



West of Wales Shoreline Management Plan 2

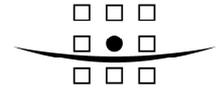
Section 4 – Plan and Policy Development Introduction

November 2011

Final

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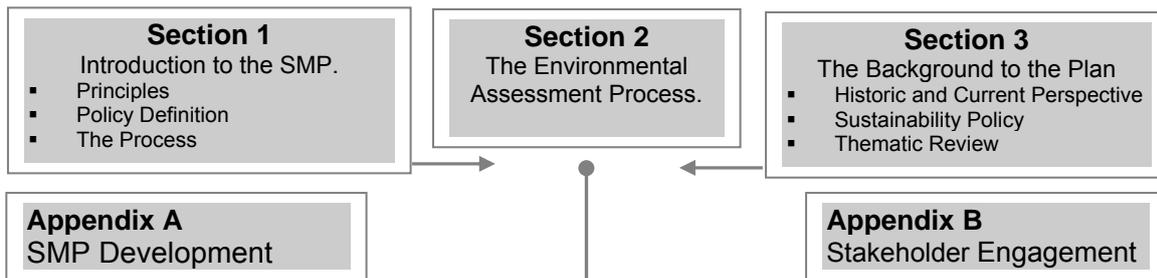
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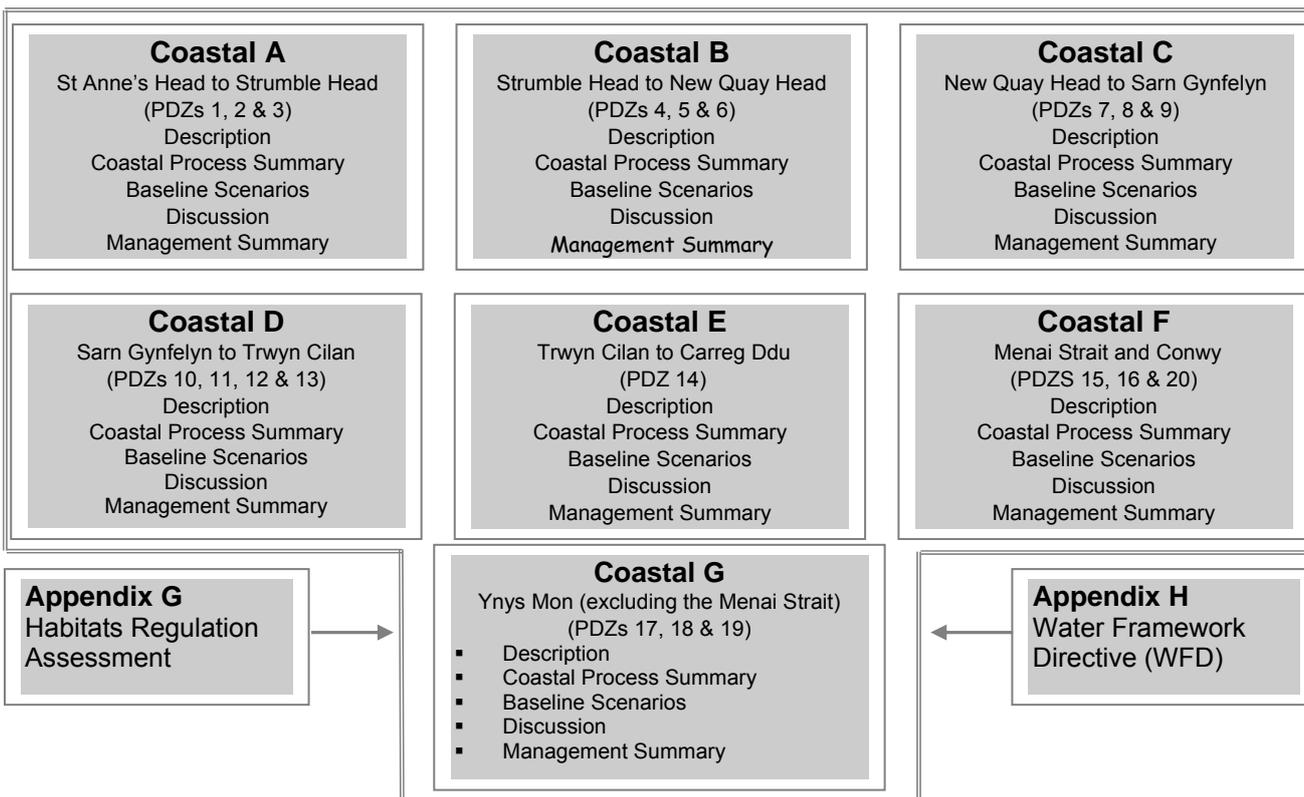
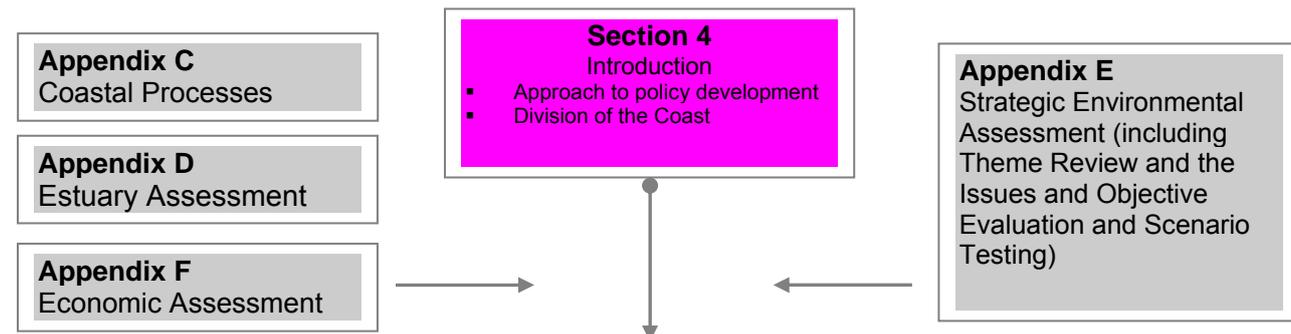
Document title West of Wales Shoreline Management Plan 2
Section 4 – Plan and Policy Development
Introduction
Document short title Policy Development
Status Final
Date November 2011
Project name West of Wales SMP2
Project number 9T9001
Client Pembrokeshire County Council
Reference 9T9001/RSection 4v4/301164/PBor

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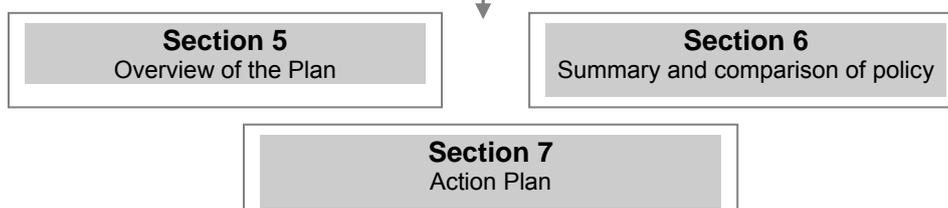
INTRODUCTION AND PROCESS



PLAN AND POLICY DEVELOPMENT

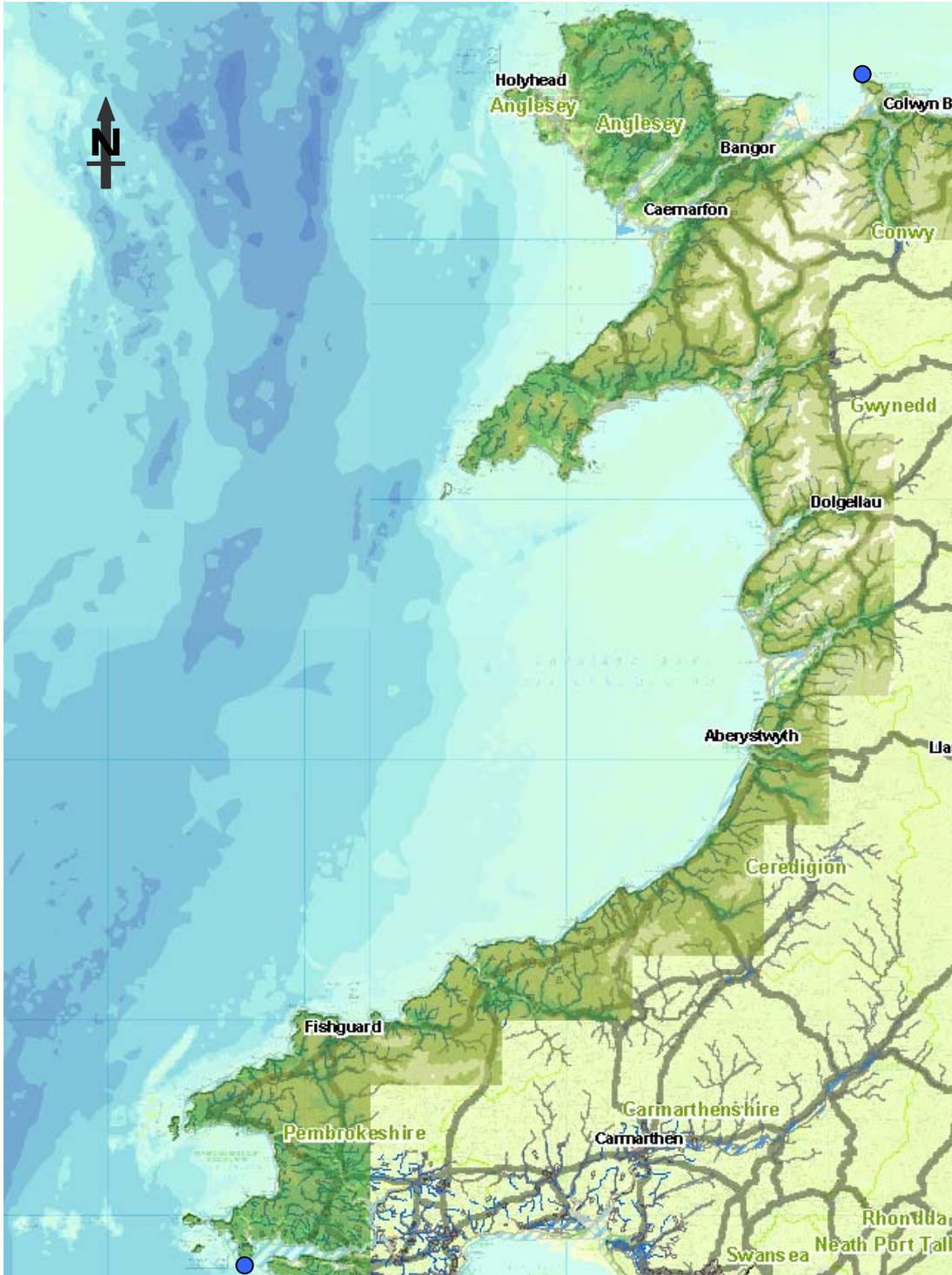


OVERVIEW



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West of Wales SMP Area. – St Ann's Head to the Great Orme

4.1 BACKGROUND SUMMARY TO POLICY DEVELOPMENT

The West of Wales SMP2 is developed for the coast between St Ann's Head, at the entrance to Milford Haven, through to Great Orme Head. The area takes into account the shoreline of the Isle of Anglesey and includes the islands of Skokholm, Skomer, Ramsey and Bardsey. The length of coast considered is in the order of 1,200km.

This is one of a second generation of SMPs (SMP2) developed for the whole coast of England and Wales.

The West of Wales area was covered by four first generation SMPs (SMP1). These are:

<i>Pembrokeshire SMP1</i>	- <i>St Ann's Head to the River Teifi</i>
<i>Ceredigion SMP1</i>	- <i>The River Teifi to the Dyfi Estuary</i>
<i>North Cardigan Bay SMP1</i>	- <i>The Dyfi Estuary to Bardsey Sound</i>
<i>Ynys Enlli to Great Orme's Head</i>	- <i>Bardsey Sound to the Great Orme</i>

The West of Wales SMP2 takes as its starting point the first generation SMPs and is, in principle, a review of the policy set out in these previous documents. However, the SMP2 considers management of the coast over a longer timescale; over a period of 100 years, compared to the 50 year period covered by SMP1. The SMP2 process also takes a broader perspective.

The prime purpose of the SMP2 is to develop policy in relation to the management of risk from flooding and coastal erosion, with respect to the shoreline and estuaries. However, in setting out a plan for managing this risk, the aim is to provide a sustainable framework within which other aspects of coast are managed. In this respect, SMP2 is seen as being led by objectives, not just to provide a technically sensible and sustainable approach to management of flood and erosion risk but to include objectives supporting the broader social and environmental aspirations of the area.

The following high level principles have been agreed in developing the Plan and policies discussed:

- To contribute to sustainable communities and development.
- To minimise reliance on defence and increase resilience of communities.
- To support an integrated approach to spatial planning, in particular recognising the interrelationships between:
 - centres of development and surrounding communities.
 - human activity and the natural and historic environment: in being essential for community identity, well being and vitality and in being highly significant for tourism and economic regeneration.
- To maintain and support the main centres of economic activity
- To sustain the vitality and support adaptation of smaller scale settlements.
- To support the cultural heritage and the use of the Welsh language.
- To avoid damage to and seek opportunity to enhance the natural environment.
- To maintain or enhance the high quality landscape.
- To sustain sustainable accessibility in terms of maintaining national and regional connectivity.

Further discussion of the above is provided in Sections 1, 2 and 3 of the document.

4.2 THE APPROACH TO POLICY DEVELOPMENT

This section (Section 4) addresses the core purpose of the SMP, the development of the **Plan** and definition of **policies** aimed at delivering this Plan. This Plan is for the whole length of the coast, setting out the intent of how the shoreline would be managed over

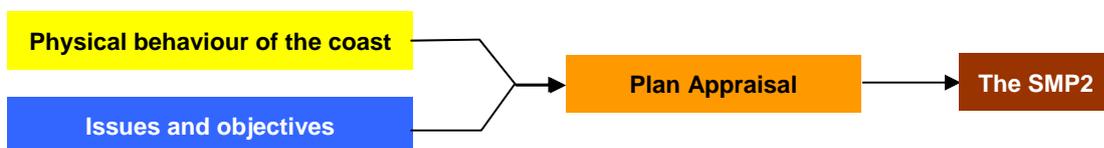
the next 100 years, with the further aim of establishing a direction of management that remains sustainable into the future. The SMP draws upon a large range of information that is presented in appendices. This information covers both the physical processes and geomorphology of the coast (Appendix C) as well as information on social and environmental aspects (Appendix E), identified in part from consultation (Appendix B). An overview of the different individual aspects for the area has been provided in Section 3 of the document, and Section 4 now draws together all of these elements, considering how different aspects fit together in developing the Plan.

Information is taken from the specific elements of work making up the SMP and a synopsis of this information is provided in relation to each area of the coast within this section of the document. This is drawn together in a discussion of why lengths of the shoreline might need to be managed and how this management may best be undertaken; this is the Plan. Flood and erosion risk management policies are then defined for specific frontages to achieve that Plan. Policies are defined over three epochs (short term, medium term and long term) and this allows the Plan to evolve, taking account of current needs while moving towards a sustainable future course of management.

SMP2 is therefore review based on where we are now. It takes as its starting point two baseline scenarios for the future:

- **No Active Intervention (NAI).** How would the coast evolve if no one manages it?
- **With Present Management (WPM).** If we continue to manage the coast in the way in which we have been managing it, what might happen in the future?

Looking at these scenarios gives an understanding of the issues being faced. What is at risk? What are the problems and how might we manage the coast better? The Plan is developed to address these issues taking account of the way in which the coast behaves and taking account of what is the best way to manage flood and erosion risks in a manner that can be sustained in the future.



Fundamental to the process is taking a broad enough and sufficiently high level approach so that the essential interaction between different areas and aspects of the coast are properly recognised; that management of one area of the coast takes account of how this may affect other areas and how it might be influenced by management elsewhere. This interaction must take account of not just the way in which the physical shoreline would behave and evolve but also how different interests interact and are affected by the Plan over the whole coastal area.

At the same time, it is important that the Plan is considered at a sufficiently detailed level so that it addresses and provides guidance specific to each individual section of the shoreline. The Plan must have a practical and achievable outcome.

The following sub-section sets out the high level division of the coast providing a suitable framework for subsequent analysis and plan development. This approach also allows more convenient access to the discussion upon which the Plan is based, allowing individuals and coastal managers to focus on specific areas of interest as appropriate, while still supporting the broader integrated context of the SMP of the whole area.

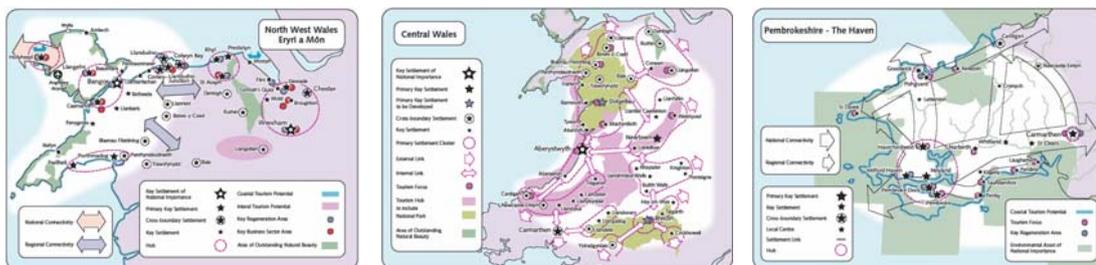
4.3 HIGH LEVEL DIVISION OF THE SHORELINE

4.3.1 Key Drivers

The SMP procedural guidance¹ suggests identification of key drivers. “A **key policy driver** is a feature that has sufficient importance that it potentially has an overriding influence upon policy selection at the wider SMP scale. Sustaining these features and the benefits derived from them will often be a key requirement at a national or regional level.”

There are several features identified for the SMP area that are considered to be key policy drivers, based on the general principles set out previously. None are seen as imposing such a constraint on management that they might then allow the coast to be divided as a result of an overriding management policy. Whilst, therefore, individual features do not impose a division of the coast, the converse argument may be made; that certain features associated with the coast effectively bind areas together such that even at a high level it would be inappropriate to divide the coast without considering further how such key drivers influence the decisions over a broader area. This is considered below.

Infrastructure and Settlements.



Extracts from the Wales Spatial Plan 2008 showing settlement interaction

Several of the key towns are considered of sufficient significance that their influence extends beyond their immediate vicinity, forming the core of economic hubs or settlement clusters. The main hub in the Pembrokeshire area, set back from this SMP coast, focuses around Haverfordwest and the Haven and acts as the centre for the west Pembrokeshire coastline. Fishguard is recognised as one of the key links with Ireland and forms an important area of regeneration, as well as being a tourism centre linked closely with Newport and through to Cardigan.

Aberystwyth is considered to be an important focus for development, important, at a national scale, to the administration and economic regeneration of West Wales. More locally, Aberystwyth has close association with the smaller settlement centres of New Quay and Aberaeron and linked by the main coastal road, the A487.

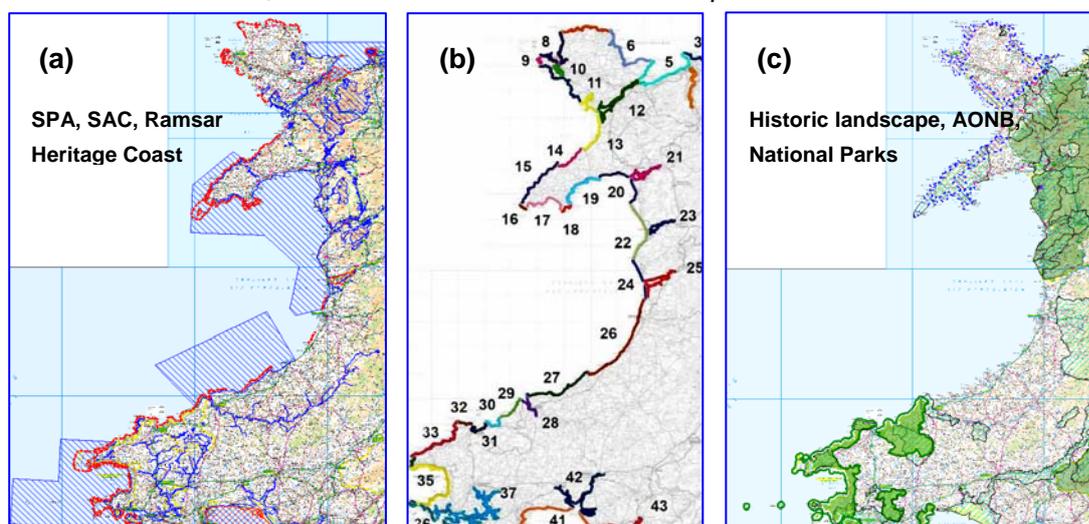
The settlements of Aberdyfi, Towyn, Barmouth, Harlech and Penrhyndeudraeth form a settlement hub and associated with this is the south Lleyrn hub of Porthmadog through to

¹ Shoreline management plan guidance. Defra March 2006.

Pwllheli. In addition to the road network in this area, the railway network lies close to the coast along this whole section.

The Menai Hub, including Caernarfon through to Bangor and Beaumaris, is strongly linked to the Conwy hub of Llandudno and Conwy, with the main national transport route of the A55 and railway running along the coastline. Holyhead is important as an international link, although the connection with the Menai Hub runs through the centre of Anglesey.

Nature Conservation, Historic Environment and Landscape.



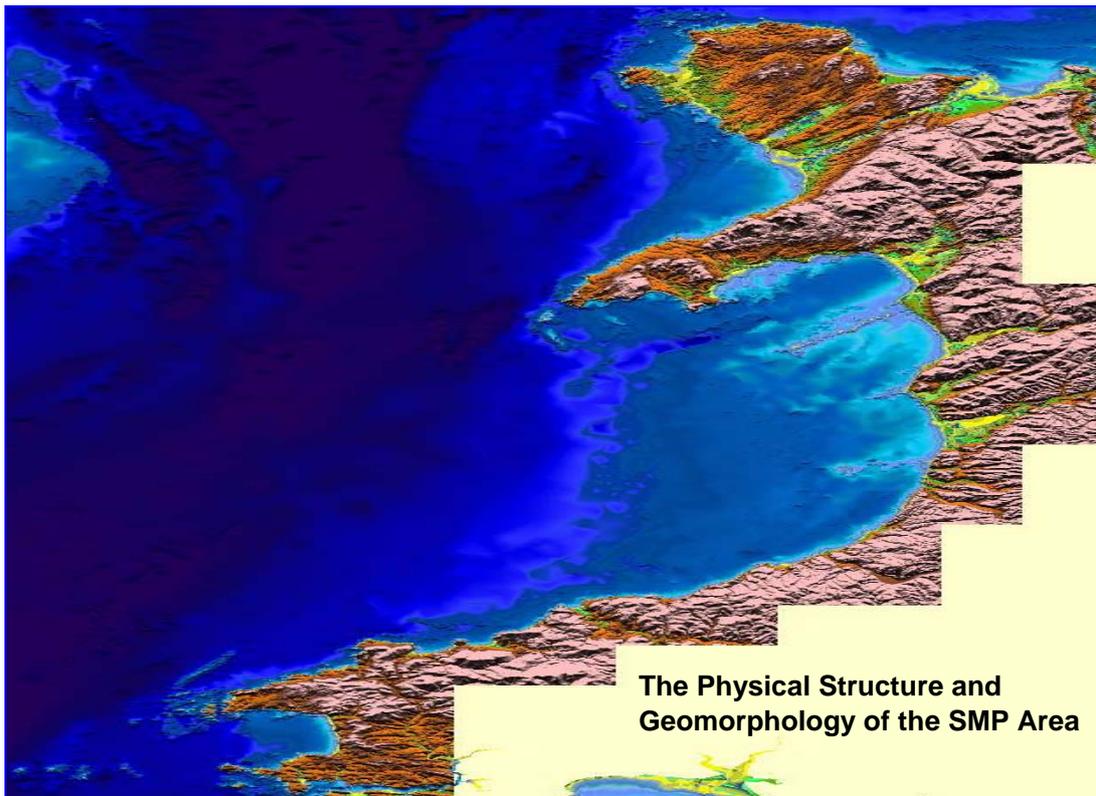
Nature conservation designations (a), Seascape Areas (b), Historic and coastal landscape (c)

Notwithstanding the national and international designations associated with the coast, the whole length of the SMP coastline is of exceptional importance for its landscape, historic and nature conservation value. There is, therefore, important connectivity over the whole SMP area in maintaining overall bio-diversity and landscape quality. More specifically, there are characteristics of the coast that represent important suites of historic or nature conservation value, where even a broad scale division of the coast could disguise important interrelationships between features. Typical of this would be across estuaries, where ecological function has to be considered as a whole.

The seascape analysis² provides a useful framework in capturing “*what characteristics and qualities make each part of our coastline distinctive and give its sense of place.*” This then has to be considered in relation to the functional system represented by other designations.

² Welsh Seascapes, CCW 2009.

4.3.2 Physical Interaction



With the very obvious exceptions of the major estuaries, including the Menai Straits, where tidal currents have a strong influence, sediment transport is predominantly driven by wave energy. The physical structure of the coast acts to control this process. Over the southern area of Pembrokeshire and southern Ceredigion the hard, slowly eroding rocky shoreline limits exchange of longshore transport between sections of the shoreline.

Over the central area of Ceredigion, there is greater interaction. Although, even here, the relatively hard nearshore bed strongly influences the coastal morphology. Further north, from northern Ceredigion through to the Llŷn Peninsula, the coast is typically more mobile; this being associated with the large spit and barrier systems across the estuaries. The coast is still held by lengths of harder geology and is strongly influenced by the three principal sarns. Despite this control, there is potential longshore sediment drift and, indeed, some of the features controlling the morphology of the shoreline are themselves subject to change. The general pattern of drift is to the north although this varies locally.

The southern shore of the Llŷn Peninsula, through to Abersoch, comprises a series of crenulate bays with a weak drift system to the east; again with local variation. This, therefore, has association with the estuary dominated coastline to the south. The western end of the Llŷn Peninsula is, in contrast, a separate system of bays controlled by hard rock headlands. The same may be said of the northern shoreline through to Carreg Ddu at Morfa Nefyn and arguably through to Trefor. There is, however, a potential for sediment supply between the bays in a westerly direction, ultimately through to the western entrance of the Menai Strait.

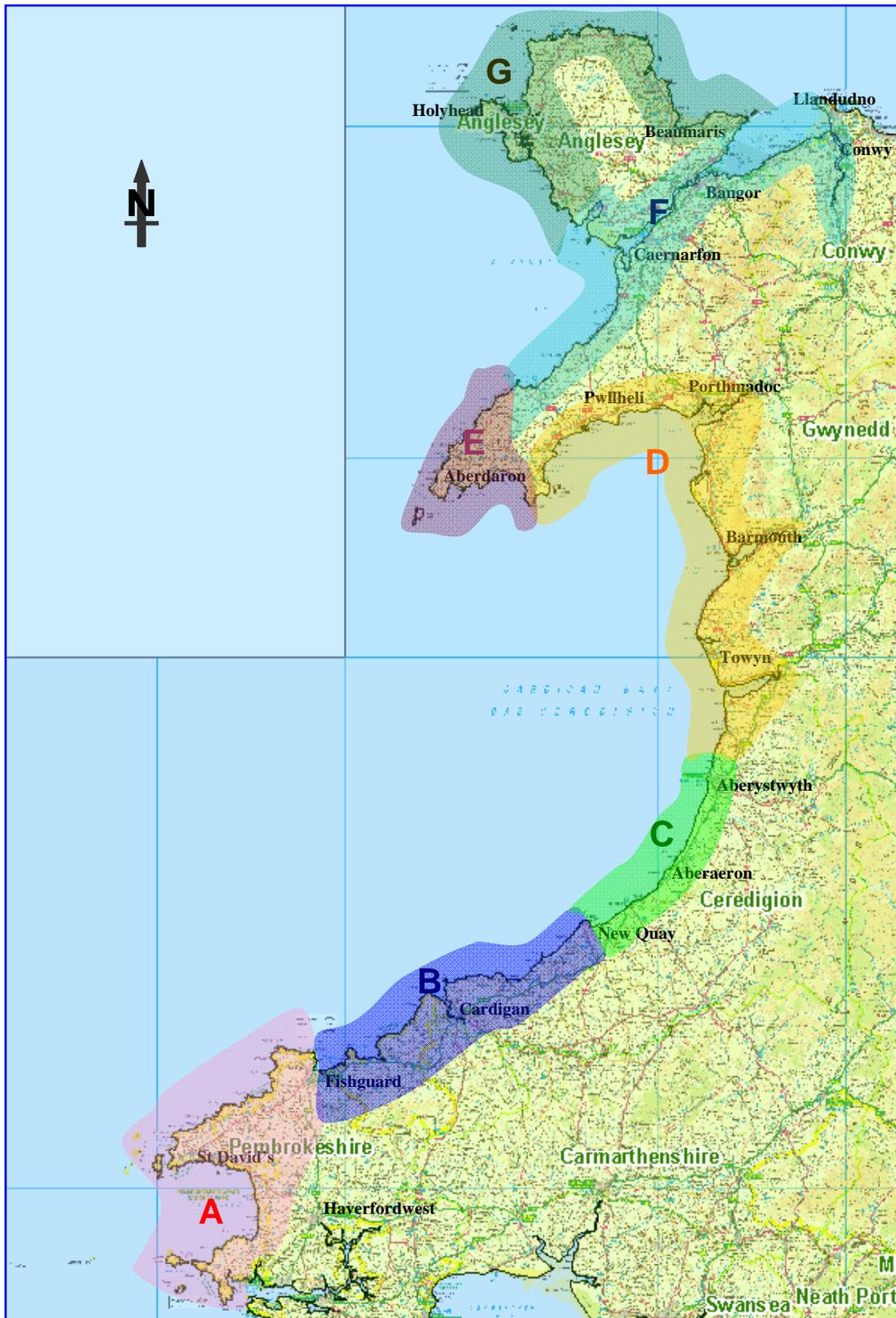
The shoreline interaction between sections of the coast increases towards the Menai Strait and this extends along the Anglesey shoreline as far as Pen-y-Parc, north of Malltraeth Bay. Clearly there are coastal process issues associated with the full extent of the Menai Straights and, therefore, by association potentially through to Conwy Bay.

Much of the rest of Anglesey comprises areas of significant local interaction with the shoreline fixed by hard rock control features.

4.3.3 Policy Development Framework and Structure for Section 4

From the above, the shoreline may be divided broadly into seven Coastal Areas for convenience of discussion and policy development. These are set out in the table below and shown on the map opposite. These areas are further subdivided through more detailed consideration of specific aspects of the coast, down to Policy Development Zones and, ultimately, individual Policy Units. However, the intent is to maintain that higher level analysis of shoreline management, which is fundamental to the SMP process.

Coastal Area	Rationale	External links
A) West Pembrokeshire	Coastal character and use. Association with Haven Hub. SAC/SPA features and Heritage Coast. Historic Landscape.	Heritage Coast. National Park
B) Cardigan	Coastal character. Transport network. SAC features. Heritage Coast.	Heritage Coast. National Park. Administrative boundaries.
C) Central Ceredigion	Coastal processes. Coastal character. Settlement cluster	SAC features. Transport network.
D) North Cardigan Bay	SAC/SPA features. Coastal processes. Settlement clusters. Transport network. Estuary management. National Park	Administrative boundaries. Transport network.
E) West Llyn	Coastal character and use. Heritage Coast. AONB. Historic Landscape. SAC/SPA features.	Heritage Coast. AONB. Historic Landscape. SAC features.
F) Menai and Conwy	Coastal processes. Economic hubs. Transport corridor. SAC/SPA features. Historic Landscape. AONB	Heritage Coast. AONB. Historic Landscape. SAC features. Administrative boundaries. Transport network.
G) North Anglesey	Coastal character and use. Heritage Coast. AONB. Historic Landscape. SAC/SPA features. Transport network.	AONB. Historic Landscape. SAC features. Transport network.



Proposed General Coast Areas

Within the discussion of each Coastal Area the document is structured in the following manner.

General Description of the Coastal Area:

- **Character:** setting out the overall context for management and summarising the general physical coastal behaviour of the area.
- **Present Management and Key Issues and Objectives**, relating this to the risks identified in different areas and, therefore, how the core principles are used to examine management scenarios. This section specifically defines:
 - **Existing management practice.**
 - **Key management issues across the whole area.**
 - **Overall objectives**, linked specifically to individual sections of the coast.

For each policy development zone (PDZ):

The analysis and discussion for each zone aims to provide a detailed understanding of the issues and nature of the area in such a manner which is logical and rigorous but also in a manner that may be referred to and understood by both coastal managers and people who use or live on the coast. Each zone is presented in a standard approach, in line with the SMP guidance.

- **Local Description:** setting out in more detail the context for management at the local scale.
- **Coastal Processes:** considering how the processes influence or are influenced by management, in particular the influence of sections of defences. A brief description of how the coast is behaving is provided, aiming to explain exposure conditions and how the coast is attempting to change. From this may be understood where there may be pressure developing in relation to the use of the coast and an initial appreciation of what may or may not be sustainable in the long term. This process is aided through a discussion of the unconstrained scenario.
- **Management Scenarios:** The section provides a more detailed description and assessment of the two base line scenarios for the whole zone. In many cases strategies have only looked over a period of 50 years. The SMP2 extends the implication and intent of the current management policy over the full 100 years and comments, where appropriate, on the further implications of beyond this period of time. The aim of the No Active Intervention, is to identify what is at risk if defences were not maintained. In a similar way, With Present Management aims is to examine how the coast may develop, identifying where there are benefits in this management approach and where there may be issues arising in the future. Associated with each scenario is a brief summary of the key risks based on the MDSF and strategy findings.

This provides a headline assessment of how each scenario achieves the key objectives set out in Section 1 above.

- **Baseline scenarios:** Baseline scenario 1 - No Active intervention
Baseline scenario 2 – With Present Management
- **Discussion and policy development.** This sub-section uses the two baseline scenarios to consider specific issues in more detail, looking at both the long term implications of the current policies and stepping back from the more local strategy development areas to consider any impacts on the coast as a whole. The discussion also considers any detailed proposals put forward in strategies and comments on these from the broader perspective. Where it is felt that the current policy fails to address some of the issues being identified, further scenarios are developed. Typically, this has been found to be a variation within one of the baseline scenarios, rather than a scenario with such wide reaching impacts that the influence of management affects area outside the development zone being considered. From this discussion and from the analysis of different approaches and their consequences, recommendations are made for the SMP policy. This principally starts with where management would take the coast in the long term, working back to how policy should therefore be adapted over the short and medium term periods.
- **Management Summary:** Policy Units are grouped as Management Areas, providing coherent intent as to the management and dependencies over the area.

Where a Coastal Area is subdivided into more than one PDZ a brief discussion is provided of the proposed management approach over the whole area to demonstrate the higher level of consistency and coherence in terms of the overall plan.

The final section for each Coastal area is the Management Area summaries.

Management Area Policy Statements

The Policy Units and Management Areas are developed in the analysis described above. A summary or statement is presented for each Management Area. This is set out in the following manner:

- **SUMMARY OF POLICY**

The format for this summary is based on the Policy Unit summary suggested by the procedural guidance. However, because of the nature of the coast and in many cases because distinct Policy Units have an association and cannot really be managed independently, the policy summaries have been developed per Management Area. A brief overview of the preferred plan recommendations is presented together with an overview of implementation for the short and medium term, followed by the long term intent. Finally the specific policies are summaries. These summaries should be read together with the more detailed information given in the main body of the PDZ report.

- **CHANGES FROM PRESENT MANAGEMENT**

The essential changes from current management are highlighted.

- **IMPLICATIONS**

For each Management Area a summary is provided of the potential impacts these policies will have in terms of the various specific themes and in term of residual risk and risk reduction. This assessment summarises the findings of the Strategic Environmental Assessment and Appropriate Assessment.

- **MANAGEMENT AREA ACTION PLAN**

The Management Area action plan would be developed following the consideration of responses to the draft Plan (these actions are drawn together for the whole of the SMP2 coastline in Section 7, together with an explanation of the requirement for monitoring).

The structure has been developed to allow different levels of readership, so that those with a specific interest in an area of the coast may readily obtain information with respect to that area. The simplest explanation of policy is in the Management Area Summary Statements. The discussion as to how a policy has been decided upon is gained from reading more fully the full discussion in the main PDZ or Coastal Area document. For those considering how the Plan has been developed and considering the broader implications, the aim of each Coastal Area document is to lead the reader through a more detailed development process, concluding with the Plan and the policies.

All of this is supported by more information provided in the various appendices

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