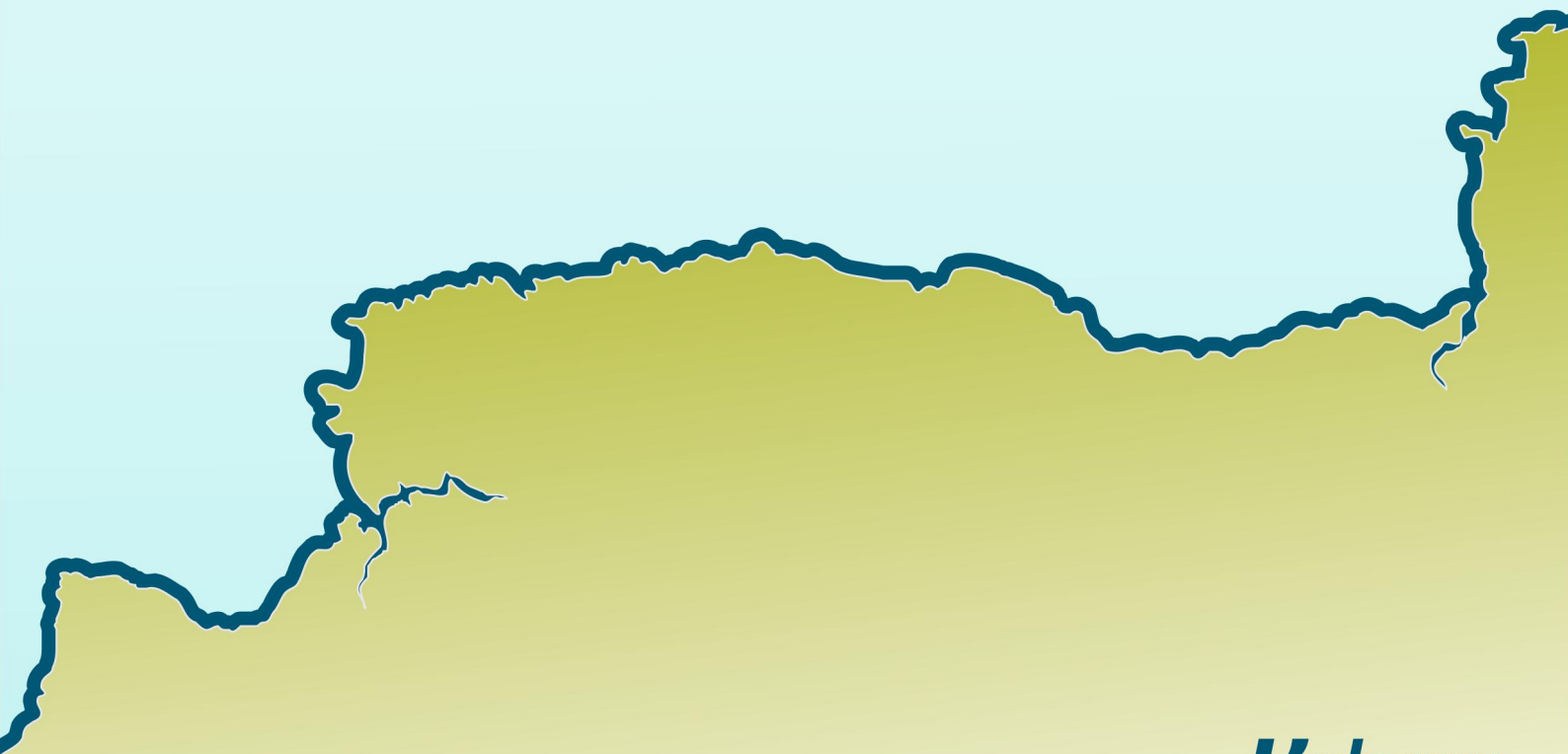


North Devon and Somerset Coastal Advisory Group (NDASCAG)

Shoreline Management Plan Review (SMP2) Hartland Point to Anchor Head

Shoreline Management Plan (Final)
October 2010



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4	3	Draft Final for Adoption	31 st July 2010	JR
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REFERENCES

GLOSSARY

APPENDICES:

A – SMP DEVELOPMENT

B – STAKEHOLDER ENGAGEMENT

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I – STRATEGIC ENVIRONMENTAL ASSESSMENT REPORT

J – APPROPRIATE ASSESSMENT REPORT

K – WATER FRAMEWORK DIRECTIVE ASSESSMENT REPORT

L – METADATA AND BIBLIOGRAPHIC DATABASES

M – ACTION PLAN SUMMARY TABLES

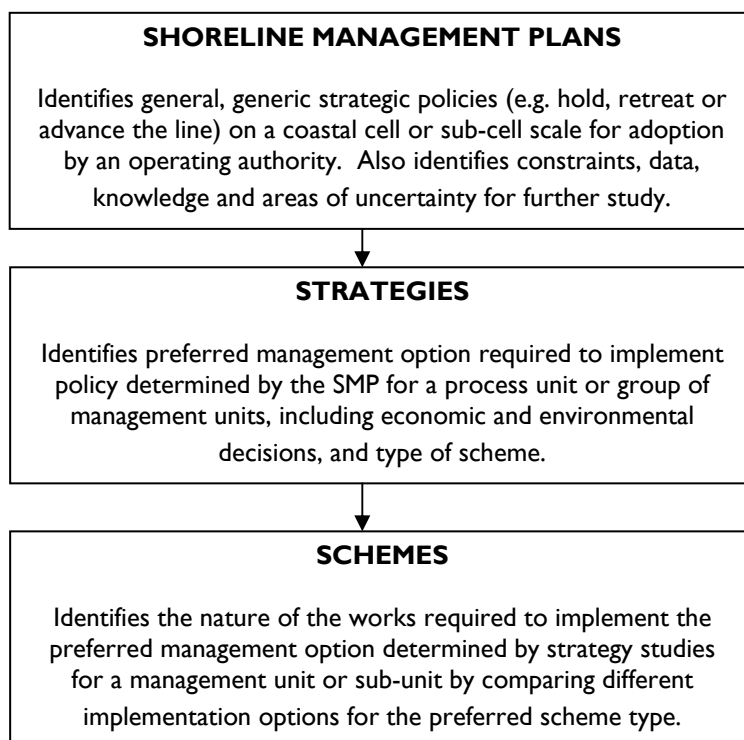
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I Introduction

I.1 The Shoreline Management Plan

A Shoreline Management Plan (SMP) provides a large-scale assessment of the risks associated with coastal evolution. It includes a policy framework to address these risks in a sustainable manner with respect to people and the developed, historic and natural environment. 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 provide the policy framework from which more detailed strategies and schemes are developed to identify the best way of implementing policy. Figure I.1 shows where SMP sits in terms of the overall context of flood and coastal erosion risk management in the UK.

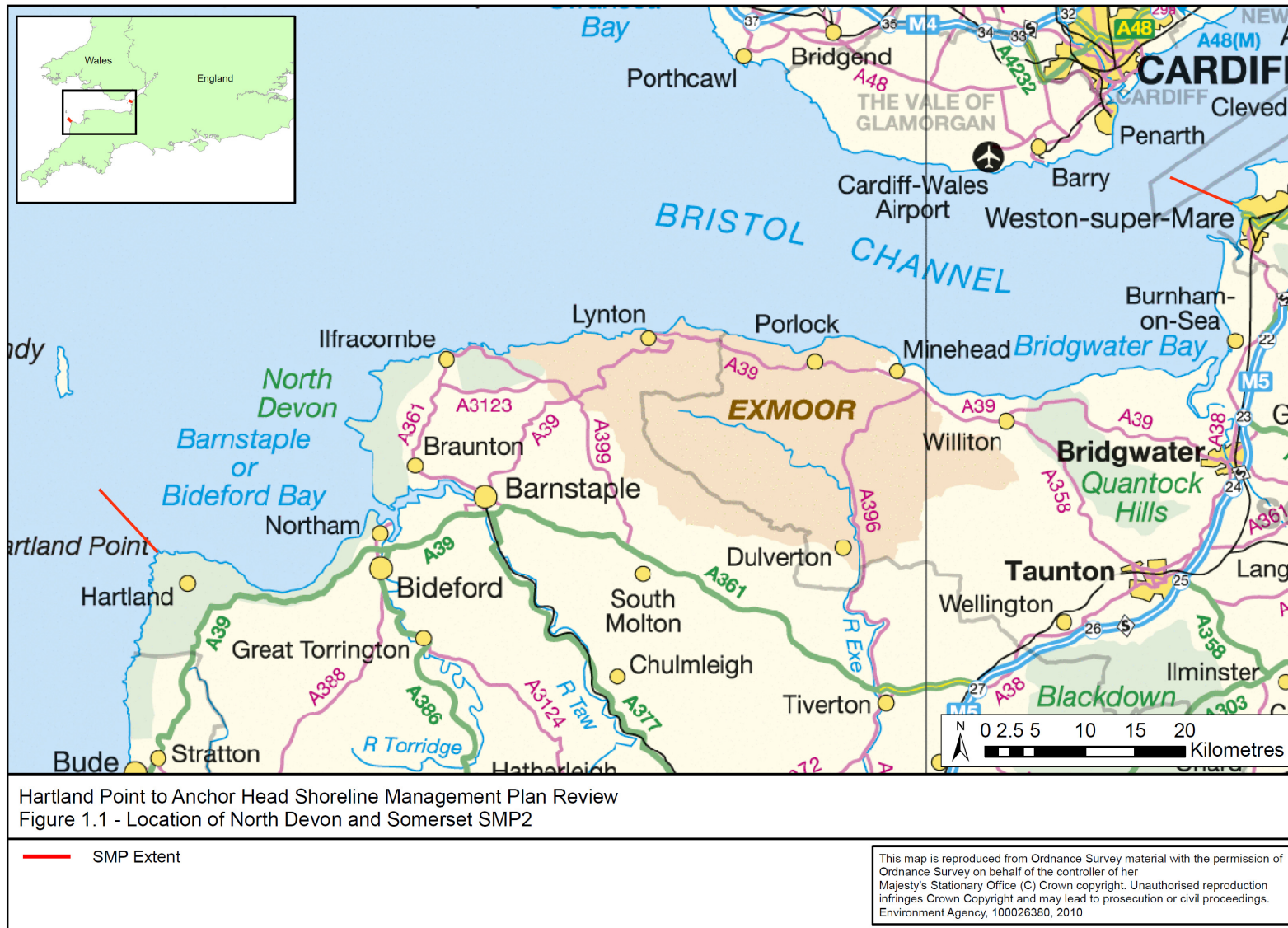
Figure I.1 Stages in Implementing UK Coastal Management Policy and Legislation (adapted from Atkins 2004 and Defra 2001)



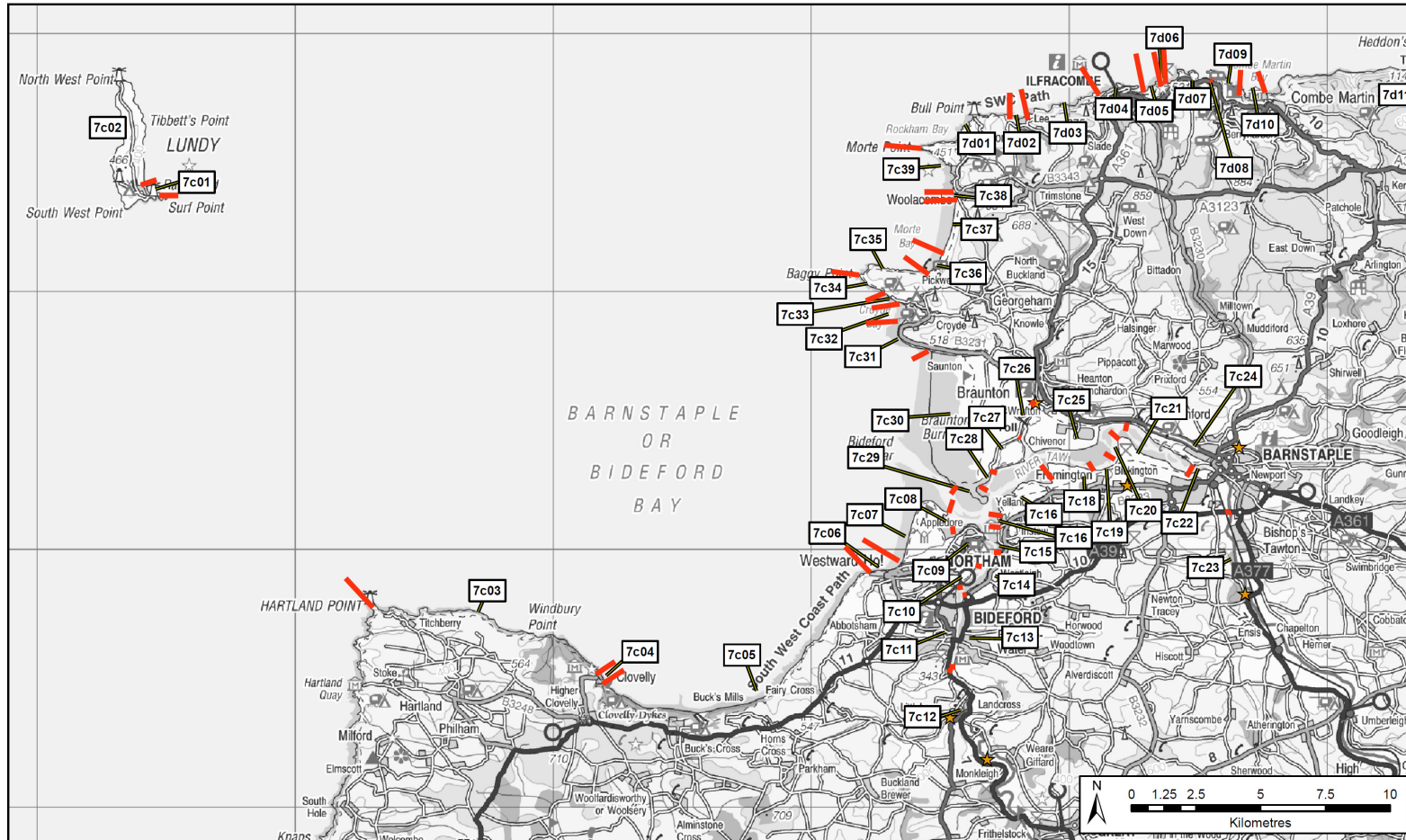
This document provides the first revision to the original Bridgwater Bay to Bideford Bay SMP, that covered the area from Hartland Point to Brean Down (including Lundy Island) and part of the original Severn Estuary SMP covering the coast between Brean Down and Anchor Head). These were adopted in 1998 and 2000 respectively. The change in extent between the first SMP and this SMP revision is in recognition of the potential for a breach of the dunes to the south of Brean Down that would potentially affect Weston Bay to the north. To take account of this potential linkage, the boundary of the SMP was moved from the south to the north side of Weston Bay, to Anchor Head.

Figure I.2 shows the area covered by the North Devon and Somerset SMP whilst Figures I.3a to I.3c show the location of policy units along the SMP frontage.

The structure of the SMP documents, and how they relate to each other, is summarised in the flow chart on the following page in Figure I.4. Further details of this structure are provided in **Section I.2**.



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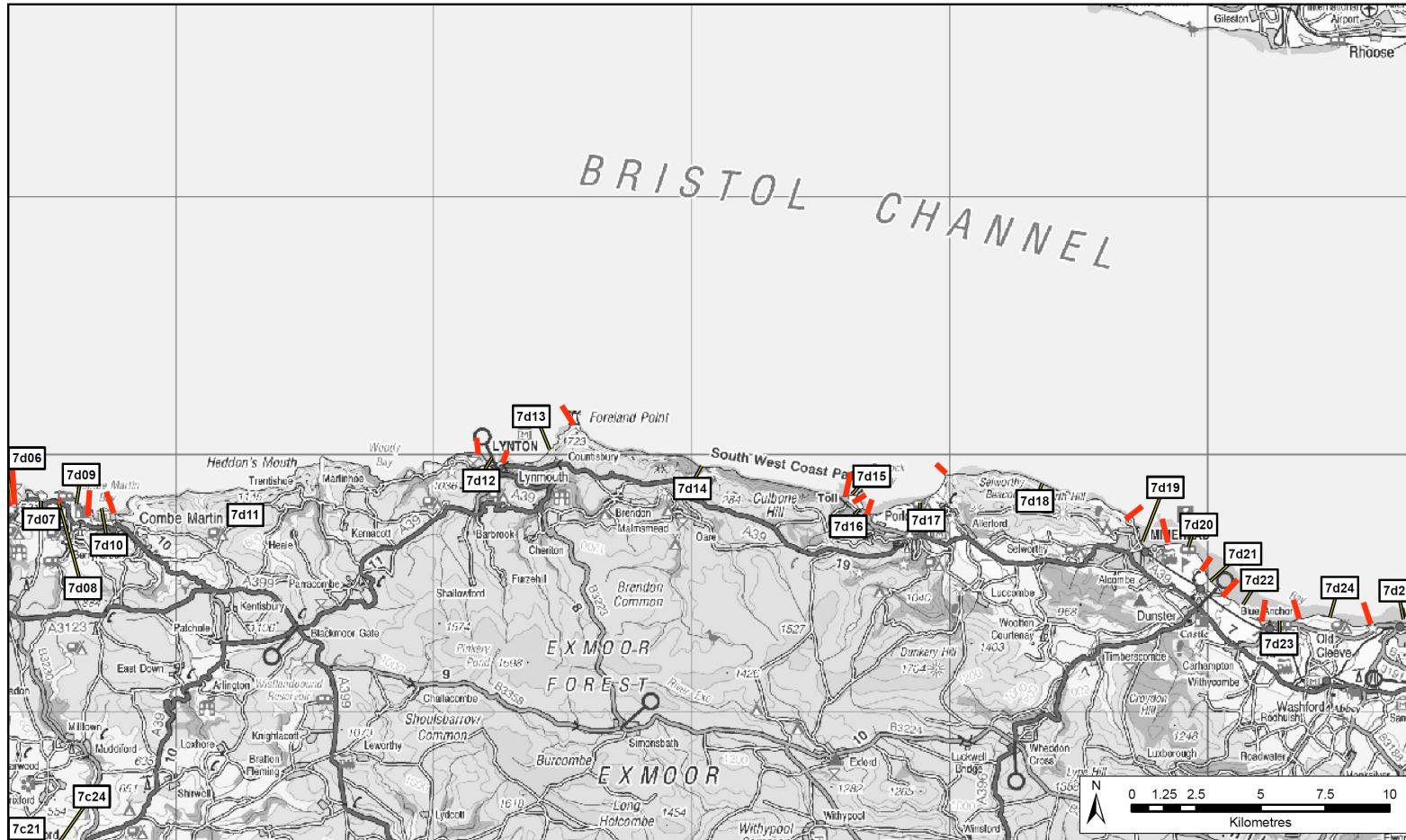


North Devon and Somerset SMP2
Figure 1.3(a) - Overview Map (1 of 3)

- Policy Unit Boundary
- ★ Tidal Estuary Limit

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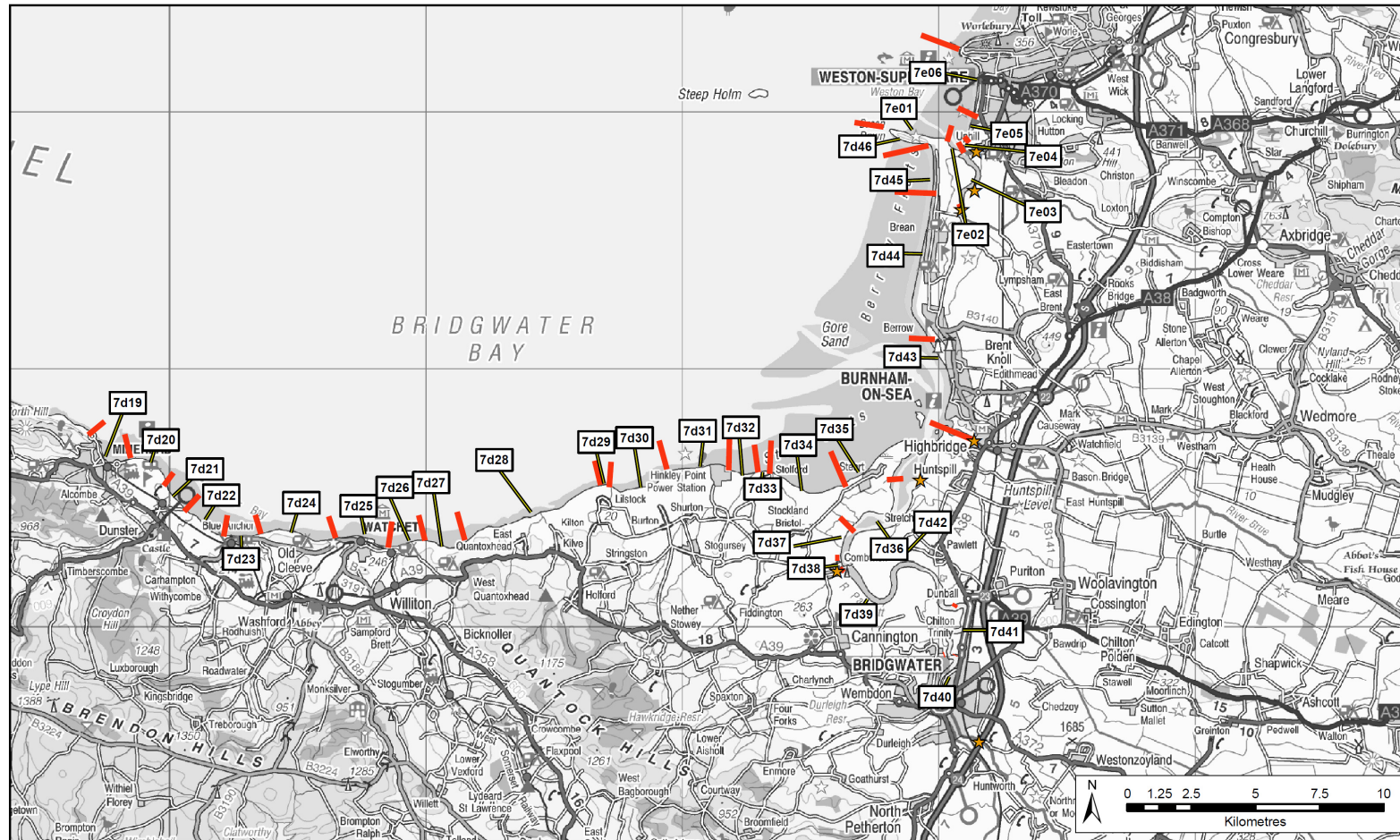


North Devon and Somerset SMP2
Figure 1.3(b) - Overview Map (2 of 3)

- Policy Unit Boundary
- ★ Tidal Estuary Limit

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North Devon and Somerset SMP2
Figure 1.3(c) - Overview Map (3 of 3)

- Policy Unit Boundary
- ★ Tidal Estuary Limit

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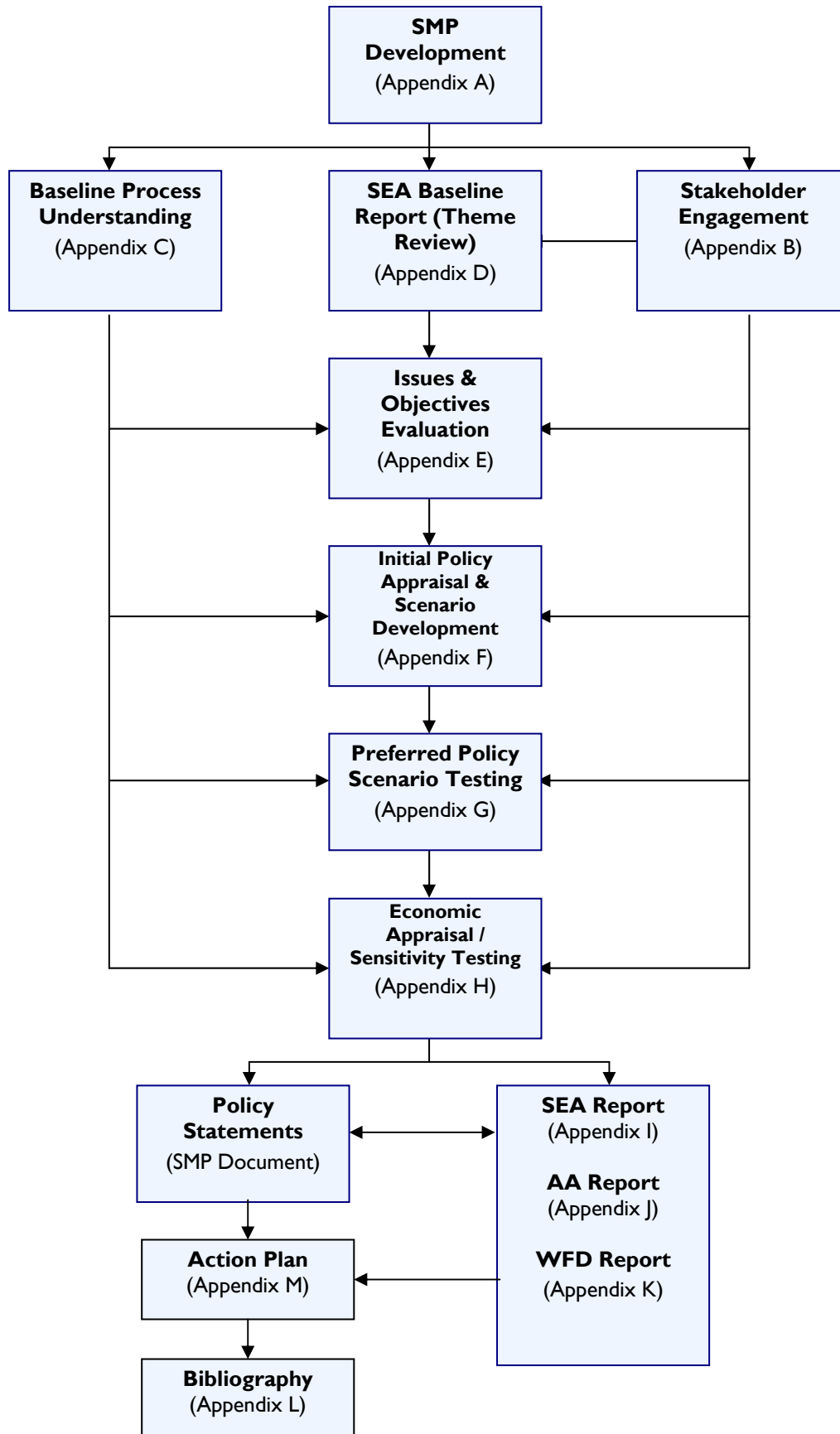


Figure 1.4 Flow chart showing how the SMP documents are structured

1.1.1 Guiding principles

The SMP is a non-statutory policy document for coastal flood and erosion risk management planning. It takes account of other existing planning initiatives and legislative requirements, and is intended to inform wider strategic planning¹. The SMP does not set policy for anything other than coastal defence management.

The SMP promotes management policies for the coastline into the 22nd Century to achieve long-term objectives, while being technically sustainable, environmentally acceptable and economically viable. It is, however, recognised that given the differences between short and long term objectives, changes to management policy in the short term may be unacceptable. Thus, the SMP provides an approach for meeting objectives through appropriate management change, i.e. a 'route map' for decision makers to move from the present situation towards the future.

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

This North Devon and Somerset SMP2 covers original SMPs of (1) Hartland Point to Brean Down, including Lundy Island, and (2) the Severn Estuary coastline, specifically the part between Brean Down and Anchor Head, which is identified as coastal process sub-cells 7c, 7d, and 7e in a 1994 study for MAFF, now Defra. Since that time many lessons have been learned. Reviews funded by Defra (2001, 2003) have examined the strengths and weaknesses of various plans and revised guidance has been issued. Some of this guidance is targeted at achieving greater consistency in the assessments and presentation of these plans, but more fundamental issues were identified, which this and other SMP reviews have to address.

One significant issue is the inappropriateness of certain policies which, when tested in more detail with a view to being implemented, may be found to be unacceptable or impossible to justify either economically or technically. It is therefore important that the SMP is realistic, given known legislation and constraints, both human and natural, and not promise what cannot be delivered. There would be no value in a long-term plan which proposes policies that are driven by short-term politics and which cannot be justified once implementation is considered several years in the future. Equally, whilst the affordability of each policy has been considered, its adoption by the local authorities involved does not represent a commitment to fund their implementation. Ultimately, the economic viability of policy implementation must be considered in the context

¹ The planning reforms under the Planning and Compulsory Purchase Act 2004 identify a requirement for Regional Spatial Strategies (the new regional level statutory planning document) and Local Development Documents (the new local level statutory planning document). These are required to contribute to the achievement of sustainable development and are supported by a range of government planning policy advice and guidance, in particular Planning Policy Statements (PPSs) and their predecessors Planning Policy Guidance Notes (PPGs). This advice and guidance shapes and directs planning at the regional and local level. Under the Act, Regional Planning Guidance for the South-West (RPG10) is being replaced by the South West Regional Spatial Strategy (RSS), the draft of which was approved by the Regional Assembly and submitted to the minister in April 2006. The final RSS is due for publication in the summer of 2009. The South West RSS recognises the need for an integrated approach to managing the coastal zone, recognising the links between the natural and historic environment, social, recreational and economic value of the coastal area, and flood and erosion risk management. Policies CO1: Defining the Coastal Zone, CO2: Coastal Planning, F1: Flood Risk are relevant, with Policy CO1 presuming against development of the undeveloped coast, and Policy CO2 advocating a sustainable, and consistent cross-border approach to coastal planning and management. These policies require local planning authorities to take account of SMPs both during the preparation of their Local Development Documents and in the determination of planning applications.

of budgetary constraints (whether private or government funding), and it cannot be guaranteed that budgets will be available for all policies. It is also important to recognise that implementation measures would need to meet the approved and adopted policy set out in the plan, or it would be extremely unlikely that either funding or planning approval would be granted.

The SMP must also remain flexible enough to adapt to changes in legislation, politics and social attitudes as well as helping to shape them by providing a route map for future change. The SMP therefore considers objectives, policy setting and management requirements for three main epochs; the present day (short-term), the medium-term and the long-term, corresponding broadly to time periods (also referred to as epochs) of 0 to 20 years, 20 to 50 years and 50 to 100 years respectively. There is a need to have a long-term sustainable vision, which may change with time, but the plan should demonstrate that defence decisions made today are not detrimental to achievement of that vision.

1.1.2 Objectives

The objectives of the SMP are as follows:

- to define, in general terms, the risks to people and the developed, historic and natural environment as a result of coastal evolution and behaviour within the SMP area over the next century;
- to identify the preferred policies for managing risks, together with the reasoning behind the choice of those policies;
- to identify the consequences of implementing the preferred policies;
- to inform planners, developers and others of the risks of coastal evolution and the preferred policies for managing those risks 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; and
- to highlight areas where knowledge gaps exist.

1.1.3 The SMP policies

The shoreline management policies considered are those defined by Defra (2006):

Hold the existing defence line	maintain or change the level of protection provided by defences in their present location.
Advance the existing defence line	build new defences on the seaward side of the existing defence line to reclaim land.
Managed realignment	allowing the shoreline position to move backwards (or forwards) with management to control or limit movement.
No active intervention	a decision not to invest in providing or maintaining defences.

1.2 Structure of the SMP

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

- the Management Plan (this document); and

- a series of supporting documents presented as appendices to the Management Plan.

1.2.1 The Management Plan

The Management Plan sets out the preferred policies for managing the risks of coastal evolution over the next century. It is intended for general readership and is the main tool for communicating intentions. While the justification for decisions is presented, further information can be found in the supporting documents.

The management plan is presented in six parts:

- **Section 1 (this part)** – gives details on the principles, structure and background to the plan’s 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** – presents the basis for development of the management plan, describing the concepts of sustainable policy and providing an understanding of the constraints and limitations on adopting certain policies.
- **Section 4** – presents a broad overview of the preferred policies, discussing their rationale, implications and requirements for implementation and management.
- **Section 5** – provides a series of statements that give details of how the policies might be implemented and the local implications of these policies in terms of: management activities; property, built assets and land use; landscape; nature conservation; historic environment; and amenity and recreational use.
- **Section 6** – provides a programme for future activities to progress the plan between now and its next review.

Although it is expected that many readers will focus upon the local details in Section 5, it is important to recognise that the SMP is produced for the North Devon and Somerset coast as a whole, considering issues beyond specific locations. Therefore, these 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

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

This information is largely of a technical nature and is provided in 12 parts and two databases.

- **Appendix A: SMP Development** – provides the history of the SMP development, describing the policy decision-making process in detail.
- **Appendix B: Stakeholder Engagement** – provides communications from the all important stakeholder process, together with information arising from the consultation process.
- **Appendix C: Baseline Process Understanding** – includes the baseline coastal process report, defence assessment, no active intervention and With Present Management process assessments and summarises data used in the assessments.

- **Appendix D: SEA Environmental Baseline Report (Theme Review)** – identifies and evaluates the environmental features of the coastline (human, natural, historical and landscape) in terms of their significance and how these need to be considered by the SMP.
- **Appendix E: Issues and Objective Evaluation** – provides information on the issues and objectives identified as part of the plan development, including an appraisal of their importance.
- **Appendix F: Initial Policy Appraisal and Scenario Definition** – provides evaluation of the impacts of a range of policy scenarios upon shoreline evolution – a key part in determining the acceptable sustainable policies and their combination into ‘scenarios’ for testing.
- **Appendix G: Preferred Policy Scenario Testing** – provides a summary of the assessment and appraisal of the preferred policies, via (i) assessment of shoreline interactions and response against preferred policy; and (ii) assessment and achievement of the objectives against the baseline scenario (no active intervention) and the preferred policies. The assessments are based on the findings of appendices E and F.
- **Appendix H: Economic Appraisal and Sensitivity Testing** – provides a high-level assessment of the economic justification of each preferred policy, which is reported in terms of “justified”, “not justified” and “marginal”.
- **Appendix I: Strategic environmental assessment report** – pulls together the various items undertaken in developing the plan that specifically relate to the requirements of the EU Council Directive 2001/42/EC (the Strategic Environmental Assessment Directive), such that all of the key information is readily identifiable either within this one document, or in other parts of the SMP documentation (e.g. Appendix D).
- **Appendix J: Appropriate Assessment** – presents the Appropriate Assessment of SMP policy impacts upon European designated sites (Special Protection Areas and Special Areas of Conservation) as well as Ramsar sites, where policies might have a likely significant effect upon these sites. This is carried out in accordance with the Conservation (Natural Habitats, &c.) Regulations 1994 (the Habitats Regulations).
- **Appendix K: Water Framework Directive Assessment** – presents assessment of potential impacts of SMP policies upon coastal and estuarine water bodies, in accordance with the requirements of EU Council Directive 2000/60/EC (the Water Framework Directive).
- **Appendix L: Meta-database and Bibliographic database** – includes all supporting information used to develop the SMP.
- **Appendix M: Action Plan Summary Table:** Presents the Action Plan items included in Section 6 of this document in tabular format for ease of monitoring and reporting action plan progress.

These appendices are presented on a CD provided at the front of the Management Plan.

1.3 The Plan Development Process

1.3.1 Revision of the SMP

The original Bridgwater Bay to Bideford Bay and Severn Estuary SMPs were adopted in 1998 and 2000 respectively. Part of the SMP process is to regularly review and update SMPs, taking account of new information and knowledge gained in the interim. This is the first revision of these two plans, which for the

purpose of this SMP, has combined the original Bridgwater Bay to Bideford Bay SMP area with part of the Severn Estuary SMP area (Brean Down to Anchor Head), based upon recommendations made by Defra (2006). This revision has taken account of:

- latest studies e.g. Futurecoast (Halcrow, 2002), various reports on climate change e.g. UKCIP02 and UKCP09, Risk Assessment of Coastal Erosion (RACE), and mapping e.g. Environment Agency Flood Zone Mapping² and emerging National Coastal Erosion Risk Mapping.
- issues identified by most recent defence planning, i.e. coastal defence studies and schemes that cover parts of the SMP area undertaken, or in the process of being undertaken, since completion of the original SMP. This includes: the Burnham to Brean Coastal Study; Parrett Estuary Flood Risk Management Strategy, Severn Estuary Flood Risk Management Strategy, Weston Seafront Strategy Study, Steart Managed Realignment Study, Stolford to Combwich Strategy Study, Bridgwater to Burnham-on-Sea Flood Management Strategy, Minehead to Blue Anchor Coastal Defences Study, Warren Point to Dunster Beach Coastal Defence Study, and Weston-super-Mare Sea Defences Scheme.
- changes in legislation such as the EU Habitats and Birds Directives and the Marine and Coastal Access Act 2009.
- changes in national defence planning requirements such as the need to consider 100-year timescales in future planning and modifications to economic evaluation criteria.
- the results of coastal monitoring activities.

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

This SMP does not account for proposed developments, only those constructed or being progressed during the time that the plan was being developed. At the time of writing, there are a number of proposed developments being considered for the North Devon and Somerset frontage, including:

- along the Steart Peninsula with detailed studies being undertaken to assess the potential for managed realignment in the area, in part to provide compensatory habitat for expansion of Bristol Port further up the Severn Estuary;
- decommissioning of Hinkley Point Power Stations A and B, with the proposed construction of one or more new nuclear reactors at Hinkley Point;
- redevelopment of Ilfracombe harbour including building an outer breakwater, a marina with a barrage and lock with facilities for ferries and visiting cruise ships, and redevelopment of the theatre area with additional tourist attractions;
- ongoing Environment Agency studies for a surge barrier on the River Parrett downstream of Bridgwater; and
- several options identified for the Severn Tidal Power Scheme; the option within the SMP study area involves a barrage across the Severn Estuary between Weston-super-Mare and Cardiff (refer also to Section 3.2.4).

² Please note 2008 flood zone data has been used during the development of this plan. The Environment Agency continually updates the flood map plans. To see the latest data, please go to www.environment-agency.gov.uk

The potential impacts that some of these developments will have on the coastline will be examined in the next review of the SMP. They may proceed ahead of the next SMP review if it can be shown that they are sustainable and do not have adverse impacts on the adjacent sections of coastline.

1.3.2 Production of the SMP2 review

Development of this SMP revision has been led by a client steering group comprising members of the North Devon and Somerset Coastal Advisory Group. This group includes technical officers and representatives from North Devon District Council, North Somerset Council, Torrington District Council, West Somerset District Council, Sedgemoor District Council, Devon County Council, Somerset County Council, the Environment Agency, English Heritage, Exmoor National Park, the National Trust, Natural England and the RSPB.

The SMP process has involved over 400 registered stakeholders who were kept up-to-date and their views sought throughout. Many of these stakeholders participated at key decision-making points throughout the process, via Key Stakeholder Forums (KSF). A number of rounds of KSF meetings 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 preferred plan policies.

The SMP is based upon information gathered largely between August 2008 and January 2010.

The main activities in producing the SMP have been:

- development and analysis of issues and objectives for various locations, assets and themes;
- thematic reviews reporting upon human, historic and natural environmental features and issues, and evaluating these to determine the relative importance of objectives;
- analysis of coastal and estuarine processes and evolution for baseline cases of not defending and continuing to defend the coastline as at present;
- agreement of objectives with the key stakeholders, to determine possible policy scenarios;
- development of policy scenarios based on key objectives and primary drivers (identified and developed through discussion with the key stakeholders) 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 preferred plan and policies through review with the North Devon and Somerset Coastal Advisory Group prior to compiling the SMP document;
- consultation on the proposed plan and policies;
- consideration of consultation responses and finalisation of the SMP for formal adoption; and
- adoption of the SMP by the local authorities and dissemination.