable and economically viable. There is no value in a long-term plan which has policies driven only by short-term politics or works that prove to be detrimental in the longer-term. Nevertheless, the plan must be sufficiently flexible to adapt to changes in legislation, politics and social attitudes. The plan, therefore, considers objectives, policy setting and management requirements for 3 main epochs:

- from present day (taken nationally as being 2005) 0 – 20 years (short term) (Epoch 1)
- medium-term 20 – 50 years (medium-term) (Epoch 2)
- long-term 50 – 100 years (long-term) (Epoch 3)

The SMP was developed between December 2006 and January 2010 and produced in accordance with the revised Procedural Guidance (Defra, 2006) for the second generation of SMPs.

The SMP is an important tool for raising awareness to the public, landowners, other land managers and operating authorities of the increasing risk and implications of climate change and sea level rise on the existing defences and management practices. It provides a 'route map' for decision makers to assist in moving from the present situation towards the future. The SMP identifies sites and options for continuing to maintain defences to provide long-term benefits to a wide community. It also identifies sites where the type and timing of change is currently unknown, where change in the management of the defences is likely or will be necessary.

Flood and erosion defences reduce the risk to the assets they protect but they do not remove the risk completely. To be suitably adaptable to future change and future risks all new development of residences or infrastructure in flood and erosion risk areas should be appropriately adaptable, resilient and resistant. Decisions on the land use within flood and erosion risk areas should fully consider the risk and be adaptable to change.

The policies that comprise this Plan have been defined through the development and review of shoreline management objectives, representing both the immediate and longer-term requirements of stakeholders, for all aspects of the coastal environment. Together with a detailed understanding of

the coastal processes operating on the shoreline, these objectives provide a thorough basis upon which to appraise the benefits and impacts of alternative policies, both locally and SMP wide. In this way, the selection of policy takes equal account of all relevant features in identifying the best sustainable management solutions.

Considerable effort has been applied to private land ownership, maintenance of third party defences, the identification of inter-tidal habitat creation opportunities and the requirements for transitional freshwater habitats arising from potential managed realignments, which were not addressed in sufficient detail within the SMP guidance.

The planning process should recognise that the coast is a dynamic place requiring adaptive solutions for uses and development. Local planning authorities take account of SMPs and its policies both during the preparation of their Local Development Documents and in the determination of planning applications. In addition, the statutory planning process also considers other planning documents and a range of government Planning Policy Statements (PPSs) and their predecessors Planning Policy Guidance Notes (PPGs). The South East Plan adopts a whole-catchment approach to water management and acknowledges the links between biodiversity and water quality, flood and erosion risk management.

Each planning application will be considered on a case-by-case basis to identify the relevant policies, planning and related advice and constraints. Flood risk will be taken into account at all stages in the planning process to avoid inappropriate development in areas at current or future risk from flooding, and to direct development away from areas of highest risk in accordance with the sequential test. In general, development should not worsen tidal flood risk elsewhere. Flood protection measures should minimise damage to nature conservation and biodiversity interests. The use of surface materials which increase surface water run-off will be discouraged.

Planning applications will be considered on a site by site basis. Planning and Development Control Officers will consider the relevant and applicable statutory plans and planning policies and will have regard to the non-statutory SMP. The Local Planning Authority will seek the advice of statutory consultees, such as the Environment Agency (e.g. flood risk, etc.), Coastal Protection Authority (shoreline erosion and coastal processes, etc.), Natural England (environmental issues, European and national nature conservation designations, etc.), and their views will be taken into account when considering a planning application. Therefore, planning permissions will not be determined solely by the SMP coastal defence policy.

Statutory plan and planning policies are the main considerations when determining planning decision, but regard will be given to the SMP during the consideration process. Having regard to the SMP and through PPS25, Local Development Frameworks and Sites and Development Management Plans are required to define Coastal Change Management Areas, where new development will be subject to varying degrees of restriction. The relevant

local planning authority should be consulted to ascertain the relevant operative development plan policies. It is important to note that SMPs do not take into account future development aspirations.

The non-statutory SMP is part of evidence base to guide the spatial location of development and add detail to statutory plan and planning policies, and other documents such as Strategic Flood Risk Assessments (SFRAs). These plans identify current infrastructure potentially at risk from erosion and/or tidal flooding, now and over next 100 years, where current defences reduce risks, and raise awareness of the rising risk over time if defences are not maintained or strengthened/raised in future and where limited financial resources are either not available or unlikely to be secured. This may impact on future viability of development through evidence for insurance risk.

1.1.2 Objectives

The objectives of the SMP are:

- to define, in general terms, the risks to people and the developed, historic and natural environment of coastal evolution over the next century
- to identify the proposed policies for managing those risks
- to identify the consequences of implementing the proposed policies
- to inform planners, developers and others of the risks of coastal evolution and of the proposed policies when considering future development of the shoreline, land use changes and wider strategic planning
- to comply with international and national nature conservation legislation and biodiversity obligations
- to set out procedures for monitoring the effectiveness of the SMP policies

1.2 Structure of the SMP

This SMP is presented in two parts: the plan and a series of supporting documents presented as appendices to the plan.

1.2.1 The Plan

The management plan sets out the proposed policies for managing the risks of coastal flood and erosion risks and shoreline evolution over the next century. It 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 the supporting documents. The plan is presented in six sections:

Section 1 (this section) gives details on the principles, structure and background to its development.

Section 2 presents the basis for meeting the requirements of the EU Council Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the Strategic Environmental Assessment Directive).

Section 3 describes the concepts of sustainable policy and an appreciation of the constraints and limitations on adopting certain policies.

Section 4 presents a broad overview of the proposed policies, discussing their rationale, implications and the requirements to implement and manage them.

Section 5 gives 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, amenity and recreational use.

Section 6 provides an action plan - a programme for future activities required to progress the plan between now and its next review. (The Action Plan will be presented with the Final SMP and is not included within the Draft SMP)

Although many readers will focus upon the local details in Section 5, it is important to recognise that the SMP is produced for the North Solent coast as a whole, considering issues beyond specific locations. Therefore, statements must be read in the context of the wider-scale issues and policy implications, as reported in Sections 2, 3 and 4 and the appendices to the Plan.

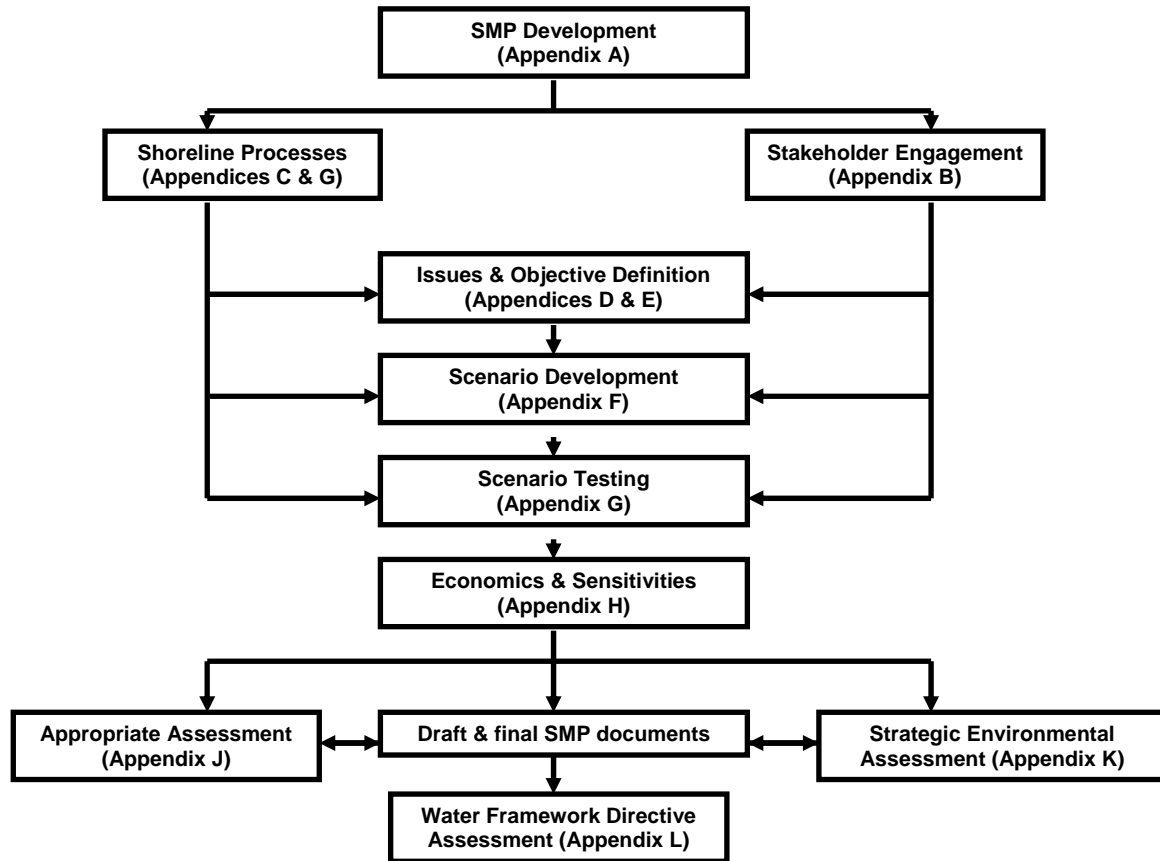
1.2.2 The Supporting Documents

All information used to support the Shoreline Management Plan is contained in a series of Appendices. They 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. The appendices, which are largely technical in nature, are:

Appendix	Subject	Detail
A	SMP Development	Reports the history of development of the SMP, describing fully the plan and policy decision-making process
B	Stakeholder Engagement	All communications from the stakeholder process are provided here, together with information arising from the consultation process
C	Baseline Process Understanding	Includes a baseline process report, defence assessment, and assessments of implications on coastal processes and defence requirements under two scenarios. If there were no defences - No Active Intervention (NAI) and if the existing defences were maintained - With Present Management (WPM) assessments
D	Theme Review	This report identifies and evaluates the environmental features (human, natural, historical and landscape)
E	Issues & Objective Evaluation	Provides information on the issues and objectives identified as part of the Plan development, including appraisal of their importance
F	Initial Policy Appraisal & Scenario Development	Presents the consideration of generic policy options for each frontage, identifying possible acceptable policies, and their combination into 'scenarios' for testing
G	Scenario Testing	Presents the policy assessment and appraisal of objective achievement towards definition of the Proposed Plan
H	Economic Appraisal & Sensitivity Testing	Presents the economic analysis undertaken in support of the Proposed Plan
I	Metadatabase and Bibliographic database	All supporting information used to develop the SMP is referenced for future retrieval and examination
J	Appropriate Assessment	An assessment of the effect the plan will have on European sites.
K	Strategic Environmental Assessment	An appraisal of the potential environmental consequences of developing the plan specifically related to the requirements of the EU Council

		Directive 2001/42/EC (Strategic Environmental Assessment Directive)
L	Water Framework Directive Assessment	An assessment of the implications of the Water Framework Directive.

The broad relationships between the appendices are as below:



1.3 The Plan Development

1.3.1 Revision of the SMP

Since the first round of SMPs, there have been a number of initiatives which have led to improved understanding of how the coast functions and evolves. Part of the SMP process is to regularly review and update the SMP, as necessary, taking account of new information and knowledge gained in the interim. The North Solent SMP has been developed using the best available data and information. This review has considered:

- latest studies (e.g. Futurecoast, climate change) and mapping which has been used during the development of this plan.
- The Environment Agency's Indicative Flood Mapping, as published in 2007, has been used for flood risk in 2007. The coastal flood risk maps for 2108 from the Pagham to East Head Coastal Defence Strategy and covered West Sussex area of the SMP region. The coastal flood risk maps for 2115 were obtained from the Partnership for Urban South Hampshire (PUSH), see <http://www.push.gov.uk>), and the New Forest District Council and New Forest National Park Authority Strategic Flood Risk Assessments; these covered Hampshire area of the SMP region.
- issues identified by most recent defence planning e.g. Pagham to East Head Coastal Defence Strategy (approved), draft Portchester to Emsworth CDS, draft River Itchen, Weston Shore, Netley, River Hamble CDS, Portsea Island CDS (approved) and other site-specific detailed investigations.
- changes in legislation e.g. the EU Habitats and Birds Directives and Regulations
- changes in coastal management planning requirements e.g. the need to consider 100 year timescales in future planning, modifications to economic evaluation criteria, etc.
- Catchment Flood Management Plans for New Forest, Test and Itchen, South East Hampshire and Arun and Western Streams, as presented in Figure 2. (Post adoption statements approved autumn 2008) (see Figure 7)
- the results of the Strategic Regional Coastal Monitoring Programme and in-house monitoring, research and datasets.

Further reviews will be carried out in future years by Operating authorities (Local Authorities and the Environment Agency), when deemed necessary, and will include changes to policies, particularly in light of more detailed studies of the coastline, climate change, legislative requirements and future

developments and pressures. This plan does not account for proposed developments, only those that were constructed or were being progressed during the time that the SMP was being developed.

1.3.2 Production of the North Solent SMP

This SMP has been led by a project management group comprising technical officers and representatives from:

- New Forest District Council/Channel Coastal Observatory (Lead Authority)
- Test Valley Borough Council
- Southampton City Council
- Eastleigh Borough Council
- Winchester City Council
- Fareham Borough Council
- Gosport Borough Council
- Portsmouth City Council
- Havant Borough Council
- Chichester District Council
- Environment Agency Southern Region and Solent & South Downs Area teams
- New Forest National Park Authority
- Chichester Harbour Conservancy
- Hampshire County Council
- West Sussex County Council
- Natural England

The diversity of pressures on the shoreline has resulted in an extremely difficult stretch of coastline to manage at a strategic level. All of these factors as well as economic (Appendix H of main SMP document) and environmental considerations have been assessed in the policy appraisal process (Appendices D, E, F and G of main SMP document) to provide the most sustainable shoreline policies over the next 100 years.

The SMP process has involved up to 220 interest groups and individuals who were informed of the SMP review and their views sought through the process. Meetings with stakeholders have been held to help to identify and understand the issues, review the objectives and set direction for appropriate management scenarios, and to review and comment upon the proposed plan policies. The SMP is based upon information gathered largely between December 2006 and October 2009. The main tasks have been:

- analysis of coastal processes and shoreline evolution for baseline cases of not defending and continuing to defend the coastline as at present

- analysis and production of indicative erosion risk maps for open coast and harbour frontages
- review, revision and assessment of coastal defence assets data and information
- development and analysis of issues and objectives for various locations and assets
- theme reviews, reporting upon human, historic and natural environmental features and issues, evaluating these to determine the relative importance of objectives
- agreement of objectives with interest groups, heritage community and stakeholders, to determine possible policy scenarios
- development of policy scenarios based on key objectives and primary drivers for sections of the frontage
- 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 proposed plan and policies prior to compiling the SMP document
- consultation on the proposed plan and policies

During and following the public consultation period, consultation responses will be considered and final policies determined. Assessments will be concluded and Action Plan prepared which identifies necessary works and studies arising from the SMP process. The Action Plan will also identify requirements for integrating SMP and CFMP policies and implementation approaches, to ensure gaps are identified and studies activated to improve understanding of systems and processes and the management of the entire tidal and freshwater river is considered holistically and sustainably.

The final SMP will need to be formally adopted by the Local Authorities and the Environment Agency Regional Flood Defence Committee, prior to submission to the Environment Agency for approval. The Environment Agency will approve the SMP on behalf of Defra. The final SMP will then be available for dissemination.



Figure 7. Catchment Flood Management Plan areas within North Solent SMP area

1.4 Policy Units

Extensive and detailed discussions were held between Client Steering Group and Local Planning Authorities, landowners and stakeholders in order to determine the boundaries of the individual Policy Units, which could be considered discrete from adjacent frontages due to geomorphology or coastal processes and its pertinent features and issues. The possible management of these frontages, failure or non-maintenance of defences and the expected consequences and interactions of coastal processes and potential implications on tidal flood and erosion risk areas, adjacent shoreline frontages, properties, access, landuse and features, etc., were also key considerations when determining the Policy Unit boundaries. These broader considerations are covered by grouping Policy Units under Management Areas, highlighting the overall interaction between sections of the coast. In taking forward policies the overall interaction between Policy Units will need to be taken into account (see section 5).

These discussions and assessment also aided identification of localised areas where the management approach may potentially be different to the overarching strategic-scale policy approach (i.e. a long length of shoreline may be considered to have similar features, land use, etc. when considered at a broad scale, but may have localised policy drivers that may require a localised management approach applicable to a short length of frontage).

Each length of shoreline frontage is termed a Policy Unit and is defined by the overarching policy drivers applicable to relatively long lengths of shoreline that necessitated or required a specific policy to be proposed. Figure 8 shows the Policy Units within the North Solent SMP area.

In order for the analysis to provide an understanding of coastal evolution, each Policy Unit is divided into three epochs - short-term (0-20 years), medium-term (20-20 years) and long-term (50-100 years). For consistency between SMPs, the output is provided for years 2025, 2055 and 2105. A single SMP policy is determined and applied per epoch for each Policy Unit in order to achieve the aim of the SMP of determining an achievable long-term vision for the North Solent coast.

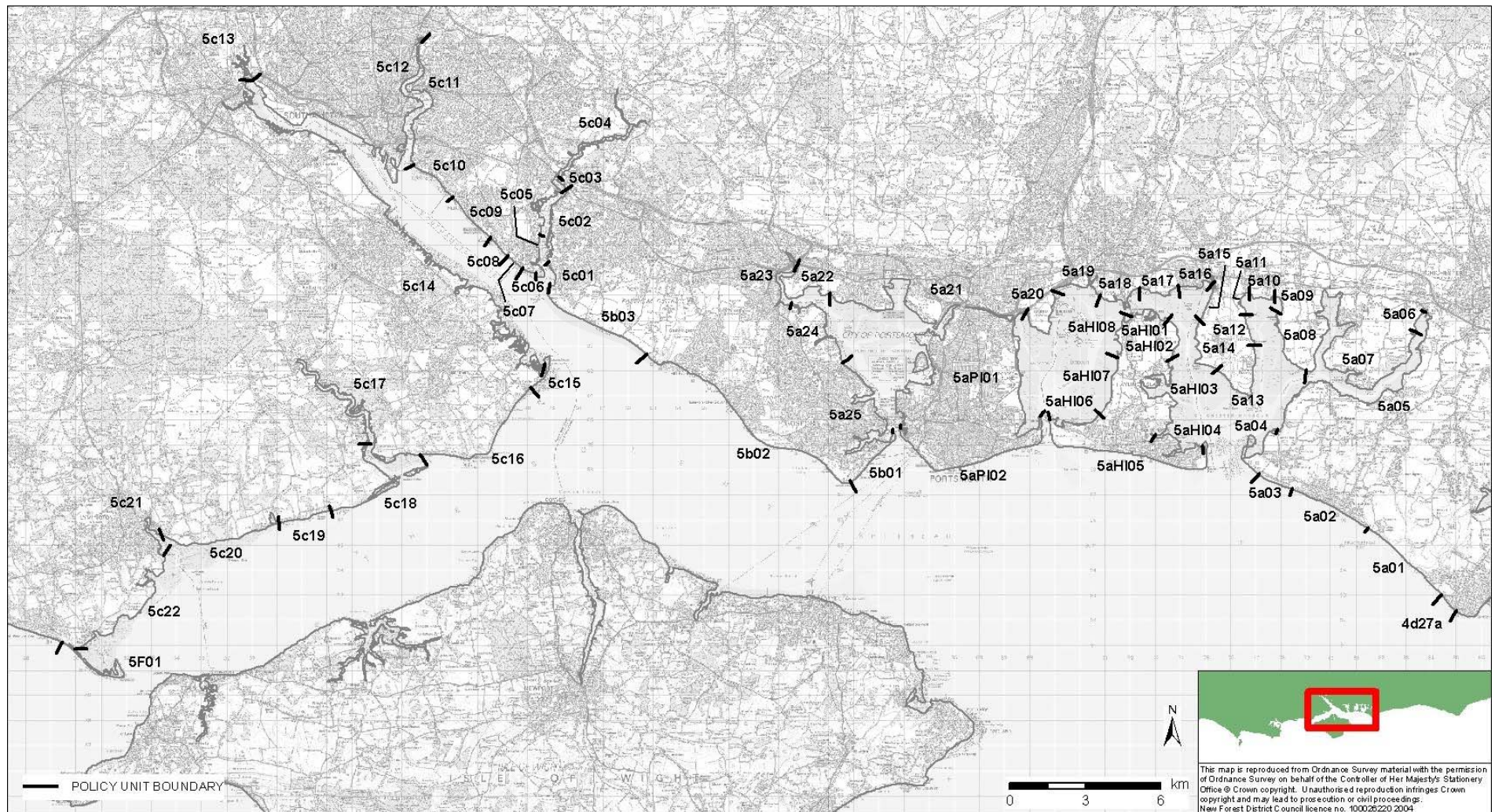


Figure 8. North Solent SMP Policy Units

1.5 The SMP Policies

The SMP is non-statutory and does not set policy for anything other than coastal defence management. It does not aim to provide sufficient detail for the implementation of the defence or management works. It is the intent of the policies rather than the definitions given below, that have driven the assessments and determination of the proposed policies for future management of the North Solent shoreline. The SMP policies proposed for public consultation are those that aim to result in sustainable and improved management of the shoreline, when considered at the broad system scale, and need to assess the flood risk implications to wider areas and communities if defences failed or were not maintained.

There are four generic Defra policy options to choose from:

- **Hold The Line (HTL)** - Maintain or upgrade standard of protection provided by defences. This policy should cover those situations where work or operations are carried out in front of the existing defences (such as beach recharge, rebuilding the toe of a structure, building offshore breakwaters, etc.) to improve or maintain the standard of protection provided by the existing defence line. This policy also involves operations to the back of existing defences (such as building secondary floodwalls) where they form an essential part of maintaining the current coastal defence system.
- **Advance The Line (ATL)** - construct new defences seaward of existing defences. Use of this policy should be limited to those policy units where significant land reclamation is considered.
- **Managed Realignment (MR)** - allowing the shoreline to move backwards or forwards, with management to control or limit movement (such as reducing erosion or building new defences on the landward side of the original defences).
- **No Active Intervention (NAI)** - a decision not to invest in providing or maintaining defence.

Hold the Line (HTL)

A policy of HTL intends that defences and beach management activities are maintained or improved to provide protection from coastal flood and erosion to important assets or features at the coast. Such assets might include centres of development and redevelopment, industry and commerce, agriculture, nature conservation designated sites, etc. The method of maintaining or improving the line of defence may consider local adjustments to the alignment of defences or that existing structures are replaced or new defences constructed, depending on the local conditions and requirements identified.

Due to the high proportion of the North Solent shoreline that is privately owned and the maintenance of defences that are privately funded, there are frontages where a HTL has been proposed but the works identified to manage the coastal flood risk are considered economically marginal or not economically viable. Privately funded works may still be permissible, although there may be conditions associated with this such that private works do not result in negative impacts on other interests. Where applicable, the Draft SMP states that no public funding would be available for maintenance of privately-owned defences, although private owners may deem the works affordable.

Although the broad economic viability of the proposed policies has been assessed in this SMP, a proposed policy of Hold the Line or Managed Realignment does not guarantee public funding through the Flood and Coastal Erosion Risk Management (FCERM) budget for maintenance or capital works. It is also the case that policy options that are considered economically viable may not achieve national priority funding through the finite FCERM budget.

Advance the Line (ATL)

An ATL policy may be considered where aligning the defence line seaward of existing shoreline position advancement would provide a more sustainable and effective opportunity for land reclamation or increased shoreline width; this may be achieved through the construction of structures seaward of the existing shoreline, such as offshore breakwaters. Alternatively, introducing or modifying the alignment of the shoreline may encourage sediment accretion, thereby promoting sustainable management of down-drift beach widths.

However, discussions within the Client Steering Group indicated that this policy was not applicable within the entire North Solent SMP area due to the complexity of the coastal processes, the number and extent of nature conservation designations and the use of the nearshore zone for navigation, transport and recreation. Accordingly, ATL has not been proposed for any of the North Solent shoreline.

Managed Realignment (MR)

The intention of a policy of MR is to either create or allow the conditions for the coast to realign and retreat. For example, this policy may be considered for issues relating to flood storage capacity, sediment transport, economic viability (i.e. shorter lengths of secondary defences), or for environmental reasons to meet the legal obligation to maintain the extent of coastal wildlife habitat in the face of sea level rise, such as inter-tidal habitat creation for offsetting coastal squeeze.

However, it may not be technically feasible or sustainable to maintain existing defences on the current defence line, and despite secondary defences being proposed, the implementation of MR policies may adversely affect or result in the loss of property, agricultural land, heritage or other assets, depending on the location of secondary defences.

Within the North Solent there are a number of sites where managed realignment could be considered but the resulting development of inter-tidal saltmarsh and mudflats would result in the loss of coastal grazing marsh. Managed Realignment at these sites can only be progressed once the legally-required compensatory habitats have been created. Therefore, existing defences need to be maintained until compensation habitat has been created elsewhere. Recent environmental advice indicates that coastal grazing marsh habitats take in the order of 50 years to be recreated depending on the site-specific features and their function e.g. roost and feeding sites. Further more detailed studies will be required to confirm the future management of these sites due to the uncertainty of realignment or timing of realignment.

In October 2009, Natural England revised their original advice with regard to the estimated timeframe that would allow development of coastal grazing marsh habitat of good biological quality in the majority of situations to be recreated. The original advice suggested such a process would take in the order of 50 years; however the revised advice suggested a period of 20 to 50 years. The implications of this revision will be taken into account in the final SMP and Appropriate Assessment.

No Active Intervention (NAI)

A policy of NAI has been proposed for lengths of coast which are allowed to change and evolve naturally. It has been predicted that increased erosion of these frontages may provide sediment to the foreshore of other sections of the coast and act as a natural means of protecting property, land use within the hinterland and environmentally important sites and features from coastal flooding.

Adaptive Management (AM)

This is not an SMP policy, but has been taken from the Pagham to East Head Coastal Defence Strategy for the East Head frontage. It is locally a politically acceptable policy term after almost a decade of discussions and consultation.

Adaptive Management promotes flexible decision making through the implementation of a Management Plan. An Adaptive Management approach is designed to address the uncertainties and work with the coastal processes to provide a proactive management approach. A suite of potential management options and possible actions will be applied as required. A key element of this approach will be the monitoring regime to understand how it is responding combined with beach management activities to manage the specific risks. As understanding of the system improves and as the coastline achieves an alignment more in line with natural processes it is likely that decreasing levels of intervention will be required.

Localised Policy Options

A number of locations were identified within defined Policy Unit frontages that required a different but localised management approach for relatively short

sections within the Policy Unit. For example; a Policy Unit may have an overall requirement for a HTL policy, but there may also be potential opportunities on a short stretch of shoreline for localised managed realignment.

These relatively short lengths of localised policy requirements were considered as localised policy options to the overarching policy, rather than as individual and separate Policy Units. Further studies would be required to confirm the future type and/or timing of management. This approach primarily reflected the level of uncertainty relating to the features that may be potentially affected by realigning defences, the function each site may contribute to the network of sites, the importance of the network being maintained and re-creatability of such sites. There are also other sites that may provide a potential opportunity for localised habitat creation, currently behind privately maintained defences, that the economic appraisal deemed were not economically viable (due to such factors as requirement for and length of secondary defences, losses of designated coastal grazing marsh that would need to be recreated at a more sustainable site elsewhere, etc.). Therefore, these sites have not been included within the proposed policy definition as a localised policy option, but have been identified as potential sites that may be reconsidered following further more-detailed studies.

Coast Protection Authority

The Coast Protection Act 1949, which applies to the coastline of England and Wales, establishes Maritime (or Unitary) District as Coast Protection Authorities and vests in them general permissive powers to carry out Coast Protection Work, which is defined as "any work of construction, alteration, improvement, repair, maintenance, demolition or removal for the purpose of the protection of any land...". Protection is defined as "protection against erosion or encroachment by the sea".

Under the Environment Act 1995 the Environment Agency has a duty to exercise a general supervision over all matters relating to flood defence in England and Wales. The EA is also a formal consultee on certain planning and development control matters relating to coast protection and flood defence. Following recent changes and Ministerial delegation, the EA has taken responsibility for what were Defra's Coastal Protection functions. The EA now has a Coastal Strategic Overview role for sea flooding and coastal erosion risk management.

In general coast protection authorities have power to carry out coast protection work, whether within or outside their area, as may appear to them to be necessary or expedient for the protection of any land in their area; and may enter into an agreement with any other person to carry out such works.

Where it appears that land requires protection the CPA provides general powers to either serve notice on the owner and occupier of the land to undertake the maintenance and repair of defences or for the coast protection authority to undertake the works if necessary.

For further information regarding the Coastal Protection Act 1949 and coastal protection authority's powers to carry out coast protection works, or to check

and discuss the necessary licences and consents required for proposed maintenance or improvement works to flood and coastal defences, please contact your local authority or the Environment Agency, or visit www.northsolentsmp.co.uk

Private Defences

Private landowners within the Solent region have a key role in the way the shoreline is managed. Third party funded ownership and maintenance of defences have been very important factors that have been acknowledged during the appraisal of policies. The North Solent SMP recognises that private landowners have certain rights to protect their property and to continue to maintain existing defences, provided it does not constitute 'development' of any kind without the need for planning permission but they should always check with their Local Planning Authority before carrying out any works. In general, planning permission would not be needed for works of maintenance or minor works required to enable continued use of existing structures while they are structurally sound. These rights apply and remain regardless of the SMP policies.

During the development of the SMP it has been clearly stated that no public funding is available for the maintenance of privately owned defences, as is currently the case. There is therefore, a risk that if defences are not maintained by the landowner, flood risk to landholdings, properties and environmentally important sites could increase. Coastal communities have raised concerns over the uncertainty of funding and continued maintenance of privately owned and maintained defences and the risks associated with either non-maintenance or failure of private defences. Landowners and coastal communities will need to be engaged with subsequent flood and erosion risk management strategy studies to identify scale of risks and possible alternative sources of funding. Current advice indicates that there is no legal obligation for a landowner to maintain defences or liability if defences fail which causes flooding elsewhere. A range of issues relating to privately owned and maintained defences have been discussed during consultations with landowners. The landowner's intentions have been sought regarding future management of their defences; these intentions have been considered in the final policies and reflected in a change of policies where an objective-led policy of Managed Realignment was initially proposed.

However, there may be the requirement for new or additional defences on currently undefended frontages in response to sea level rise or flood risk increases; this could be applicable to undefended frontages within a frontage with a proposed Hold the Line or No Active Intervention policy. New construction works, or works of improvement (such as increasing the height, width or length of the defences), demolition or removal of defences will almost certainly require planning permission and may require various consents and licences depending upon the type, location and timing of the proposed works, and will consider the relevant planning policies for the area, as is currently the case.

When considering a planning application on a case-by-case basis, Planning and Development Control Officers will consider the relevant and applicable statutory plans, planning policies, related advice and constraints and will have regard to the non-statutory SMP. Planning operates independently of other legislation and consent under the following regimes may well also be required: Food and Environment Protection Act (FEPA) licence, Coast Protection Act 1949 Section 34 Consent, Land Drainage Consent, Environmental Impact Assessment (EIA), Appropriate Assessment (AA), Strategic Flood Risk Assessment (SFRA), etc. The Local Planning Authority will, therefore, seek the advice of statutory consultees, such as the Environment Agency (e.g. flood risk, etc.), Coastal Protection Authority (shoreline erosion and coastal processes, etc.), Natural England (environmental issues, European and national nature conservation designations, etc.), and their views will be taken into account when considering a planning application.

Planning permissions will not be determined solely by the SMP coastal defence policy. The SMP policies relating to privately owned and currently undefended frontages would therefore not prevent an application from being approved, as the SMP is only one of the material considerations taking into account in reaching a decision by the planning authority along with any formal views from the statutory agencies involved in coastal issues. An information note for landowners and planners has been prepared to provide guidance on coastal planning issues.

Defences maintained by Ministry of Defence

The Ministry of Defence (MOD) advised that they will continue to operate from their existing sites, which includes a number of coastal frontages, and they will manage their flood defence assets accordingly in order to maintain the required operational capabilities of their facilities. Therefore, funding through MOD budgets will need to be secured to undertake the necessary maintenance and improvements works that have been identified.

Coastal Defence Strategies

During development of the North Solent SMP, significant work has been undertaken towards three Coastal Defence Strategies (CDSs) within the SMP study area. Rather than repeat appraisal work in the SMP for these relevant frontages, policies recommended or proposed under these CDSs have, where possible, been used directly in the SMP. Other sectoral strategies, of varying status (i.e. concluded and approved, concluded and not approved, not concluded or approved) have also been available to the SMP and are stated in the relevant Policy Statements. Table 1 shows the SMP policy units covered by the relevant strategies and the corresponding strategy frontage.

The emerging draft Portchester to Emsworth CDS has previously been out to public consultation and is nearing completion of revisions. The draft Itchen, Weston Shore, Netley and River Hamble CDS frontages will be out to public

consultation during summer and autumn of 2010. The North Solent SMP policies for these frontages may therefore, require revisions to reflect the final policies arising from these CDS; this policy review requirement has been identified and included in the Action Plan for the North Solent SMP.

SMP Unit	Policy	Coastal Defence Strategy	SMP1 Management Unit Reference or area
5A01		Pagham to East Head (approved)	Medmerry
5A02			East Wittering & Bracklesham
5A03			Cakeham
5A04			West Wittering
5A16		Portchester to Emsworth (emerging draft)	Emsworth
5A17			Warblington
5A18			Langstone
5A19 (part)			Brockhampton Quay
5A21 (part)			M27, Farlington Marshes
5A20			Horsea Island
5A21 (part)		Portchester and Paulsgrove	
5C01		River Itchen, Weston Shore, Netley and River Hamble (draft)	HAM8
5C02			HAM 5,6,7
5C03			HAM4
5C04			HAM2, 3
5C05			HAM1
5C06			NET6
5C07			NET5
5C08			NET4
5C09			NET2, 3
5C10			NET1
5C11			ITCH3,4
5API01		Portsea Island (approved)	Portsea Island harbour frontages and open coast
5API02			
5AHI04		Selsmore to Mengham Strategy (not concluded and not approved)	
5AHI05		Eastoke Strategy (approved)	Eastoke, Hayling Island
5C15		Western Solent Coastal Defence Strategy (in progress)	Calshot, Lepe, Beaulieu, Lymington, Pennington, Keyhaven, Hurst Spit, West Solent
5C16			
5C17			
5C18			
5C19			
5C20			
5C21			
5C22			
5F01			

Table 1 SMP Policy Units and Coastal Defence Strategy Frontages