

Kelling to Lowestoft Ness Shoreline Management Plan

Appendix A: SMP Development

Contents

Introduction	1
Project Information	2
SMP Programme	5
Stage 1: Scope SMP	7
Stage 2: Assessments to Support Policy Development	9
Stage 3: Policy Development	14
Stage 4: Public Examination.....	18
Stages 5 and 6: Finalise and Disseminate Plan	21
Stage 7: Unify SMP and Prepare Supporting Documents.	22
Stage 8: SMP Finalisation and Dissemination	24

Introduction

This Appendix provides a full explanation of the Shoreline Management Plan (SMP) process adopted, a description of the policy decision-making process and outlines the chronology of the SMP development.

It also provides a 'route map' for the supporting information used in the SMP development and included in appendices, these are as follows:

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 baseline process report, defence assessment, No Active Intervention (NAI) and With Present Management (WPM) assessments and summarises data used in assessments.
D: Thematic Studies	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: Policy Development and Appraisal	Presents the consideration of generic policy options for each frontage, identifying possible acceptable policies, and their combination into 'scenarios' for testing. Also presents the appraisal of impacts upon shoreline evolution and the appraisal of objective achievement.
G: Preferred Policy	Presents the policy assessment and appraisal of objective achievement for the Plan.
H: Economic Appraisal	Presents the economic analysis undertaken in support of the Plan.
I: Sources of Data	All supporting information used to develop the SMP is referenced for future examination and retrieval.

Project Information

SMP BACKGROUND

This SMP is an update of the Sheringham to Lowestoft SMP produced by Halcrow in 1996. The SMP was developed and produced in accordance with the latest Procedural Guidance (PG) for the production of SMPs (Defra, 2004) and as one of the first second generation SMPs to be produced, formed part of the testing of the PG. The SMP was initially developed over the period April 2003 to July 2006. As not all of the coastal authorities felt able to adopt the plan in this form, it was subject to a second drafting to provide a unified text that addresses the concerns of each authority, and takes into account the views of the many members of the public who commented on the first version of the plan. This work has been undertaken between December 2008 and April 2010

CLIENT STEERING GROUP (CSG)

At the start of the SMP process the Client Steering Group was defined and comprised the following core members:

Mr Peter Frew (Chairman)	North Norfolk District Council (Lead Authority)
Mr Gary Watson (Secretary)	North Norfolk District Council
Mr Bernard Harris	Great Yarmouth Borough Council
Mr Julian Walker/ Mr Paul Patterson	Waveney District Council
Mr Guy Cooper/ Mr Steve Hayman	Environment Agency
Mr Peter Lambley/ Mr John Jackson	Natural England
Mr David Wilson	Defra
Mr Patrick McNamara	Great Yarmouth Port Authority

Additional attendees included:

Mr Gary Alexander	North Norfolk District Council (Planning Department)
Mr Ian Dodson	Environment Agency (Project Manager for Happisburgh to Winterton Strategy Review)

This group therefore included a representative from each of the district authorities as well as Defra, Natural England and the regional Environment Agency office.

It was agreed that North Norfolk District Council would be the Lead Authority and as such were responsible for the financial management of the project, including grant aid submission, and overall project administration. The CSG had overall responsibility for the delivery of the SMP and were involved throughout the life cycle of the SMP. As well as initiating the development process and defining the scope and extent of the SMP, they were responsible for managing the development of the

SMP through guidance and review of the work undertaken. The group will also oversee implementation of the SMP, with regular meetings continuing following completion of the SMP.

CONSULTANT

Halcrow Group Ltd were commissioned to produce the SMP on behalf of the CSG. Some tasks were sub-contracted, with agreement from the CSG, to Terry Oakes Associates, including the stakeholder engagement process and objective setting.

Key team members included:

Mr Kevin Burgess	Project Director
Dr Helen Jay	Project Manager
Ms Emma Fisher	Coastal Scientist
Mrs Eleni Paipai	Principal Environmental Scientist
Ms Sharon Duggan	Ecologist
Dr Richard Westaway	GIS Analyst
Mr Terry Oakes (Terry Oakes Associates)	Stakeholder consultant
Mr Keith Tyrell (Terry Oakes Associates)	Stakeholder consultant

As identified previously, it was necessary to undertake a substantial amount of work to produce a unified plan which all coastal authorities felt could be adopted, and which reflected the concerns of local residents potentially affected by the policies. It was also necessary to prepare a separate Strategic Environmental Assessment (SEA), a Habitats Regulation Assessment (HRA) and a Water Framework Directive (WFD) Compliance Assessment. All of this work was undertaken by AECOM, supported by Jan Brooke.

Key members of the team included

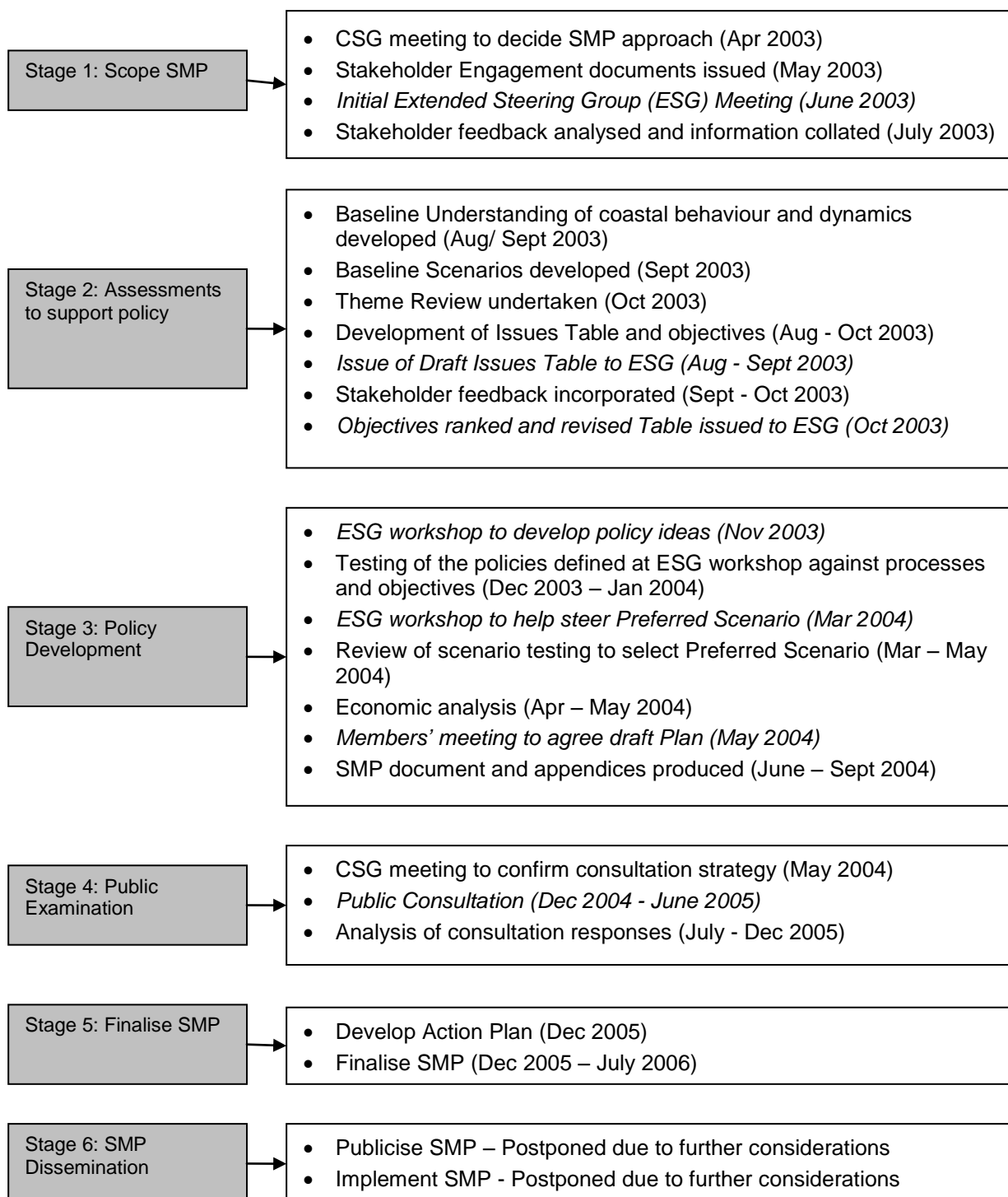
Mr David Wells	Project Director
Mr Nigel Pilkington	Project Manager
Mrs Jan Brooke	WFD and Coastal Policy Consultant
Ms Charlotte Brightwell	Environmental Scientist/SEA
Ms Pamela Hudson	Principal Ecologist/HRA
Mr Owen Tucker	Senior Environmental Scientist/WFD

SMP STUDY BOUNDARIES

This SMP relates to Sub-cell 6 as defined by Defra and the first SMP covered the area from Sheringham to Lowestoft. The boundary at Sheringham was originally defined due to the sediment null point/drift divide; however, this point is known to shift in position between Weybourne and Cromer. Therefore at the start of the study it was decided by the CSG that a more suitable boundary would be at Kelling (to the west of Cromer), where there is also a change in geomorphology and coastal system from shingle barrier to cliffed coastline. No change was made to the southern boundary at Lowestoft Ness, which has been identified previously as the point at which material moved alongshore from the north is moved offshore.

SMP Programme

The Figure below illustrates the timetable of activities carried out as part of the initial SMP development, highlighted in *italics* are the activities that involved stakeholder engagement (further details are included in [Appendix B](#)).



Stage 7: Unify SMP
and prepare supporting
documents

- CSG meeting agree approach to unification of the SMP (Dec 2008)
- *Presentation to Elected Members of proposed approach to policy setting (Apr 2009)*
- Prepare Strategic Environmental Assessment Report based on original baseline, supplemented where necessary with new or missing information. (Jan 2009 to March 2010)
- Undertake two stage Habitats Regulation Assessment (Jan 2009 to March 2010).
- Undertake Water Framework Directive Compliance Assessment following EA guidelines as well as supplementary assessment work. (Jan 2009 to March 2010).
- *Issue of two newsletters to the public via Parish Councils*
- *Second presentation to Elected Members, explaining the proposed final policy text.*
- Update Action Plan for implementing the SMP (Jan 2010 to April 2010)
- Issue SEA for consultation (May 2010 to June 2010)
- Issue final SMP, SEA, HRA and WFD documents. (Dec 2010)
- SEA representations lead to some changes to the SMP policies and therefore the SEA required updating.
- Second SEA consultation (Feb-April 2012)
- CSG Consideration of SEA responses

Stage 8: SMP
Finalisation &
Disemination

- Adoption of SMP by Partner local Authorities (Nov 2011 – July 2012)
- Completion of adoption documentation (including Statement of Environmental Particulars) and submission of all supporting documentation to Environment Agency (Sept 2012)
- Communication Plan
- Publication of Post Adoption Statement
- Publication of adopted SMP6 documents.

Stage 1: Scope SMP

STAKEHOLDER ENGAGEMENT STRATEGY

A three level approach was adopted:

- Level 1: the Client Steering Group
- Level 2: an Extended Steering Group (ESG)
- Level 3: additional stakeholders.

The aim of the ESG was to act as a focal point for discussion and consultation throughout development of the SMP; and members of the ESG were involved in a series of workshops throughout the SMP development and also consulted through written correspondence. [Appendix B](#) provides further details of all ESG meetings and stakeholder engagement exercises.

Membership of both the ESG and additional stakeholder group was determined through discussion with the CSG and through utilising the first SMP and existing strategy studies. Representatives were invited from a range of local, regional and national interest groups: a full list is provided in [Appendix B](#). A database of names, organisations and contact details was created.

Although Elected Members were not formally involved during the SMP development they were consulted at the start of Stage 4 (Public Examination). Further details are provided in [Appendix B](#).

DATA COLLECTION

Data was collected via a number of sources including stakeholders, literature searches and web-searches. Key resources were:

- The first round SMP (Halcrow, 1997)
- Futurecoast (Halcrow, 2002)
- Existing strategy studies completed since the last SMP: Cromer Coastal Strategy Study (HR Wallingford, 2001), Overstrand to Walcott Coastal Strategy Study (HR Wallingford, draft), Ostend to Cart Gap Coastal Strategy Study (HR Wallingford, 2001), Happisburgh to Winterton Sea Defences Strategy Review (Halcrow, 2002), Gorleston to Lowestoft Coastal Strategy Study (Halcrow, 1999), Lowestoft to Thorpeness Coastal Strategy Study (Halcrow, 2000).
- Existing scheme/ Project Appraisal Reports completed since the last SMP: Caister Seawall Repair Final Appraisal Report (Halcrow, 2000), Corton Village Coast Protection (Halcrow, 2002).
- Winterton Dunes Coastal Habitat Management Plan (Posford Duvivier, 2003)
- Southern North Sea Sediment Transport Study (HR Wallingford, 2002)
- English Nature website (www.english-nature.org.uk)
- MAGIC website (www.magic.gov.uk)
- Data provided by English Heritage.

All the data and information gathered and used within the SMP development are referenced in Appendix I. Some of the data collected were reviewed as part of separate tasks, such as that completed for the Baseline Understanding of Coastal Behaviour and Dynamics (see Stage 2 below).

Stage 2: Assessments to Support Policy Development

BASELINE UNDERSTANDING OF COASTAL BEHAVIOUR AND DYNAMICS

(a) Assessment of coastal processes and evolution

An assessment of coastal behaviour and understanding was undertaken, incorporating existing information at various temporal and spatial scales. This review includes statements on interactions, shoreline movement and predictions of shoreline evolution at various scales and is included in [Appendix C](#). There is also an additional section which discusses other considerations necessary in policy development, e.g. current understanding of the impact of offshore dredging. Through this review it was concluded that this coastline has been extensively modelled in the past (as has been thoroughly reviewed and reported by the Southern North Sea Sediment Transport Study (SNSSTS)), therefore it was decided that no further modelling was necessary for management policy definition. There are, however, still inherent uncertainties associated with coastal behaviour along this coastline, which are discussed in the report.

This baseline review underpins coastal process understanding of the study area and is the basis for the development of the baseline scenarios. A review of this report was undertaken by the CSG.

(b) Assessment of coastal defences

It was intended that the National Flood and Coastal Defence Database (NFCDD) be used in the assessment of coastal defences. This data was not, however, available at the time of the review; therefore information on condition grades of defences was obtained from the three operating authorities and the EA as well as the existing CPSE and SPS data. An assessment of residual life under a 'no active intervention' policy was undertaken using the condition data together with NADNAC *condition deterioration curves* (CDC), using the Table presented in [Appendix C](#) as a guide. This was supplemented by technical knowledge of the coast through involvement of the CSG and from Halcrow's previous experience in various schemes.

The report is included in [Appendix C](#). A review of this report was undertaken by the CSG.

This information was used in the 'No Active Intervention' assessment (see below) as a first approximation of when defences will fail.

BASELINE SCENARIOS

To assist in the development of future policy, the future coastal response was assessed, assuming two simple scenarios for the whole of the coastline, termed 'baseline scenarios': 'No Active Intervention' (NAI), which assumes that defences are no longer maintained and will fail over time; and 'With Present Management' (WPM), which assumes that all defences are maintained to provide a similar level of protection to that provided at present. These assessments provide an understanding of the influence of defences on coastal behaviour and evolution.

These assessments were completed at three pre-defined timescales (epochs): 0-20; 20-50 and 50-100 years. It was not appropriate at this stage to define *Policy Units*; therefore the coast was initially divided according to the defence characteristics and is reported north to south, i.e. Kelling to Lowestoft Ness.

Under the two scenarios, predictions of future shoreline change and erosion/ flooding risk have been made using information from the baseline understanding of coastal behaviour and dynamics (see above) together with additional data on historical shoreline change, from analysis of Environment Agency beach profiles and Historical Ordnance Survey maps, and the Environment Agency Indicative Floodplain Mapping data. Further details of the information used are included in [Appendix C](#).

The two reports are included in [Appendix C](#). Maps showing the predicted shoreline response under 'no active intervention' are included in [Appendix C](#); these illustrate maximum indicative flood and erosion risk. These maps and conclusions from the analyses were presented to the Extended Steering at the ESG workshop held on 5 November 2003 (see [Appendix B](#)).

DEFINITION OF FEATURES, BENEFITS AND ISSUES

(a) Theme Review

A review of the characteristics of the coast was undertaken to identify key features along the coast and define why these features are important to stakeholders: this is a central element of the identification and assessment of objectives. This review evaluated existing data and data collected from stakeholder inputs and was supplemented by:

- a familiarisation visit to whole coastline, concentrating on sensitive areas
- review of first round SMP
- review of other relevant documents
- discussions with local authority officers
- data provided by English Nature, Broads Authority, Norfolk and Suffolk County Archaeologists.

All data sources used in the review are recorded in [Appendix I](#) and spatial data has been mapped using GIS.

The full report, and supporting maps, is included in [Appendix D](#) and includes information on the following themes:

- landscape and nature conservation
- historic environment
- current and future land use.

This information has been taken forward and incorporated in the Issues Table.

(b) Issues Table

As part of the 2004 Procedural Guidance testing, a Table identifying feature and benefits had already been developed for this SMP, but this Table was revised using the information gathered for the above theme review. This Issues Table clearly sets out for each location:

- the feature
- issues associated with the feature
- why the feature is important i.e. the benefit/s provided
- who the beneficiaries are
- whether it affects policy.

Further explanation is included in [Appendix E](#). An ESG Workshop was held in June 2003 to discuss and review the issues identified in the Table. As a result of feedback received, minor edits/ additions were made to the Table.

DEFINITION OF OBJECTIVES

The next stage was to use the features, issues and benefits identified to define objectives. These objectives fulfil two roles; firstly, they help inform the development of policy options, secondly, they help provide a focus for consensus amongst the SMP stakeholders on the various issues, sometimes conflicting, that are raised during the process of plan formulation.

In the process of doing this, it was found that a number of generic objectives could be developed, to ensure consistency within the Table. These are outlined below:

Type	Generic Objective
Residential properties	<ul style="list-style-type: none"> • Prevent loss of residential properties to erosion • Prevent damage to /loss of residential properties due to flooding
Commercial properties	<ul style="list-style-type: none"> • Prevent loss of commercial properties to erosion • Prevent damage to /loss of commercial properties due to flooding
Heritage	<ul style="list-style-type: none"> • Prevent loss of [heritage site name] to erosion • Prevent damage to/loss of heritage site/s due to flooding
Site of Special Scientific Interest (SSSI) (geology)	<ul style="list-style-type: none"> • Continued erosion of cliffs to maintain exposures
SSSI (habitats)	<ul style="list-style-type: none"> • Maintain existing [possibly add type] habitats
Nature designations	<ul style="list-style-type: none"> • Maintain existing [possibly add type] habitats
National Trails/ Public footpaths	<ul style="list-style-type: none"> • Maintain trail or footpath
Golf Course	<ul style="list-style-type: none"> • Prevent loss of golf course to erosion
AONB	<ul style="list-style-type: none"> • Maintain landscape quality
Infrastructure (services)	<ul style="list-style-type: none"> • Maintain services to properties
Infrastructure (roads)	<ul style="list-style-type: none"> • Maintain existing access • Maintain [major] communication link between communities [name as appropriate] • Maintain communication links within [town]
Beach	<ul style="list-style-type: none"> • Maintain a beach [possibly add type e.g. sandy/ wide etc.] suitable for recreational purposes
Car parking	<ul style="list-style-type: none"> • Maintain car park facilities
Access	<ul style="list-style-type: none"> • Maintain an access to beach/sea
RNLI/ IRB Lifeguard Station	<ul style="list-style-type: none"> • Maintain access to beach/sea

	<ul style="list-style-type: none"> • Maintain Lifeboat Station [in the town]
Farmland	<ul style="list-style-type: none"> • Prevent loss of farmland to erosion • Prevent damage to/ loss of farmland due to flooding

The development of this 'Extended Issues Table' involved a review by both the CSG and the ESG: the Table was provided to the ESG in September 2003, prior to the ESG workshop and members were asked to:

- review the features identified
- check that all relevant issues had been included
- check that the benefits identified were correct and all beneficiaries were included
- check that the objectives were a good representation of the requirements of the beneficiaries.

The report sent out to stakeholders is included in [Appendix B](#).

Feedback from the stakeholders was minimal, but the comments received were incorporated into the Table. Involving stakeholders at this stage was key to ensure that prior to policy appraisal all issues had been understood and incorporated into the process.

IDENTIFY FLOOD AND EROSION RISKS

In order to understand whether the features identified within the Issues Table were actually 'at risk', results from the No Active Intervention assessment were used to look at flood and erosion risks under such a scenario. This information fed into the assessment of objectives (see below).

ASSESSMENT OF OBJECTIVES

In an attempt to try and prioritise or rank the objectives generated, the objectives were assessed using a number of questions:

- At what scales (spatial/temporal) is the benefit important?
- What is the importance of the benefit, i.e. the impact if this feature/ benefit were lost tomorrow?
- Is there enough of the benefit?
- Can the benefit be substituted?

Further details are provided in [Appendix E](#).

Using the answers to the above four questions, the objectives were then ranked. Through testing of the 2004 Procedural Guidance it was recognised that it is neither possible nor appropriate to compare different types of features, e.g. environment site with housing, therefore a *comparative* ranking was generated *specific to each 'theme'*. The following 'themes' were used:

- Natural environment (E)
- Housing (H)
- Commercial and agricultural property (C)

- Infrastructure (roads, pipelines etc.) (F)
- Recreation (R)
- Heritage (G)
- Landscape (L).

Both the objective assessment and ranking data was input to the Issues Table. This revised Table was reviewed by both the CSG and ESG. The full Table is included in [Appendix E](#).

This ranking was not intended as a mechanism to prioritise decisions, but to help fully understand the issues that have been raised and aid in the policy development. However, it was agreed by the CSG that it was too subjective and did not add value to the policy appraisal; therefore the ranking was not taken any further after this stage.

HIGH-LEVEL OBJECTIVES

In addition to the objectives generated through stakeholder involvement there are a number of overarching objectives for SMPs that have been set by Defra, which have been considered when appraising policies:

- Shoreline management policies should take due consideration of current Government sustainable development policies, any High Level Targets, regulations, statutes, and climate change guidelines associated with flood and coastal defence
- Shoreline management policies should seek to have no adverse effect on any physical processes that benefits rely upon
- Shoreline management policies should take due consideration of the need to maintain, restore or where possible enhance the total stock of natural and historic assets
- Shoreline management policies should have regard to current regional development agency objectives and statutory planning policies.

Stage 3: Policy Development

This Stage involved four key steps:

- Development of policy scenarios
- Policy scenario assessment
- Identification of a preferred scenario
- Confirmation of the preferred scenario.

Further details on each of these steps, and results of any assessments, are included in [Appendices F \(Initial Policy Appraisal and Scenario Definition\)](#), [G \(Policy Scenario Testing\)](#) and [H \(Economic Appraisal\)](#). The sections below outline the main tasks undertaken to complete these steps.

DEVELOPMENT OF POLICY SCENARIOS

The first stage of this assessment was to determine the main factors influencing policy decisions along the coast, i.e. key policy drivers, in order to give firm direction to the choice of possible policies. A key policy driver can be defined as a feature that has sufficient importance in terms of the benefits it provides that it potentially has an overriding influence upon policy selection at the wider SMP scale; this may be through either promoting a policy or discarding a policy for a particular location or locations. This task involved the use of the Issues and Objectives Table (see [Appendix E](#)), which was used to initially identify key objectives for the coast, and involvement of the ESG.

The focus of the ESG workshop on the 5 November 2003 (see [Appendix B](#) for further details) was therefore to involve stakeholders in the identification of key policy drivers along the frontage, through bringing together an understanding of the issues, the risks, and an appreciation of each other's viewpoints. The two baseline scenarios and associated flood and erosion risk assessment were presented to the group, the full issues Table had also been issued prior to the meeting. The ESG was first divided into four groups of individuals with broadly similar interests or disciplines and each group were asked to provide a practical vision for the SMP coastline over each of the three epochs, taking account of the information on defined issues and risks. The ESG was then divided into different groups of individuals, split by geographical area. Each group were asked to consider the different viewpoints highlighted and seek a level of agreement on what should be the key drivers/policy options that need to underpin scenario testing for specific sections of coast. The conclusions of each group were fed back to the rest of the ESG, highlighting areas of agreement and conflict. The key points were recorded and the summary note produced is included in [Appendix B](#).

Using this information together with the understanding of coastal behaviour and sediment linkages, the appropriateness of all four generic Defra policies was broadly considered for each location, i.e. 'Hold the Line', 'Advance the Line', 'Managed Realignment' and 'No Active Intervention', in order to identify those options to be considered further.

From this exercise, feedback from the ESG and further discussion with the CSG, it was possible to combine policy options at each location and define a number of 'policy scenarios' to assess further. Along this coast there are strong linkages and interdependencies therefore it has been important to

define and assess combinations of policies for the whole SMP coast, rather than developing policies for individual stretches.

Clear feedback from the ESG meant that along this coast it was possible to define a policy scenario which appeared to address both the requirements of the key drivers and a number of the objectives: this was defined as Scenario A. Although there had been general agreement at the ESG that for much of the coast the present management practice should be continued for the 0-20 year epoch, there was less agreement for the medium and longer term, therefore scenarios were developed based upon the following principles:

- Scenario B - Key Drivers plus a more naturally functioning coast by year 100
- Scenario C - Key Drivers plus defence of other areas where present economic criteria *may* be satisfied, i.e. those areas where the initial assessment of the four generic policies had not totally discounted a 'Hold the Line' policy.

These policy scenarios were then taken forward to the next step: policy scenario assessment.

POLICY SCENARIO ASSESSMENT

This process had two main stages:

- assessment of shoreline interactions and response and
- assessment of achievement of objectives.

(a) Assessment of shoreline interactions and response

All three scenarios (A, B and C defined above) were assessed in terms of future shoreline response. The first stage was to state assumptions made regarding the broad implementation of such policies at each location: this is an important factor as it can have a significant influence upon the impact that the policy has on adjacent frontages. For example, the downdrift consequences of a 'hold the line' policy may differ if this is to be implemented through provision of a linear defence (e.g. a seawall), or if it is envisaged that this will be implemented through beach stabilisation (e.g. breakwaters or groynes, possibly including recycling). This stage required a broad assessment of the *technical* viability of the proposed policy considered. This was then reviewed by the CSG.

An assessment of future shoreline response was then undertaken, with predicted changes reported by each epoch (as undertaken for the two baseline scenarios). Due to the strong sediment linkages, the scenarios were appraised as a whole in terms of shoreline interactions and response, rather than assessing locations in isolation. These assessments incorporated consideration of future climate change, in particular sea level rise. Predictions were made of both the likely rate of change and type of change along the coast; the two baseline scenarios proved extremely useful in developing the assessments. Reports detailing these assessments are included in [Appendix F](#).

(b) Assessment of achievement of objectives

These assessments were then used to assess whether the scenario achieved the objectives set for the frontage, utilising information on the objectives included in both the Issues and Objectives Table and the Theme Review. This was a subjective process and the decisions for each objective were fully

recorded in the Issues and Objectives Table. At this stage no quantification of losses was undertaken, or detailed economic analysis. This Table is included in [Appendix E](#).

IDENTIFICATION OF A PREFERRED SCENARIO

Results of the scenario testing were presented to the ESG at a workshop in March 2004. The Table summarising and comparing the potential impacts of each policy was distributed to the group prior to the meeting. The proposed policy was presented, together with the maps of potential flood and erosion risk, and stakeholders were asked to identify any areas where they disagreed with the proposed policy and wished to discuss further. The ESG was then divided into different groups of individuals, split by geographical area, and each group was asked to discuss those areas identified, in order to steer the policy for that specific coastal stretch. Where areas of conflict existed, further discussion took place to check the justification for the proposed policy.

At this stage many of the concerns noted related to the impact of policy decisions on property owners, in terms of property blight and insurance issues, rather than the technical justification of the policies. There were also questions raised over consideration of external factors such as dredging, which highlighted the need for this issue to be addressed within the SMP, even though it does not directly impact on policy decisions.

Feedback from the meeting, together with the conclusions from policy assessment, were used to modify the scenario in order to develop a draft 'preferred scenario', i.e. a scenario that best achieved the defined shoreline management objectives in a sustainable manner, considering technical, environmental and economic factors (further discussion on sustainability is provided in the main SMP document). Only minor changes were made, although it was recognised that at many sites, management of coastal retreat would be necessary and that the document should identify the need for measures to be in place to deal with loss of land and property. It was also agreed that at this time it would be inappropriate to set a single long-term policy for the Happisburgh to Winterton frontage, as further studies to look into potential impacts of a change in policy are necessary. Where changes were made, further assessments were undertaken.

Once the draft preferred scenario had been defined, Policy Units were identified. These are simply frontages for which a discrete shoreline management policy applies.

The draft preferred scenario was discussed with and reviewed by the CSG and agreed in principle.

CONFIRM PREFERRED SCENARIO

Once the preferred scenario had been agreed by the CSG, economic analysis was carried out. Although economic considerations had been taken into account in the development of the scenarios, up to this stage no quantification had been undertaken. [Appendix H](#) includes details on the analysis undertaken.

It should be noted that this assessment was not to establish the economic justification for a scheme, simply to make a broad assessment of the economic robustness of the preferred policies, i.e. whether the policy was:

- clearly economically viable

- clearly not economically viable
- of marginal viability (and therefore in need of more detailed assessment at a later date, e.g. as part of a strategic plan).

In some locations information was available from existing strategy studies and scheme Project Appraisal Reports and these contain detailed information on assets, benefits, and management costs. These data sets have been used where appropriate and directly applicable, but problems in using such data relate to differences in:

- the timeframe – as many strategies have looked at economics over only 50 years and use different discount factors to those now required by Treasury
- the area determined to be at risk, which may differ from the SMP (particularly due to the timescale issue noted above)
- the preferred option, which may differ from the SMP.

Therefore new data were derived. Losses and benefits have been calculated only on the basis of residential and commercial property values; these have been determined using the MDSF (Modelling and Decision Support Framework) tool, which calculates timing of property loss using the risk zones defined as part of the policy assessment and baseline scenario NAI. Other assets such as utilities, highways, have not been valued or included and intangibles such as recreation and impacts upon the local economy or environment are also not included. This is in accordance with the 2004 Procedural Guidance (Defra, 2004). The cost of implementing the proposed policy has also been broadly calculated, assuming the implementation measures to be used.

Along the Happisburgh to Winterton frontage, a strategy review is in progress which will be undertaking economic analysis and decision was made to use this information when it comes available, rather than undertaking a broad-level assessment as part of the SMP (see [Appendix H](#) for further details on data used in the economic assessment).

DRAFT SMP DOCUMENT PREPARATION

A draft version of the main SMP was produced to clearly present the Plan and the associated policies for review and consultation. This includes:

- Details on the objectives of an SMP and its status
- A non-technical explanation which gives background to development of the Plan and discusses concepts of sustainability
- An overview of the Plan and its implications for the SMP as a whole
- Statements for each policy unit outlining:
 - Details of the policies and their implementation
 - Justification for the policies
 - Implications for local objectives
- Mapping to support the statements

All supporting information is included in the accompanying Appendices as discussed within this document.

Stage 4: Public Examination

GAIN APPROVAL IN PRINCIPAL

Prior to a final version of the SMP document being produced, the Plan was presented to an Elected Member's group in May 2004. The policies and their justification were presented to the group for further discussion (further details are provided in [Appendix E](#)).

Concerns were raised at the meeting regarding the public acceptance of the proposed policies, which will result in substantial loss of properties over the 100 year period, without any mitigation measures being in place. Meetings were held internally within the various local authorities between the technical offices and their members to discuss these matters further.

Agreement was eventually reached for the public consultation process to proceed, but with the proviso that any SMP documents for consultation should make it clear that the SMP represents the best policy that can be achieved within the current government guidance and policies. It was agreed that the documents should also make it clear that there is a need for management strategies to be introduced to deal with the consequences of implementing the proposed policies. Other comments regarding the document contents and presentation were also considered in order to finalise the plan.

CONFIRM CONSULTATION STRATEGY

A strategy for the public consultation exercise was agreed through discussion with the CSG.

The following were agreed by the group:

- The most appropriate method of dissemination is through manned public exhibitions
- The exhibitions should be held in the areas that are most affected
- The local press should be used as much as possible both for educational purposes and advertisements
- There is a need for a leaflet explaining the background and principles of the SMP
- There may be a need for additional meetings to be held for certain stakeholder groups.

Terry Oakes Associates Ltd. were appointed to manage the consultation process and to receive comments.

PUBLIC CONSULTATION

(a) Consultation Activities

The consultation period began on 15 December 2004 with an initial closing date for comments of 31 March 2005, however this was then extended to 29 April 2005, following a number of requests from Parish Councils and members of the public. Further comments were also received after this deadline.

The full consultation document, including all appendices and maps, was available in electronic format on the Anglian Coastal Authorities Groups' website www.acag.org.uk. Printed versions of the consultation document were also available for inspection at:

- North Norfolk District Council offices at Cromer, Fakenham and North Walsham;
- Great Yarmouth Borough Council offices at Maltings House, Great Yarmouth and GYB Services, 101 Churchill Rd Offices, Great Yarmouth;
- Waveney District Council offices at the Town Hall, Lowestoft; and
- Public libraries in Sheringham, Cromer, Holt, North Walsham, Mundesley, Stalham, Martham. Caister, Great Yarmouth, Gorleston and Lowestoft.

Copies of the consultation document were also provided by the local authorities to Parish Councils (full details are included in [Appendix B](#)).

A series of presentations to various audiences was given by officers of the local authorities and the Environment Agency and staff of the Halcrow Group (see [Appendix B](#) for details).

The public and businesses were invited to a series of public exhibitions, where officers of local authorities and the Environment Agency were present to discuss the proposals contained in the draft SMP. Information boards were displayed at each of the exhibitions with an accompanying slide show.

The public were invited to comment on the draft SMP proposals and a consultation response form was made available for download or completion on-line on the Anglian Coastal Authorities Groups' website.

(b) Collation of Consultation Responses

The responses received from residents, businesses, Parish Councils and other organisations were in a variety of formats:

- Individually written letters
- Individually written e-mails
- Comments at the public exhibitions
- Individually completed consultation forms downloaded from the website
- Pre-printed forms signed by consultees (see [Appendix B](#)).

In addition, three petitions were received.

Upon receipt, each response was given a unique reference number and entered into a Microsoft Excel spreadsheet. The details recorded included the name, address and the postcode of the person making the comment, the format in which the comment was made and a summary of the response.

(c) Assessment of Consultation Responses

Using the data collated in the database, Terry Oakes Associates analysed the responses to identify key issues and concerns raised. A Consultation Report documenting their conclusions was produced and provided to the CSG for comment (see [Appendix B](#)). This identified twelve key 'strands' (or reasons) for objection, and summarised issues raised and key quotes under each of these strands:

- Blight
- Built Environment
- Coastal Processes

- Compensation
- Dredging - Erosion
- Dredging - Income
- Economic Assessment
- Heritage
- Human Rights
- Natural Environment
- People and their Environment
- Social Justice.

Stages 5 and 6: Finalise and Disseminate Plan

REVISIONS TO DRAFT SMP

The Consultation Report, produced by Terry Oakes Associates was reviewed by the Client Steering Group (CSG). In response to this document, through discussion with the CSG, a report addressing the concerns raised through the consultation process was produced (see [Appendix B](#)).

Following consideration of comments, in no instance was a case identified to justify a change any of the SMP policies presented in the original consultation draft. Alterations and additions to other sections of the SMP were made, where necessary, in response to comments received.

DEVELOP ACTION PLAN

An Action Plan for implementation of the plan has been produced; this document outlines the steps required to ensure SMP recommendations are taken forward in the immediate term, both in planning and coast defence, and identifies the need to initiate further studies/ actions to facilitate the implementation of the longer-term plan. Some of these actions, such as consideration of compensation measures, will require decisions to be made at government level.

FINALISE SMP

Following consideration of comments raised, the SMP has been finalised and reviewed by the CSG ready for dissemination.

DISSEMINATION AND IMPLEMENTATION OF THE PLAN

The CSG will be responsible for making the SMP accessible and for publicising its completion. It will also be the responsibility of the Coastal Group to promote and monitor progress, with the Action Plan retained on the agenda for all future Coastal Group meetings. The Kelling to Lowestoft Ness SMP website (part of the ACAG website) will have an 'updates' page on which this Action Plan will be placed and progress against the actions reported. This will include identification of the implications of any study outputs or wider developments for the relevant SMP policies.

It is not possible at this time to set a date for the next review of the SMP. It is considered likely that a 5 to 10 year period may be appropriate, however it is vital that changes in understanding or the shoreline management framework are monitored to establish if there comes a point (within the next 5 to 10 years) that the SMP policies become sufficiently out of date as to warrant a full review of the plan. This will be a judgment made by the Coastal Group.

Stage 7: Unify SMP and Prepare Supporting Documents.

UNIFICATION OF THE SMP

Following the issue of the SMP it was recognised that some issues had not been fully resolved and that further work was necessary in order to develop an SMP that all coastal authorities felt able to adopt.

AECOM was commissioned to manage the finalisation of the Kelling to Lowestoft Ness (Cell 6.) Shoreline Management Plan (SMP). The purpose of this finalisation process was not to radically alter policies proposed in the first review of the SMP, as these policies were developed strictly in line with the appropriate guidance from Defra. However, the steering group for the finalisation of the SMP is aware of the sensitivity of some of the recommended policy aims, as they affect people and communities in real terms. As such, AECOM has endeavoured to better explain how it is proposed that such implications might be mitigated, *inter alia* through measures designed to deliver 'social mitigation'. In particular the action plan has been expanded to identify key opportunities to minimise the anticipated effects on people and communities, of the recommended managed retreat or no active intervention policy aims.

Social mitigation includes a range of issues and must:

- Be a readily understood and open process
- Be integrated within the wider policy framework for coastal management
- Acknowledge the effects of previous decisions
- Involve the community in identifying and solving problems
- Not repeat past mistakes
- Provide assistance to help members of the community deal with issues that individuals cannot easily resolve themselves
- Encourage the community to take responsibility for its own future.

This final stage in the development of the SMP also provided an opportunity to complete three important supporting documents namely:

- Strategic Environmental Assessment – prepared within a separate SEA report.
- Habitat Regulations Assessment – separate report signed off by Natural England
- Water Framework Directive Compliance – a report required to check compliance with the European Water Framework Directive. Needed to follow EA published guidelines, but final document included a supplementary assessment to account for aspects missing in the guidance and where data were not available.

Opportunities were taken to keep the public informed as to progress using two newsletters.

The Action Plan to support the SMP has been significantly updated to reflect the importance of identifying effective social mitigation measures.

STRATEGIC ENVIRONMENTAL ASSESSMENT

The Strategic Environmental Assessment was consulted upon as required by the Environmental Assessment Regulations (SI 2004 1633). The first consultation on the SEA took place between May and June 2010. Following consideration of the representations that were submitted, some amendments were made to the SMP and the SEA was updated to reflect these changes. The changes to the SEA were again consulted up between February and April 2012. From the representations received no further amendments were required. Details of how the findings of the SEA have been taken into account and how views expressed during the consultation period have been taken into account in the plan are available in the Statement of Environmental Particulars.

Stage 8: SMP Finalisation and Dissemination

ADOPTION

Final Local Authority partner adoption was completed as detailed in the table below.

Partner Authority	Lead Officer	Method of Adoption	Date
North Norfolk District Council	Rob Goodliffe	Cabinet decision	28.11.2011
		Approval by Full Council	14.12.2011
		Delegation	03.09.2012
Great Yarmouth Borough Council	Bernard Harris	Cabinet	25.07.2012
		Approval by Full Council	31.07.2012
Waveney District Council	Paul Patterson	Cabinet	13.06.2012
		Call in expiry	22.06.2012

COMPLETION OF FINAL ADOPTION DOCUMENTATION

During the final adoption process further documentation was prepared and submitted to the Environment Agency to enable the final approval process. Documentation included:

- Lead Authority Completion Report
- Schedule of Local Authority Adoption
- Schedule of corrections and statement of consistency since the Quality Review group
- Confirmation that Quality Review Group recommendations were incorporated or actions have been put in place for implementation
- Post Adoption Statement (later published in local press)
- Natural England confirmation of their agreement with the Environmental Reports
- Statement of Environmental Particulars

SMP6 KELLING TO LOWESTOFT NESS – COMMUNICATION PLAN

Clear and consistent communication of the SMP policies and wider coastal processes is essential. Such communication will assist individuals and communities to understand the coast and therefore be in a good position to make considered decisions regarding the future.

SMP6 sets out a direction for communication of the policies in Section 6.5 as detailed in the extract below:

6.5 MANAGEMENT OF SMP UNTIL NEXT REVIEW – Extract from SMP6

Through the implementation of actions outlined in sections 6.2 to 6.4 [SMP6 Document], the technical understanding of this coastline, the basis of some SMP policy options and the wider shoreline management framework could change. As such, it is important that progress against these actions is monitored by the Coastal Group so that any developments which might affect policy, and hence works, are notified, and also so that any need for revision of the SMP can be monitored.

Tables 6.1 to 6.3 above [SMP6 document] effectively provide a checklist against which progress can be monitored. It will be the responsibility of the Coastal Group to promote and monitor progress, with the Action Plan retained on the agenda for all future Coastal Group meetings.

The Kelling to Lowestoft Ness SMP website (part of the EACG website) will have an 'updates' page on which this Action Plan will be placed and progress against the actions reported. This will include identification of the implications of any study outputs or wider developments for the relevant SMP policy options. The 'updates' are important as the means of disseminating progress to stakeholders and, as such, the existence of this page will be reported during the final SMP dissemination process. The responsibility for maintaining the 'updates' page will remain with the Coastal Group.

Consistent with the SMP the following actions will be completed to disseminate SMP policy:

- Publication of Post Adoption Statement in local press
- Publication of SMP reports and documentation on the East Anglian Coastal Group (www.eacg.org.uk) or other appropriate webpage's
- Publication and/or links to SMP reports and documentation on the North Norfolk District Council web pages (www.northnorfolk.org)
- Links to SMP documentation on Great Yarmouth Borough Council and Waveney District Council web pages.
- Hard copy documentation to be made available at North Norfolk District Council, Great Yarmouth Borough Council, Waveney District Council and local Environment Agency offices on request.
- The Non-Technical Summary of SMP6 to be made available at the following libraries: Caister, Cromer, Gorleston, Great Yarmouth, Mundesley, North Walsham, Sheringham and Stalham.
- SMP policies incorporated into local land searches.
- Publication of the action plan with regular updates via EACG and/or other appropriate web pages.
- Progress of implementation of the Action Plan will be monitored through the SMP6 Delivery Group and reported as required to the Environment Agency and local government governance structures.
- Continued reporting of SMP progress through relevant local democratic reporting mechanisms.
- Integration of SMP policies through integration into wider local authority services as required.

