# Part B

# PART B: HOW TO USE THE PLAN

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## 1 INTRODUCTION

# 1.1 Format of the Shoreline Management Plan

This chapter describes the key elements of the SMP Plan format. Key definitions of terms used throughout this document in the description of process and management units are included. Particular focus is given to the way in which strategies have been evolved and presented. The nature of data contained on maps prepared for this SMP project are described.

## 1.2 How to Use the SMP

The Poole and Christchurch Bays SMP is a very extensive set of documents, and it is not intended to be read from cover to cover. Instead, the Plan should be regarded as a manual in which the reader will refer only to those sections that cover their interests along the coastline.

In the light of these comments the document has been structured so that it can be read in different ways. The way in which particular readers should approach the document will depend upon their interests.

Broadly, these interests will fall into one of the following categories:

- Readers with coastal defence responsibilities (e.g. District Councils and the Environment Agency) who need to understand the background to the preferred strategy for a number of management units;
- Readers with only local interests (e.g. Parish Councils) who are only likely to be concerned primarily with the preferred strategy for a limited number of management units; and
- Readers with an interest in the whole (or a large part) of the coastline, or a specific subject (e.g. County Councils, Conservation Agencies).

To assist the above categories of reader, Figures B1 to B3 are provided on the following pages, with suggested approaches to the document.

NB. Figure B4 referred to in the following tables is located in section 2.6 of this Part.

### FIGURE B1:

# RECOMMENDED COASTAL DEFENCE RESPONSIBILITY PROCEDURE

# **VOLUME 1**

Read Part B covering the selection of process units, management units, objective setting and background to the selection of strategic defence options.

# INTRODUCTION

Refer to Figure B4 to determine within which process units your responsibilities lie.

## **VOLUME 1**

Turn to Parts C and D, and specifically the sections dealing with the selection of options for the process units of relevance.

## **VOLUME 1**

Read Part E covering future monitoring and research, and future reviews of the SMP.

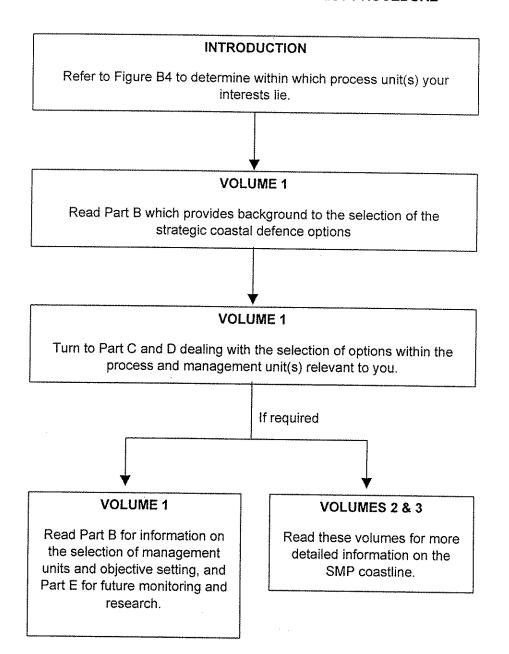
As required

## **VOLUMES 2, 3 & 4**

Read these volumes for more detailed information on the SMP coastline.

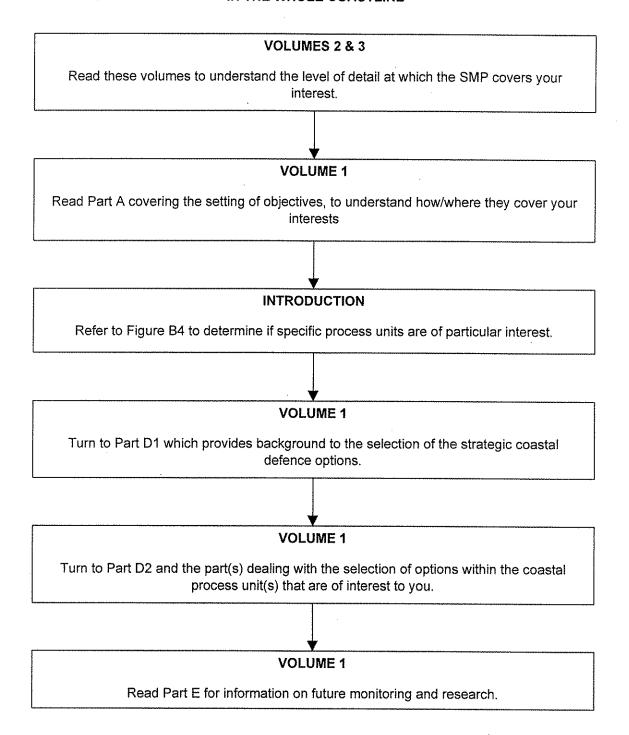
# FIGURE B2:

# RECOMMENDED LOCAL INTEREST PROCEDURE



# FIGURE B3:

# RECOMMENDED PROCEDURE FOR READERS WITH AN INTEREST IN THE WHOLE COASTLINE



#### 2 MANAGEMENT FRAMEWORK

#### 2.1 Overview

A framework of Process Units and Management Units has been developed to enable sustainable shoreline management and coastal defence strategies to be established for the future. The following sub-sections describe these units, their meaning, their relevance to the Plan and the reasoning by which individual units have been delimited.

## 2.2 Why Set Up Process Units?

The key to achieving effective and sustainable management of the shoreline is linked to a sound knowledge of coastal processes and their interaction along the coast. All management decisions ought therefore to be linked primarily to the processes and their implications. Management strategies need to address these implications on a broader scale than land use alone and the defence options for individual management units must be appraised against the overall processes within a larger area. The structure of the management for Poole and Christchurch Bays is therefore one where conformity with the requirements of the Process Unit is paramount. Therefore, it is for these reasons that the Process Unit framework has been set up for this SMP.

The basic building block for the development of policies within an SMP is the "Management Unit". In the MAFF Guidelines (1993), a management unit is defined as "a length of shoreline with coherent characteristics in terms of both natural coastal processes and land use". The Guide goes on to say that "these are likely to constitute discrete benefit areas at the economic appraisal stage". For this SMP, a broader more strategic approach is to be adopted that takes into consideration wider issues and impacts that should, over the long term, provide a more useful framework from which to manage the shoreline.

The groundwork for using this approach has been set within this Volume and, where possible, the final strategy Document (Volume 1) of the SMP will utilise this to its fullest effect.

## 2.3 How are Process Units Identified?

The sub-cell system derived from the "Mapping of Littoral Cells" report commissioned by MAFF in 1993 (Motyka and Brampton) originally categorised sub-cells on the direction and movement (littoral drift) of sand and gravel along beaches. Two main types of boundary between cells were recognised, firstly at littoral drift divides and secondly at sediment sinks (Motyka and Brampton, 1993). It was stressed in this report that the division into coastal cells is strictly applicable to the purpose of coastal defence management on non-cohesive beaches (such as Poole and Christchurch Bays). The direction and movement of sediment further offshore is unlikely to mirror littoral drift directions or boundary conditions.

Based upon the Terms of Reference set out for this SMP, the shoreline of the subcells shall be divided into discrete "Process Units" and associated "Management Units". A Process Unit is defined in the Consultants Brief as being "a length of shoreline with coherent characteristics in terms of processes and based upon an understanding of the geology and geomorphology, the prevailing sea conditions and natural shoreline evolution". This is seen as a necessary development of the present MAFF Guidelines and one that is required to ensure sustainable management techniques are followed on the coast.

An important clarification to make is that the demarcation of these Process Units is not merely made on the geographic limits of certain physical features or landforms. Different coastal characteristics (such as dune, storm ridge or marsh) should not be separately divided based purely on the fact that they are very different in their morphological appearance. On the contrary, their formation is likely to be attributed to linked coastal processes that have occurred over a range of temporal scales. In addition to this, their integrity is dependent upon sedimentary budget regimes that act over a far wider scale than the geographic limits of a certain coastal feature.

With reference to Poole and Christchurch Bays, a strong physical relationship occurs between areas of open coast and sediment sink areas (such as Poole and Christchurch Harbours). Consequently, interlinkages will and do occur especially between areas, such as harbour mouths and the open coast. There are also key strategic landforms (terrestrial or subtidal, such as Hook Sand or Double Dykes) where actions in one Process Unit may well be influential on the natural evolution of another. Therefore, the concept of introducing Process Units that emphasise links with adjacent units is ultimately required. This shall be assisted through the use of Process Unit Statements (Part C).

## 2.4 How are Process Units Defined?

The following definition has been created to explain a Process Unit. It is described as:

"an area of coastline reflecting the complexity or simplicity of a particular coastal area, not merely representing lengths of coherent physical characteristics, but considering aspects of related littoral interdependencies that impact upon both ecological and geomorphological evolutionary trends over a range of spatial and temporal scales."

# 2.5 Management Units

The purpose of further subdivision of the process units into smaller components is to identify and develop the different defence options which will enable the main objectives to be met, whilst being in accordance with the overall natural process requirements for the Process Unit. Management Units provide a practical way for the Operating Authorities to implement the coastal defence strategy since it is not possible to consider a policy for the whole coastline at once.

Definition of a Management Unit from the MAFF Guidelines for Shoreline Management Plans is "a length of shoreline with coherent characteristics in terms of coastal processes and land use." As coastal processes and land use vary along the coast, there are a number of Management Units within the area covered by this Plan.

Consistent land use or type along a stretch of shoreline within a Process Unit has been the basis for the division into Management Units within these sub-cells, ie in accordance with these guidelines. However, to reduce any confusion between the role of the Process Units and the Management Units, Management Units may be further considered within this SMP as:

"a length of coast that requires a specific coastal defence option for the future to meet overall strategic requirements for the Process Unit."

The Environment Agency's Sea Defence Survey (SDS) and MAFF's Coast Protection Survey of England (CPSE) provide strategic information on defence

structures within the Management Units. It should be noted that there are some inconsistencies, duplications and omissions between the SDS and CPSE defence databases and the direction of these surveys conflicts with the direction of the SMP with Management Units defined from West to East.

# 2.6 Key to Process Units and Management Units

Each Process Unit is described by a three letter identifier derived from a well recognised geographical feature within the unit e.g. Process Unit CBY, the Christchurch Bay Process Unit, takes its abbreviations from Christchurch BaY. The subdivision of the coastline into Process Units is presented in figure B4.

The subdivision of Process Units into management units is effected by means of a post script numeric which is ordered within each Process Unit in a west-east direction along the study coastline i.e. CBY1 is the first Management Unit of the Christchurch Bay Process Unit. Each Management Unit is also described by more local geographical association.

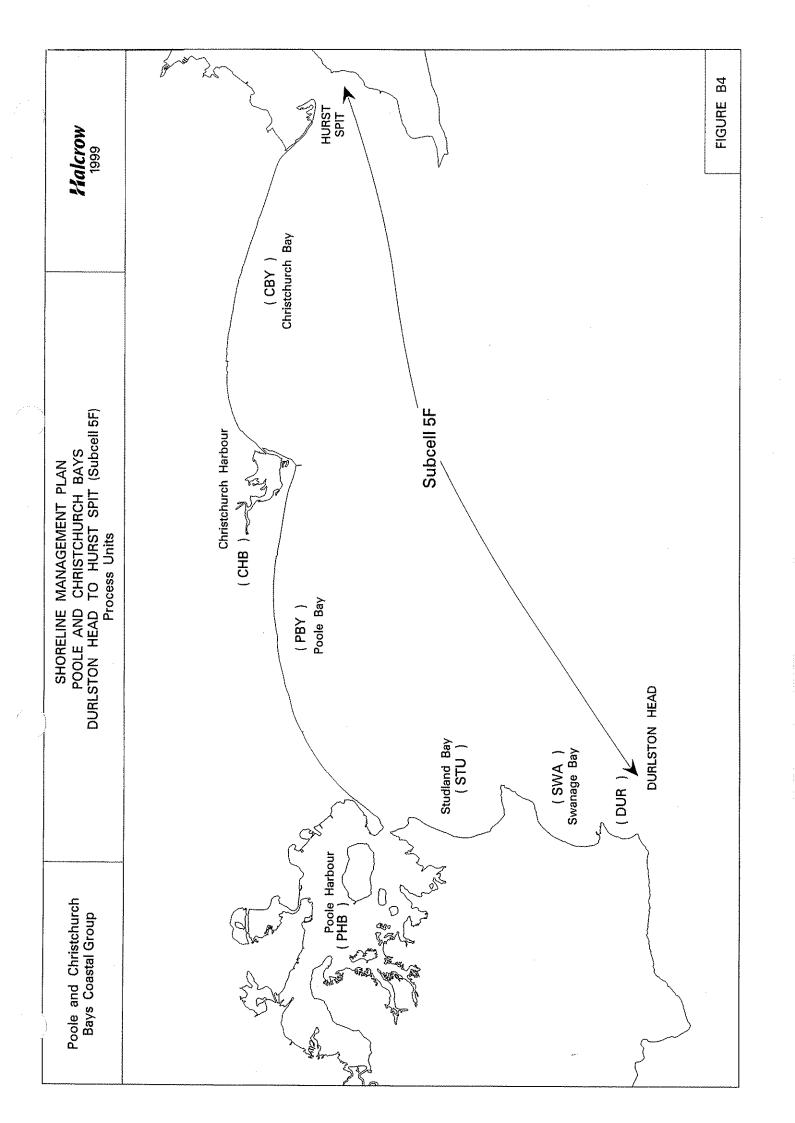
The Christchurch Bay Process Unit also overlaps with the Western Solent and Southampton Water Shoreline Management Plan, completed in 1998. Consequently, any information produced within this SMP should be regarded as the definitive version, replacing any previous text produced.

The full extent to which the coastline has been divided into Process Units and Management Units along with the descriptions attributed to them are summarised below:

Process Unit	Management Unit	Description
DUR	DUR1 DUR2 DUR3	Duriston Bay Duriston Head to Duriston Cliff Flats Duriston Cliff Flats (Cliff Stabilisation) Duriston Cliff Flats to Peveril Point
SWA	SWA1 SWA2 SWA3 SWA4 SWA5	Swanage Bay and Ballard Down Peveril Point to Swanage Pier Swanage Pier to Outfall Jetty Outfall Jetty to Sheps Hollow Sheps Hollow to Ballard Point Ballard Point to Handfast Point
STU	STU1 STU2 STU3 STU4	Studland Bay Handfast Point to the Warren The Warren to Studland Sandspit Studland Sandspit Shell Bay
РНВ	PHB1 PHB2 PHB3 PHB4	Poole Harbour  The Islands (excluding Brownsea) Brownsea Island (eastern half) Brownsea Island (western half) South Haven Point to Hydes Quay (south coast of Poole Harbour) Hydes Quay to Holton Point

Process Unit	Management Unit	Description
	PHB6 PHB7 PHB8 PHB9 PHB10 PHB11 PHB12 PHB13 PHB14 PHB15 PHB16 PHB17	Lytchett Bay Rockley Viaduct to start of defence 681/2442 Defence 681/2442 to Hamworthy Quay Hamworthy Quays Holes Bay (E, N and W) Town Quays Parkstone Bay and Baiter Park Parkstone Yacht Club to Salterns Marina Salterns Marina to Lilliput Pier Whitley Lake Whitley Lake to North Haven Point North Haven Point to Sandbanks Ferry Slipway
PBY		Poole Bay
î	PBY1 PBY2 PBY3	Sandbanks Ferry Slipway to Point House Cafe Point House Cafe to Warren Hill Warren Hill to Hengistbury Head Long Groyne
СНВ		Christchurch Harbour
	CHB1 CHB2 CHB3 CHB4 CHB5	Harbour side of Mudeford Spit South side of Christchurch Harbour (to Grimbury Point) Stanpit and Grimbury Marshes Mudeford Town Frontage Mudeford Quay
CBY		Christchurch Bay
	CBY1a &b CBY2 CBY3	Hengistbury Long Groyne to the tip of Mudeford Spit Mudeford Spit to Chewton Bunny (inc Mudeford Quay) Chewton Bunny to start of defence at Barton-on-
	CBY4 CBY5 CBY6 CBY7	Sea (ie undefended length) Start to defence to Beckton Bunny Outfall Beckton Bunny Outfall to Hordle Cliff Hordle Cliff to Hurst Spit Hurst Spit

N.B: Maps showing the Management Unit boundaries (Figure B5 and B6) can be found at the end of section 6.3.



### 3 MANAGEMENT OBJECTIVES

## 3.1 Issues Analysis

An essential step in the preparation of the SMP is the identification of issues so that proposed actions can address current concerns as well as future opportunities on the coastline. A number of issues have been identified based upon the information gathered and from consultations with various stakeholders and discussions with representatives of Local Authorities. Topics were varied though emphasis was placed on coastal defence concerns and needs.

A standard and necessary part of the SMP process is to distinguish "key issues" from the large number of issues raised that are not related to coastal defence. This helps to focus the SMP, formulate geographically specific objectives and put forward recommendations for further studies that may be required in the future. An Issues Analysis is necessary to achieve this and plays a critical role as part of a longer rolling programme of updates and revisions of the SMP. It may also suggest changes in defence strategies if priorities and issues change over time.

The issues were grouped together under respective Process Unit boundaries. An analysis of their relevance is then carried out resulting in the preparation of suitable Process Unit Objectives which are presented in the SMP (Part C). From this work and following an assessment of compliance with the overriding Core Objectives, future sustainable policy options are selected to ensure that the appropriate management of the shoreline within Poole and Christchurch Bays is followed (Part D).

# 3.2 Ranking Objectives

It is important to recognise that the objectives of various bodies may conflict. The resolution of a conflict within a Shoreline Management Plan requires, by it's nature, a degree of consensus between interested parties and invariably differing objectives will be set by them. To this end, not all of the objectives present in this document will necessarily be achievable.

For clarification purposes, the following definitions have been prepared:

**Core Coast Defence Objectives** – General subcell specific objectives which any preferred strategy <u>must</u> comply with (presented to test each management unit in Part D2).

**Strategic Management Objectives** – Cross sectoral objectives to ensure that the policies do not significantly affect the other interests and uses of the coast.

**Process Unit Objectives** – Geographically specific objectives that reflect the future management needs of the Process Unit (presented to test each management unit in Part D2).

The objectives stated in this document do not represent, ad verbatim, the objectives of specific organisations or authorities, but they do acknowledge the key aspects of relevance to each component within the framework of a non-statutory strategic plan for future coastal defence.

## 3.2.1 Core Coast Defence Objectives

The core objectives for coastal defence management are presented below. These ensure that the policy options meet the general requirements for coastal defence

and shall be used in the assessment of each of the policy options for each management unit.

# **Core Coastal Defence Management Objectives**

- Coastal defence options should be technically viable
- Coastal defence options should be economically justifiable and sustainable over the long term whilst being environmentally acceptable
- Coastal defence options should be compatible with the strategies for adjacent lengths of coast
- Coastal defence options should be compatible with coastal processes at work within the Process Unit and wider subcell.

# 3.2.2 Supplementary Management Objectives

The supplementary management objectives ensure that the policies do not significantly affect the other interests and uses of the coastline. These objectives have been set through consultation with a broad range of consultees and are intended to apply to the whole coastline in the SMP area, thus ensuring that, strategically, the policy options meet the requirements of users of the coast. Although these strategic management objectives are relevant to the whole SMP area, the wide range of uses that they represent do not occur in each process unit. Therefore, process unit—specific objectives have been identified, which are based on the strategic management objectives but focus on the key issues in each unit.

The supplementary management objectives are listed below:

Coastal Planning – "To inform the statutory planning process and related coastal zone planning"

Coastal Processes – "To ensure that future policies for coastal defence do not adversely interfere with the behaviour of the natural processes within the plan or across plan boundaries"

"To promote co-ordinated monitoring of coastal processes and/or regular shoreline surveys throughout the sub-cell to improve knowledge and understanding of the coastal environment, including identifying gaps in knowledge and proposing future research"

Conservation – "To ensure compatibility with national and local biodiversity targets by protecting and where possible enhancing nature conservation interest and in particular to safeguard the integrity of sites of regional national or international interest"

"To determine sensible and sustainable options for the management of important earth heritage and archaeological assets where applicable"

Education – "To develop an improved public awareness of the behaviour of the coast and the influences they and others have on it"

# 3.2.3 Process Unit Objectives

Process Unit Objectives have been devised in recognition that there are key issues associated with specific uses of the coast, which need to be addressed specifically for the assessment of coastal defence policies for particular units. These objectives have been used in Part D2 to assess the viability of the policy options for each management unit.

# 4 DEFINITIONS USED IN THE SHORELINE MANAGEMENT PLAN

## 4.1 Strategic Coastal Defence Options

There are four generic strategic coastal defence options identified by MAFF and these have been considered for each Management Unit. A series of definitions have been agreed upon by the Operating Authorities which are consistent with SMP's being produced elsewhere. These are as follows:

- Do nothing "carry out no coastal defence activity except for safety measures";
- 2) Hold the existing defence line "by intervention, including maintenance, continue to defend the same position whether it be by maintaining the existing defence line or by enhancing its role as a coastal defence" (for example, through incorporating soft options in front, eg. beach nourishment or foreshore stabilisation schemes).
- 3) Advance the existing defence line "By intervention to physically move the existing line of defence seaward" (Within the context of this Plan it is recognised to be unrealistic to expect linear spit features backed by cliffs, ether defended or undefended, to warrant close examination as to possible impacts under this option);
- 4) Retreat the existing defence line For clarity, two definitions are provided for this option depending on whether a length of coast is backed by low lying floodable land or by cliffed areas experiencing erosion.

Floodable Low Lying Land – "by intervention to adopt a more landward defence position and take advantage of wider natural defence formation".

Eroding Cliff Areas – "by intervention to alter the natural rate of cliff retreat, or allow the cliffline to retreat to a pre-determined defence position" – (Under this option, measures to reduce retreat rates should be considered either now or at a future date. Consequently, it may be the rate of retreat that will be managed, and not necessarily the final position).

It should be noted that none of the above four options specifically mention monitoring, which should be carried out under all circumstances.

For a number of Management Units, intervention may be appropriate only over part of the coastline. In such cases, modification of the standard four generic strategy options has been developed to accommodate this. These options are referred to as selective options and apply to HOLD and RETREAT options specifically. Unless otherwise stated for each Management Unit (Part D2), the option is considered in combination with "Do Nothing."

- 5) **Selective Hold the Line** through specific intervention measures to protect assets at risk to flooding and erosion
- 6) Selective Retreat the Line through specific intervention, seek to reduce the risk of erosion, flooding or defence outflanking at the junction of Management Units and making provision for managed retreat at selected locations for the creation of habitat (environmental conservation) and for adaptation to sea level rise (soft engineering).

The selection of a "strategic coastal defence option" requires a sound understanding of the current shoreline processes in order to ensure it is appropriate and sustainable. However, in certain locations processes, and evolutionary trends in particular, are still not fully understood. In these areas long term adoption of one of the options may considered unwise, thus a short term strategy may be presented in conjunction with a period of structured monitoring, in order to provide a sound baseline for the selection of a preferred long term "strategic coastal defence option" in future revisions of the SMP.

# 4.2 Time scales of Strategy Implementation

In addition to the definition of strategic coastal defence options, this SMP has introduced the concept of setting strategies over different timescales. "Short" and "Long" term headings have been used as a guide to provide an indication to coastal decision makers that policies set may only be attainable over specific time frames whilst over the longer term, a different strategic decision may have to be pursued. For each Management Unit (see section 6) where a change in policy is recommended, an estimate of time or threshold indicators (beach level, cliff position etc) are provided where possible.

Part E of this Volume explains the SMP review timetable for the future, recommending that the SMP should be reviewed over a 5 yearly cycle. This period should be generically adopted to reflect a "short term" policy relating to management actions and policy up to 2004. As a consequence of this, a long term policy applies to actions and policy along a stretch of coast from 2004 to 2049. This is somewhat conjectural as it is closely hinged on monitored data and beach response over time. However, where trigger levels can be deduced, an attempt has been made to state physical environmental indicators (cliff erosion markers) so that policy change may be altered without having to wait for the next SMP review.

It should be noted that the timescale of short and long term policies may vary between Management Units thus it has been decided to set out a clear definition of the extent of short and long term policies for each unit (within Part D2 of this Volume). In addition, an indication has been made of planning time linked to the statutory development plan frameworks for each local / unitary authority for the future. This ensures that the SMP is used to inform statutory planning of the longer term need to either "set back" or "remove" built assets in high risk erosion areas.

#### 5 PROCESS UNIT DESCRIPTIONS

Parts C and D of this document contain the developed strategy for management of the Plan shoreline. This assessment and development of management strategies is carried out in Process Unit and Management Unit statements.

The Process Unit Statements (Part C) produced for this coastline provide a synopsis of the main characteristics for the area covered by each Process Unit, summarising the details discussed in greater length in Volumes 2 and 3. The key strategic issues relating to each Process Unit are identified and the sub-division into Management Units presented.

It is not intended that these statements contain detailed descriptions of the characteristics of the area; the statements simply provide a summary of the factors which are to be considered in the development of any strategy. Any significant issues which arise from these, and which must be primary considerations in the assessment of the strategy, are identified. A more detailed description of the various issues can be found in the documentation within Volumes 2 and 3 if required. Each Process Unit Statement considers the following:

## Administrative Responsibility

Identifies the local authorities responsible for the frontage of the Unit.

#### Process Unit Issues

Geology, geomorphology and Sediment Processes

This summarises the key geological/geomorphological components of the Process Unit, along with sediment sources and sinks and the principal influences (eg coastal conditions) upon sediment movements along the frontage. A conceptual plot is produced for each Process Unit highlighting key findings from Volume 2 of the SMP.

## Natural Environment

This briefly describes the key natural features of the Unit, their conservation importance, and the requirements from shoreline management to achieve their protection.

## Developed Environment

This identifies the land use, human environment and development features of the Area. Features such as population, employment, economy, tourism, recreation and archaeological interest are reviewed in relation to the issues and requirements for shoreline management.

The above 3 sets of 'issues' are each followed by the presentation of 'Strategy Test Statements'. These statements form issue specific objectives which are used, in Part D2, in the 'Appraisal of Strategic Options' for individual Management Units.

Coast Defence Requirements

A summary of the standards of defence required for the various frontages within the Process Unit, based on MAFF's indicative standards.

Planning Policies

This section presents a table of the planning policies of relevance to the coastline of the Unit. These are presented under the headings Coastal Defence Policies; Coastal Development Policies; and, Conservation and Environmental Policies.

#### 6 MANAGEMENT UNIT STATEMENTS

Following the Process Unit Descriptions are the more specific Management Unit Statements (Part D). These provide more detailed information on specific characteristics related to that Management Unit and detail the strategy assessments that have been carried out, leading to the recommended preferred options. These are divided into two parts.

Part D1 of the Management Unit Statement provides specific information regarding that area which may be used as a fast reference to guide those using the Plan (see sub-section 5.1 below). This shows the progression of the strategy development from the issues to the coastal defence options through evaluating the broad impact of each option against the issues for the area (see sub-section 5.2 below).

The defence strategy assessment is presented in Part D2 of the Management Unit Statement (see sub-section 6.2 below). This contains a more detailed assessment of the most appropriate options for the individual Management Units to meet both the strategic issues and natural process needs. This concludes with the recommended strategy for each Management Unit.

By adopting this framework of Process Units and Management Units, the selection of a strategic defence option for the smaller scale Management Unit takes into account the wider physical hydrodynamics operating on a regional scale, along with the overall objectives which are pertinent to the Process Unit. This helps to avoid the piecemeal approach to problem solving in the coastal zone which is one of the aims of shoreline management planning.

#### 6.1 Management Unit Characteristics

Each Management Unit Statement (Part D1) lists specific information under the following sub section headings:

Location

This identifies the start and end limits identified for each Management Unit.

Management Unit Description

This summarises the key characteristics of the unit.

Administrative Authority

Local authorities with jurisdiction over the Management Unit.

Frontage Lengths

Total and defended frontage lengths of the Management Unit.

Environmental Designations (refer also to Volume 3 section 3)

This lists any statutory and non-statutory designated areas which may have a bearing on the unit and, where appropriate, describes key characteristics of the designed features.

## Land at Risk

This highlights the key features of the land identified as being at risk.

Planning

This is a table of planning policies relevant to the Management Unit frontage.

- Coastal Defences
- (a) Defence Elements within Management Unit (refer also to Volume 3 append. 1)

This subsection contains a tabulated summary of all defence elements that have been identified within the limits of the management unit. This is based upon the 1991 Sea Defence Survey of England and Wales (SDS) and the 1994 Coast Protection Survey of England (CPSE) databases, in the latter instance including any notified corrections incorporated in the latest 1996 update. The data does however now include further update information where this was obtained from operating authorities. In the case of CPSE data, any changes included here will be adopted in the next update of the database.

In the case of SDS data out-of-date entries have been deleted where works have been carried out. Those areas where SDS and CPSE data overlap have been edited to include the most correct details. New defences are identified by the expansion of the original 4 digit suffix by adding a 9 at the front. Elsewhere obvious errors have been corrected.

(b) Description of Defences (refer also to Volume 3, section 1)

This describes the key aspects of the defences identified above.

# 6.2 Appraisal of Strategic Options

The second part of the Management Unit Statement (Part D2) presents the appraisal of coastal defence options. One of the main objectives of the SMP is to assess a range of strategic coastal defence options (as detailed in section 4) and determine a preferred approach for each Management Unit. Each option needs to be considered in relation to its impacts, both positive and negative, upon the various factors which are influenced by, or influential upon, the condition of the coastline.

## 6.2.1 Screening of Strategic Options

In order to establish which of the potential coastal defence policy options satisfy both the core and process unit management objectives, the procedure described below has been adopted for each of the 43 management units.

From the outset of the assessment, some of the policy options were clearly not appropriate for specific management units. An initial screening procedure was undertaken to identify and remove from further consideration those options that were clearly not technically or environmentally realistic or acceptable, or which did not meet the core coastal defence management objectives. Therefore, options that were not technically realistic, sustainable or compatible with the processes at work within the cell were not considered further in the Environmental Summary Matrix and further appraisal of the options (as follow). The remaining options, which meet the core coastal defence management objectives, were considered further in the appraisal.

An exception to this rule applies in a number of units where the Do Nothing or the Hold the Line options were ruled out in the initial screening as being not realistic or sustainable. Despite these options being ruled out in the screening, they were commonly considered in the Environmental Summary Matrix, as they provide a useful comparison with the other potentially viable option(s).

## 6.2.2 Environmental Summary Matrix

This part of the appraisal process considers, in more detail, the potentially viable options that have emerged from the initial screening. For all management units these potentially viable options, together with Do Nothing and Hold the Line (even if one or other was screened out earlier as being apparently non-viable) are appraised. These latter options are considered to provide useful background discussion, leading to the selection of preferred options.

An important aspect of the impact matrices is that they do not directly appraise the options in monetary terms. They are primarily a mechanism for comparing the advantages or disadvantages of options beyond simply their economic justification, enabling intangible items to be given equal consideration to those that are quantifiable.

# 6.2.3 Assessment of Preferred Option

Having established the issues and reviewed the general suitability of the generic options through the impact matrices, an assessment has been undertaken of the most viable defence options. Details are provided on the suitability of the options with reference to the issues, together with comment upon the sustainability of the option where appropriate.

## Select Preferred Option

Based on the above assessment a recommendation is made on the preferred strategic coastal defence option for each Management Unit, identifying short term and long term approaches, where appropriate.

## Compliance with the Process Unit Objectives

This section confirms compliance of the recommended management unit strategy with the overall strategy presented for each Process Unit. These are outlined in each Process Unit Statement.

## Impact on Adjacent Management Units

Any potential impacts of the preferred strategic option for each Management Unit upon the wider Process Unit are outlined and methods of minimising such impacts are discussed.

## · Review for Potential Implementation

Overview of current defence performance within each unit and long term implementation of the preferred strategic option.

## Present and Future Monitoring / Studies

Any existing monitoring carried out within the unit is reported and specific future requirements discussed. Such monitoring proposals should be seen in the context of the fully integrated monitoring programme described in Part E of this volume.

### 6.3 Maps

A two tiered approach to mapping has been carried out for this SMP. The first level has been to produce Process Unit wide maps highlighting key information that has been derived from Volumes 2 and 3. This includes locations most at risk from sea level rise, sediment sources and sinks and contemporary sediment drift directions. The second level comprises 1:10 000 maps of each Management Unit highlighting the preferred defence policy, existing and future monitoring locations and the position of the coast should the preferred policy be followed. These maps contain the following:

## 6.3.1 Management Unit Limits

The limits of the defined Management Units are indicated on each map in red. These divisions of the Process Units are established as described in Section 2 of this Part.

## 6.3.2 Monitoring Positions

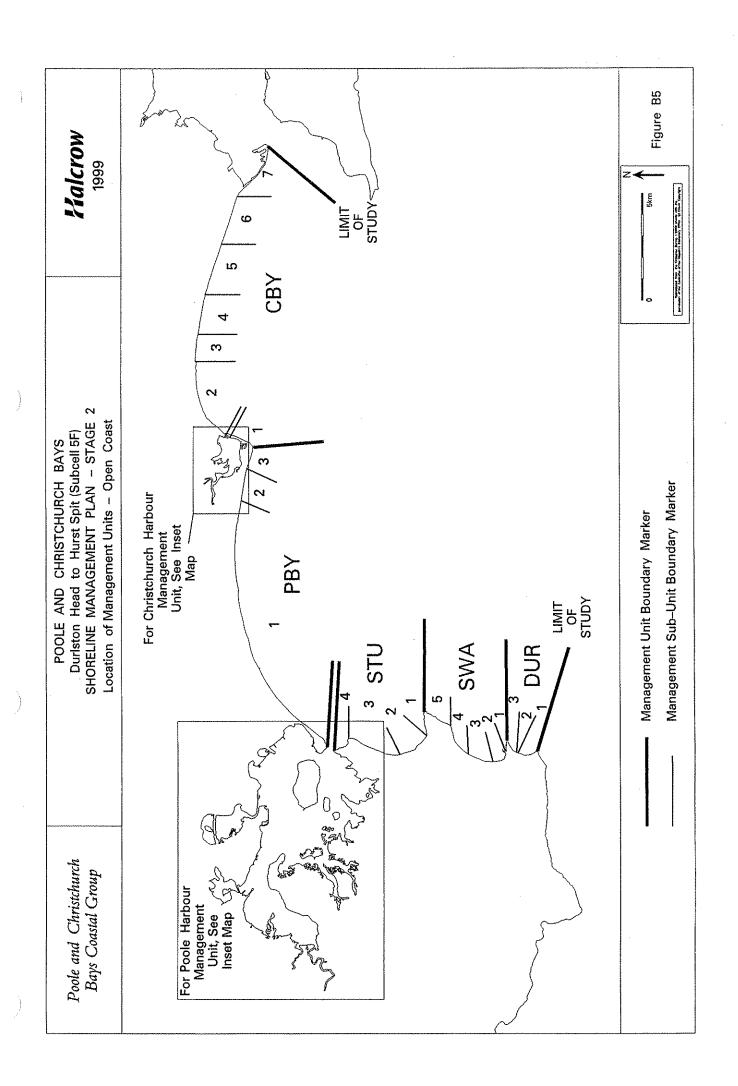
All identified existing monitoring positions are indicated, including the Environment Agency's Annual Beach Monitoring Survey, Council survey positions, BP's Poole Bay positions, and Halcrow 1998 SMP survey positions. Proposed sites for future/additional monitoring are also identified. Greater detail of present and future monitoring is given in Part D2 and Part E.

## 6.3.3 Proposed Policy Coastline

This indicates the likely implications (on shoreline position) of adopting the preferred short / long term policy for each Management Unit. A 'best estimate' is presented (as a broken line) of future coastline configuration, based in part on the 'at risk' 3m contour line presented on the coastal defence maps in Volume 4.

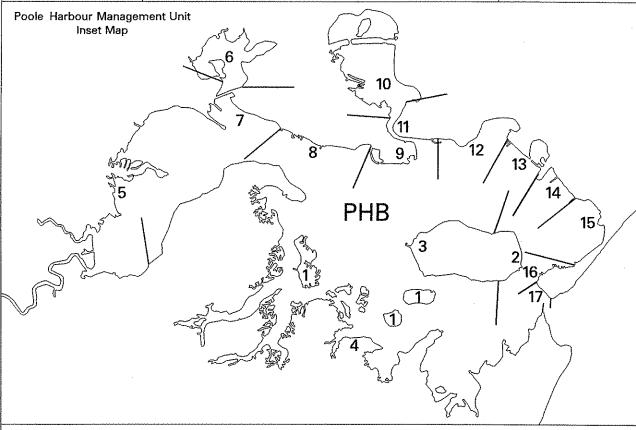
The line on the Volume 4 maps indicates the hypothetical extent of flooding/erosion of the coastline over the next 75 years, were no defences present. This line is modified here, where relevant, to reflect the retardation of erosion or reduction of flood risk, that would result from the implementation of the preferred strategies.

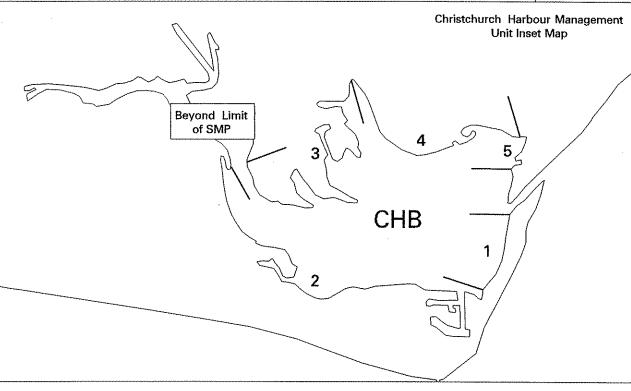
A 'Proposed Future Coastline' position is not indicated for all Management Units. Where the preferred strategy is intended to result in no change to shoreline position, ie: where the short and long term policy is hold the line, the future coastline will, theoretically, reflect the current position, thus it is not deemed necessary to map this. Elsewhere, where do nothing, retreat or advance options are preferred as either the short or long term policy some change to the current coastal position should be expected, so a proposed future position is indicated.



Poole and Christchurch Bays Coastal Group POOLE AND CHRISTCHURCH BAYS
Duriston Head to Hurst Spit (Subcell 5F)
SHORELINE MANAGEMENT PLAN - STAGE 2
Location of Management Units - Inset Maps

Yalcrow 1999





Management Sub-Unit Boundary Marker

Figure B6