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PLANNING

Planning Policy Statement 25 Supplement:
Development and Coastal Change
Practice Guide



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Practice Guide

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1 Introduction

- 1.1 The Supplement to PPS25 on Development and Coastal Change is about positive planning at all levels to deliver appropriate sustainable development in the right places, taking full account of coastal change¹. The Supplement to PPS25 sets out the policy approach. This Practice guide explains further how to implement this approach.
- 1.2 PPS25 and its Supplement are part of the holistic approach to managing risk set out in the Government's strategy for flood and coastal erosion management, Making Space for Water (Defra 2005) and DEFRA's *Adapting to Coastal Change – Developing A Policy Framework*. Planning has a key role to play in avoiding and reducing the risk from coastal change, and helping communities adapt to its effects.
- 1.3 England's coastline and coastal communities sustain important local economies, are places of relaxation and enjoyment and contain a rich variety of landscapes and habitats. Coastal environments have changed continuously through human history due to natural processes and as a result of human activity, which have led to coastal erosion, land instability and tidal flooding. The impacts of these processes vary considerably from one part of the coastline to another, and have been essential in shaping our coast and its communities.
- 1.4 The coast continues to play a vital role in society from a social, economic and environmental perspective. The coast also provides a natural environment that is vital to supporting protected species and habitats, as well as providing the setting for many historical features. The combination of these benefits attracts people to visit, live and take holidays on the coast.
- 1.5 Coastal communities have historically adapted to the changing coastline as sea levels have risen steadily since the end of the last ice-age. However, climate change is likely to exacerbate erosion and coastal flooding through projected sea level rise, together with the potential increase in the intensity, severity and frequency of coastal storms over the next 100 years (on the basis of the latest climate projections provided by UKCP09²). The Government is committed to managing the impact of coastal erosion and flooding in a sustainable manner, and this includes ensuring that our spatial planning policies shape sustainable communities to adapt to the risks presented by climate change. Coastal change, as exacerbated by climate change, has implications for development on the coast and is, therefore, a major consideration for spatial planning in shaping places that are resilient to climate change. Positive planning has an important role in helping communities to manage risk and adapt to an ever changing coastline.

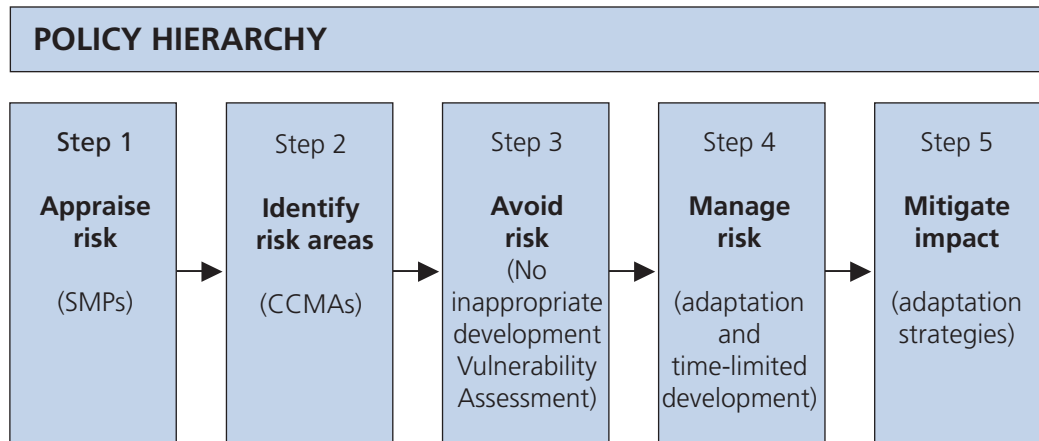
¹ Coastal change means physical change to the shoreline, i.e. erosion, coastal landslip, permanent inundation and coastal accretion, (Planning Policy Statement 25 Supplement: Development and Coastal Change, paragraph 4)

² The UK Climate Projections 2009, published 18 June 2009.

- 1.6 The aim of our policies for managing coastal change through the planning system is to ensure that our coastal communities continue to prosper and adapt to coastal change. This means planning should:
 - 1 ensure that policies and decisions in coastal areas are based on an understanding of coastal change over time;
 - 2 prevent new development from being put at risk from coastal change by:
 - a) avoiding inappropriate development in areas that are vulnerable to coastal change or any development that adds to the impacts of physical changes to the coast; and
 - b) directing development away from areas vulnerable to coastal change;
 3. ensure that the risk to development which is, exceptionally, necessary in coastal change areas because it requires a coastal location and provides substantial economic and social benefits to communities, is managed over its planned lifetime; and
 4. ensure that plans are in place to secure the long term sustainability of coastal areas.
- 1.7 The policy promotes a strategic risk-based approach which aims to strike the right balance between economic prosperity and the need for further defence of the coastline, and reduce the consequences of coastal change on communities. The approach it adopts to do this is to assess risk so it can be avoided and managed.
- 1.8 The hierarchy used in this practice guide further develops the appraise, avoid and manage approach in the Supplement to PPS25. This guide shows how this can be done in practice.

HOW WILL THIS GUIDE HELP YOU

- 1.9 The guide complements the Supplement to PPS25 on Development and Coastal Change by offering guidance on how to implement its policies in practice. It draws on existing good practice, through case studies and examples, to show how regional planning bodies and local planning authorities can deliver the national policies set out in the Supplement to PPS25 on Development and Coastal Change in the light of their own varying circumstances.
- 1.10 Each chapter is set within the context of the overall policy hierarchy which is explained further in Chapter 2:



- 1.11 At the beginning of each chapter this summary flow chart shows which part of the process the chapter relates to. It acts as a reminder that these steps are sequential. So, for example, you can conclude that mitigating the impact of coastal change (Step 5) is a possible solution to managing development within Coastal Change Management Areas (CCMAs), if all previous steps have been considered first. The hierarchy is colour coded as follows:
 - Green step(s) relevant to chapter
 - Yellow step(s) covered in previous chapters
 - Blue step(s) covered in following chapters
- 1.12 *Chapter 2 – The planning system and coastal change management* provides an overview of how the spatial planning process can assist with the strategic management of the impacts of coastal change and sets out the key stakeholders and their roles and responsibilities.

- 1.13 *Chapter 3 – Regional and local planning approach* sets out how consideration of the impact of coastal change should form an integral part of planning strategies and plan making at the national, regional and local levels, and of decision-making on all types of planning applications for development in areas that might be vulnerable to coastal change.
- 1.14 *Chapter 4 – Assessing the impact of coastal change* provides guidance on the available sources of information that will enable Regional Planning Bodies (RPBs) and local planning authorities (LPAs) to understand and assess the level of impact of physical changes to the coast within their regional and local areas, and determine whether an area is at risk, to inform their land allocations and planning strategies and policies.
- 1.15 *Chapter 5 – Identifying the area at risk* explains how to identify the Coastal Change Management Area.
- 1.16 *Chapter 6 – Avoiding and managing the risk* sets out guidance on how to decide what development may be appropriate in the CCMA. To support this it also explains how to assess the vulnerability of development to coastal change, and how to operate time-limited planning permissions.
- 1.17 *Chapter 7 – Mitigating the impact* explains how planners can make provision for the relocation and replacement of development and infrastructure from CCMA's and safeguard land for relocating habitat affected by coastal change.

WHO SHOULD USE THIS GUIDE

- 1.18 The guide is aimed at regional and local planning officers, as well as development control officers. An important principle of the [new planning policy on Development and Coastal Change] is that the impacts of coastal change should be considered at all levels of the planning process. But it will also be relevant to anyone involved in the planning process such as:
- developers and their agents who need to understand how the planning process assesses vulnerability to coastal change and what is required to ensure that development within a CCMA is appropriate
 - individuals with planning applications where coastal change is an issue, to help them understand and where possible reduce vulnerability to coastal change
 - other stakeholders who are involved in development and coastal change; and
 - community groups who want to understand how the planning system deals with development within CCMA's.

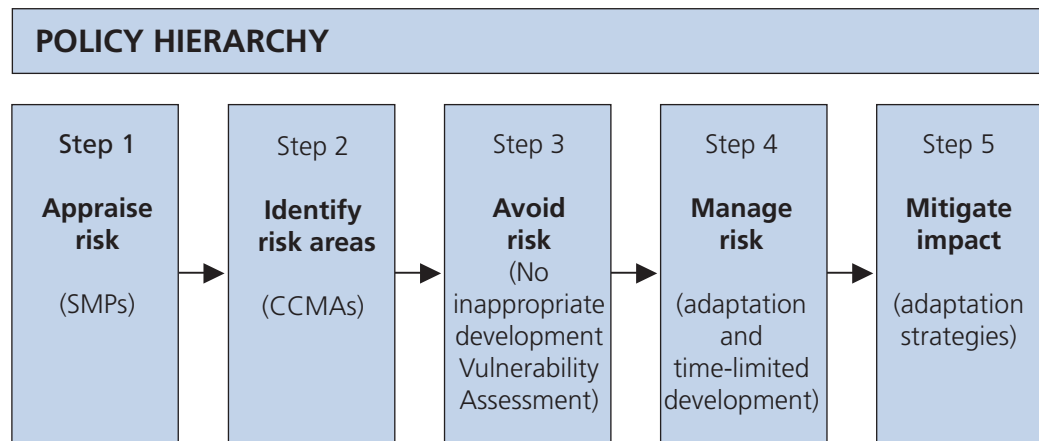
HOW THIS GUIDE WAS PREPARED

- 1.19 This practice guide builds upon the draft framework of the practice guide which was part 3 of the consultation paper on a new planning policy on Development and coastal change, published for consultation in July 2009. A summary of the responses to the consultation is on the coastal change page of the Communities and Local Government (CLG) website.
- 1.20 This guide has been prepared by CLG drawing on:
- responses to the consultation on the draft framework of the practice guide;
 - case study research carried out by Scott Wilson; and
 - input from staff at the Environment Agency, Natural England, Defra, The National Trust and coastal planning authorities.
- 1.21 Our thanks are due to all those who have contributed.

STATUS OF THE GUIDE

- 1.22 This guide is intended to support and facilitate the implementation of the Government's national planning policies on development and coastal change as set out in the Supplement to PPS25 on Development and coastal change. As such, regard must be had to this guidance in the preparation of Regional Strategies (RS) and Local Development Documents (LDDs) and it is capable of being a material consideration in the determination of planning applications.
- 1.23 The reference to examples taken from any development plan prior to its adoption is without prejudice to the Secretary of State's rights of objection or direction in respect of plan policies, or to call in plans for his own determination. Reference to any example, whether from an adopted plan or otherwise, is also without prejudice to any decision the Secretary of State may wish to take in respect of any planning application coming before him as a consequence of a policy referred to as an example in this guide.
- 1.24 Where other published or electronically available material is cited, apart from Government documents, this is intended to provide pointers to good practice and does not necessarily confer full endorsement or adoption of the content by Communities and Local Government. Similarly, the case studies used are intended to suggest good practice in ways of working rather than full endorsement of a particular proposal or decision.

2 The planning system and coastal change management



INTRODUCTION

- 2.1 This chapter provides an overview of how the spatial planning process can assist with the strategic management of the impacts of coastal change and sets out the key stakeholders and their roles and responsibilities.
- 2.2 Coastal change and its impact on the natural and built environment is a material planning consideration. New planning policy on Development and coastal change requires coastal change to be taken into account at all stages of the planning process to avoid inappropriate development.
- 2.3 The spatial planning approaches advocated in the new planning policy on Development and coastal change (including the emphasis on close partnership working) can assist with the strategic management of the impacts of coastal change, while realising the opportunities to improve the quality of the built and natural environment. Illustrative case studies of these approaches being put into practice are included within this guide.
- 2.4 Figure 1.1 summarises how the spatial planning process should do this. The outcome should be a strategic approach to coastal change at all levels following the hierarchy set out above.

Figure 1.1 Overview of how the spatial planning process can assist with the adaptation to coastal change.			
Policy Hierarchy stage	What it means	How the planning system deals with it	Who is responsible
Appraise risk	Undertake studies to collect data at the appropriate scale and level of detail to understand impact of coastal change.	By reference to Shoreline Management Plans, Environment Agency maps and other strategic plans for coastal areas.	Planning bodies.
Identify risk areas	Identify the areas likely to be affected by physical changes to the coast.	Set out coastal change management areas on the LDF proposals map.	Planning bodies.
Avoid risk	Avoid inappropriate development in areas that are vulnerable to coastal change.	Carry out a vulnerability assessment and only allow appropriate development that requires a coastal location and provides substantial economic and social benefits.	Planning bodies and developers.
Manage risk	In considering applications for development take into account whether development will be safe through its planned life-time.	Where development is appropriate, set a time limit for development.	Planning bodies and developers.
Mitigate impact	Reduce the risk facing coastal communities already experiencing coastal change.	Put in place plans to manage the future development of coastal communities through adaptation, for example, by improving their resilience or by relocation.	Planning bodies.

- 2.5 Tackling climate change is the Government's principal concern for sustainable development in a changing global context. PPS1, Delivering Sustainable Development, and PPS Planning and Climate Change set out the wider planning policy framework for managing and reducing the risk from climate change to deliver sustainable development. These, alongside PPS25, Development and Flood Risk, promote a risk-based approach towards managing the impact of coastal change by:
- Ensuring a broad consideration of the impacts of coastal change in preparing spatial plans at regional and local level and in determining planning applications, based on the use of an agreed evidence base on coastal change, including coastal erosion and projected sea level rise and their degree of impact on the coast;
 - Avoiding inappropriate development in areas that are vulnerable to coastal change, whilst allowing necessary development that is appropriate and safe; and
 - Shaping sustainable coastal communities that are resilient to coastal change.

SECTION 1 – OUTLINE OF STAKEHOLDERS' KEY ROLES AND RESPONSIBILITIES AND LINKAGES

- 2.6 The policy advises that the Environment Agency should be consulted on planning applications in areas that are identified as vulnerable to coastal change (i.e. Coastal Change Management Areas (CCMAs)). With its new strategic overview role, the Environment Agency will be able to support the planning system by providing timely information and advice on coastal change issues that is fit for purpose.

The Environment Agency's 'strategic overview' role

The Government's Making Space for Water strategy included a commitment to extend the strategic role of the Environment Agency in relation to the future management of coastal erosion risk in England. Under the new arrangement, which came into force on 1st April 2008, the Environment Agency will:

- *Take the lead in managing all sea flooding risk in England, and fund and oversee coastal erosion works undertaken by local authorities;*
- *Ensure that proper and sustainable long-term Shoreline Management Plans (SMPs) are in place for the English coastline. SMPs will be managed, reviewed and approved by the Environment Agency on behalf of Defra;*
- *Work with local authorities to ensure that the resulting flood and coastal erosion works are properly planned, prioritised, procured, delivered and maintained so that record levels of investment are used to best effect. Local Authorities will remain the lead for coastal erosion but under the Environment Agency's overview role; and*
- *Ensure that third party defences are sustainable*

- 2.7 Partnership working and coordination between all stakeholders with an interest in the coast to enable the sharing of knowledge, best practice and experience is key to successful management of coastal change. Local planning authorities should consult other agencies and bodies with an interest in the coast, including Natural England, the National Trust, English Heritage, the Marine Management Organisation, Primary Care Trusts and Coastal Groups³.

SECTION 2 – INTEGRATED COASTAL ZONE MANAGEMENT AND THE MARINE AND COASTAL ACCESS ACT 2009

- 2.8 Integrated Coastal Zone Management (ICZM) is a tool which facilitates a joined-up holistic approach towards the planning and management of the many different elements (land and marine) of the coast, bringing stakeholders together.
- 2.9 Engagement with Coastal Groups should help inform the planning system and strengthen links with the Shoreline Management Plan (SMP) process.
- 2.10 Coastal Partnerships can provide an effective way of involving stakeholders in all planning and decision-making for the coast.
- 2.11 The Government's approach to implementing ICZM is set out in 'A strategy for promoting an integrated approach to the management of coastal areas in England' (see below), and the planning principles promoted through the Development and Coastal Change policy, reflect this approach.

³ Coastal Groups are voluntary coastal defence groups made up of maritime district authorities and other bodies with coastal defence responsibilities. These are responsible for preparing Shoreline Management Plans.

ICZM – ‘A strategy for promoting an integrated approach to the management of coastal areas in England’ (Defra, 2009)

This strategy sets out the Government’s vision for coastal management, objectives and future actions to achieve the vision, and briefly explains how all the changes currently being taken forward will work together in coastal areas.

Integrated Coastal Zone Management (ICZM) means adopting a joined-up approach towards the many different interests in coastal areas –both on the land and at sea. It is the process of harmonizing the different policies and decision-making structures, and bringing together coastal stakeholders to take concerted action towards achieving common goals. Integrating the many different interests effectively means we can look at the coast in a holistic way.

The recognised key principles which should guide all in implementing an integrated approach to the management of coastal areas are:

- *A long term view*
- *A broad holistic approach*
- *Adaptive management*
- *Working with natural processes*
- *Support and involvement of all relevant administrative bodies*
- *Use of a combination of instruments*
- *Participatory planning*
- *Reflecting local characteristics*

ICZM is a priority for UK Government. The aim is to embed these principles into all coastal planning and decision-making processes affecting coastal areas, including both the terrestrial and marine planning systems.

Case study

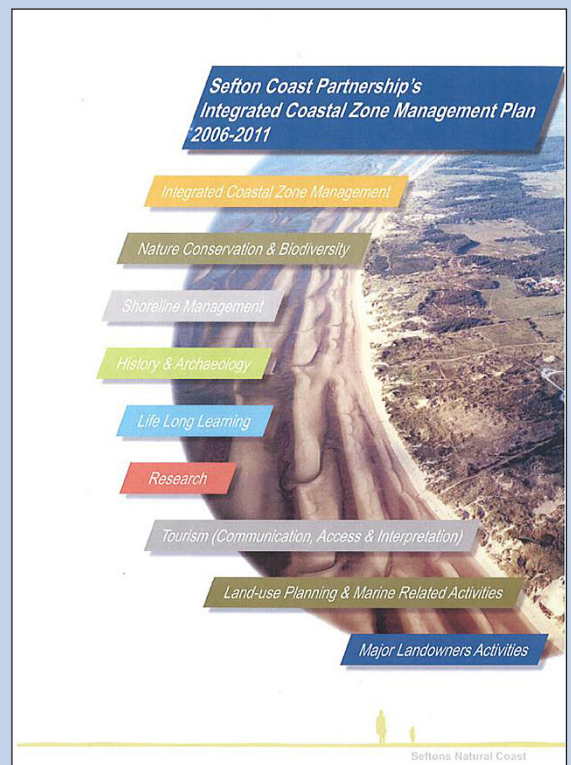
Sefton ICZM – an example of partnership working

The coast between the Ribble and Mersey Estuaries has a long history of management and is now referred to as Sefton's Natural Coast. A diverse range of habitats are found along this stretch of coastline that are of international, national and local importance, these include sand dune habitats and salt marsh.

Partnership working has been a key to the success of managing the Sefton Coast which has benefited from over 30 years of improved co-ordination. During the early 1970's concerns were raised about the loss of dune habitat to development and it was realised that successful restoration schemes could only be achieved through co-ordination and long-term management.

The continued evolution of coastal management has led to the formation of the Sefton Coast Partnership (SCP). This is an informal association of interested parties including land managers, land owners, community groups, agencies and Sefton Council. SCP is integral to the successful implementation of ICZM practices.

Dissemination of information about the Sefton Coast is undertaken through 'Coastlines', a publication that is distributed to local communities through a mailing list, schools and libraries. The publication is available via the dedicated Sefton Coast website. In addition, SCP holds an annual forum that engages the public and provides opportunities for a wider audience to discuss coastal issues.



Continued

Sefton ICZM – an example of partnership working (continued)

This partnership approach and community engagement allows a consensus to be developed on issues where joint action is required; it facilitates communication, through the dissemination of information to partners and the public; assists in resolving conflicting views; and provides the opportunity to develop coast wide strategies and, importantly, actions on the ground. For example, it has facilitated:

- Coastal Access
- Beach Management
- Branding and Interpretation
- Nature Conservation Strategy
- Sefton Coast Woodlands Management Plan
- Joint procurement opportunities for ICZM collaborative actions
- Stakeholder network for the Shoreline Management Plan (SMP)

The current ICZM plan (2006-2011) is a non statutory document. A revised plan is being produced and is expected to be endorsed by the partners in 2011. Where appropriate, linkages will be made with the emerging Local Development Framework, including the Core Strategy. The aim is to help inform and integrate with the wider planning process, and with the Shoreline Management Plan. At the more detailed level, the ICZM plan, together with the Green Space Strategy for Sefton and other more focussed strategies, helps set the priorities for green space (including coastal) enhancement linked to development proposals. Further information on Sefton's Natural Coast can be obtained at the following websites:

<http://www.seftoncoast.org.uk/coastlines.html> (Coastlines publications)

<http://www.visitsouthport.com/sefton/home> (visitor information)

<http://www.nwcoastalforum.co.uk/>

Case study

Alde and Ore Futures Pilot Project, Suffolk – an example of partnership working between coastal communities and the Suffolk Integrated Coastal Zone Management (ICZM) Initiative

The Suffolk ICZM Initiative known as the ‘Suffolk Coast Futures’ is a partnership between regional and local government and government agencies. The coastal zone within Suffolk poses dynamic challenges both now and in the future for communities, the economy and the environment. Through working in partnership with the community, an integrated long term management plan is being developed to provide a more sustainable and co-ordinated approach to coastal zone management.

The Alde and Ore Futures is a pilot project focussed on the Alde and Ore estuary and is part of the wider Suffolk Coast Futures that has identified the requirement to:

- Develop and test better governance processes for the coastal zone
- Develop new techniques to enable multiple funding streams for projects
- Build community based framework plan or ‘route map’ for the area

This aims to address long term issues identified by the community through consultation. A ‘community conference’ was held to ensure that representatives of interested parties were actively involved. Task and finish working groups were formed by members the local communities to look at the specific issues and opportunities for local solutions in the area. Each group is chaired by a local person and is made up of a wide range of interested parties within the community. Each group is supported by a lead officer from one of the Suffolk Coast Futures partners. The five working groups are:

- Communities
- Business and infrastructure
- Landownership and Fisheries
- Environment, Recreation and Access
- Arts Futures

These groups are currently identifying issues that are important to them in and around the estuary and are developing ideas to help deal with challenges that are likely to affect those within the Alde and Ore area. Prospective opportunities for the topic areas will be identified by each group alongside issues that cannot be dealt with locally. Even in the early stages it was quickly apparent how each of these groups is both dependent on each other on many issues. As the project develops, innovative working will be required to create multiple sources of funding and ensure that recommendations are legal and fundable. This work will support and inform the development of the flood risk management strategy being developed by the Environment Agency.

Continued

Alde and Ore Futures Pilot Project, Suffolk – an example of partnership working between coastal communities and the Suffolk Integrated Coastal Zone Management (ICZM) Initiative (continued)

This project is working with the 'Estuary Planning Partnership of the Alde and Ore' that was established in 2004 to improve communication with the community. The aim is the identification and implementation of improvements in the care of the estuary.

The project is feeding into Suffolk Coastal District Council's LDF. The partnership is also engaging with Suffolk Coastal planners on other issues such as ensuring that the Core Strategy and the LDF take into account coastal issues which will have to go through a planning application process.

Further information on Suffolk Coastal Futures and Alde and Ore Futures is available at:

<http://www.suffolkcoastfutures.org.uk>

On the Edge: Aldeburgh, the sea and estuary. Image courtesy of Terry Oakes Associates



- 2.12 Coastal integration applies to both the terrestrial and marine planning systems. It is important that changes introduced by the Marine and Coastal Access Act 2009 are considered alongside proposals for managing the impacts of physical changes to the coast through the terrestrial planning system. The Marine and Coastal Access Act has set the framework for a marine planning system. This will comprise the development of a Marine Policy Statement which will bring together national policies that affect the marine area, followed by a series of Marine Plans that will apply the policies locally. Public authorities must take authorisation or enforcement decisions in accordance with the appropriate marine policy documents (Marine Policy Statement and Marine Plans) unless relevant considerations indicate otherwise. They must also have regard to the Marine Policy Statement and any relevant Marine Plan for other types of decision which will or may affect the UK marine area, unless relevant considerations indicate otherwise.

- 2.13 The Marine and Coastal Access Act also contains provisions to create a new Non Departmental Public Body, the Marine Management Organisation, and also improve public access to the English coast.

The Marine and Coastal Access Act and the Marine Management Organisation

The Marine and Coastal Access Act has introduced a new system of marine planning that should be a key tool in helping the UK Government deliver its vision of the marine environment through strategic management. Marine planning aims to clarify the UK Government's objectives and priorities for the future, and direct decision-makers and users towards more efficient, sustainable use and protection of our marine resources. Marine Plans will lead the process of joining up between marine and terrestrial planning.

The Marine Management Organisation (MMO) will be the UK Government's strategic delivery body in the marine area. The MMO will draw up the Marine Plans for the Secretary of State and also as regulate many activities in the marine environment. Marine Plans will cover the whole UK marine area which goes up to mean high water spring tide and the waters of every estuary, river or channel as far as the tide flows at mean high water spring tide. When drawing up Marine Plans, the MMO will seek to ensure that they are compatible with terrestrial plans. To do this, the MMO will work closely with local planning authorities and responsible regional authorities to aid integration of land and marine planning and management.

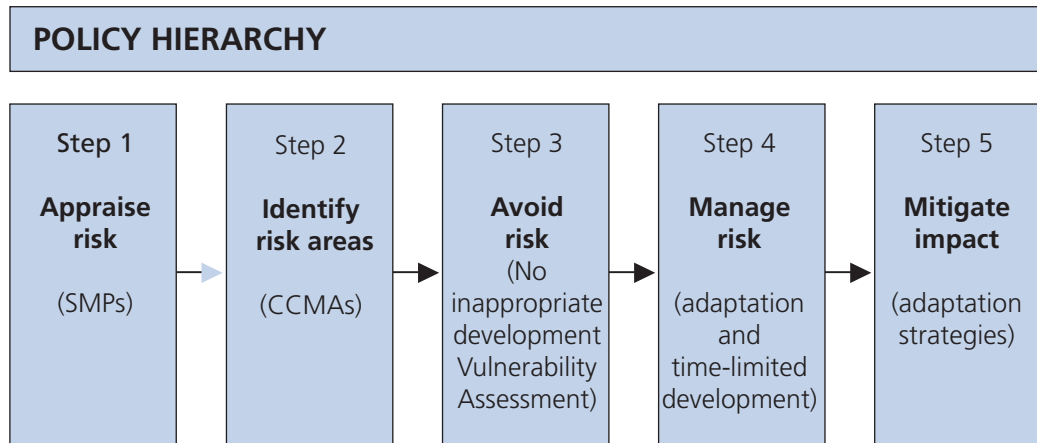
SECTION 3 – LINKS TO OTHER RELEVANT PLANNING POLICY STATEMENTS (PPSS) IN ENSURING THE PROPER MANAGEMENT OF COASTAL AREAS

- 2.14 The new policy on Development and Coastal Change is part of the framework of national planning policy and does not seek to repeat or duplicate other national planning policy relevant in its application. The policy should be read alongside other relevant Planning Policy Statements (PPS/PPG(s)).
- 2.15 Of particular relevance is PPS25, Development and Flood Risk. This sets out the Government's policies for managing flood risk through the spatial planning system. PPS25 aims to ensure that flood risk is taken into account at all stages of the planning process to avoid inappropriate development in areas at risk of flooding and to direct development away from areas at highest risk. Where new development is, exceptionally, necessary in such areas, policy aims to make it safe, without increasing flood risk elsewhere, and, where possible, reducing flood risk overall. The policy on Development and Coastal Change complements PPS25 by taking forward its risk-based approach on managing the impacts of physical changes to the coast on development.

- 2.16 There are communities which will be exposed to the risk of both flooding from the sea and coastal change. Continued historic sea level rise exacerbated by climate change is likely to increase the risk from sea flooding to some coastal communities. Where the impact is increased probability of flooding, it is addressed through PPS25 policy and assessed by Strategic Flood Risk Assessments (SFRAs)⁴. Should sea levels rise to the extent that defences are permanently overtopped so that areas are inundated, with movement of shorelines inland, the new policy on managing coastal change will come into effect. Consequently, flood risk management policy (PPS25) will need to be integrated with the coastal change policy to effectively manage the impacts of climate change and the changing coastline to these communities. This will particularly be the case where there is an identified risk of inundation in the medium to long-term but where the shorter term risk is increased probability of flooding.
- 2.17 Coastal areas currently protected by coastal defences may face the risk of flooding resulting from either physical failure of the defence, in whole or in part (i.e. breach) or sea water levels rising to exceed the level of the defence (i.e. overtopping). PPS25 policy is that this flood risk should be appraised as part of the SFRA and, where relevant, through site-specific flood risk assessment (FRA), taking account of coastal management policy set out in the Shoreline Management Plan (i.e. hold or advance the line of defence, or no active intervention on defended coasts), and the risk of flooding to development managed by applying the approach in PPS25.
- 2.18 Where the shoreline is changing as result of coastal management policies (i.e. either no active intervention on undefended or defended coast, or managed realignment), it is proposed that the impacts of these changes to the coast on development be managed by applying the new policy on Development and Coastal Change.

⁴ PPS25 requires that flood risk is assessed by local planning authorities through Strategic Flood Risk Assessments (SFRAs) to provide the evidence base for their plans and strategies and that planning applications for development in flood risk areas are accompanied by a Flood Risk Assessment (FRA). Both SFRA and FRA should consider the risk and impact from sea flooding (including changes in risk as result of coastal processes) SFRAs and FRAs should take account of the evidence provided by SMPs to understand the effects of coastal change.

3 Regional and Local Planning Approach⁵



INTRODUCTION

- 3.1 This chapter of the Practice Guide sets out how consideration of the impact of coastal change should form an integral part of planning strategies and plan making at the national, regional and local levels, and of decision-making on all types of planning applications for development in areas that might be vulnerable to coastal change.
- 3.2 Coastal change should be taken into account at all levels of the planning system. By doing so inappropriate development can be avoided in coastal change management areas which will help deliver sustainable development into the future.
- 3.3 Planners have a key role in managing the impacts of coastal change through the hierarchy above. The planning system is the main way to avoid and reduce the impact of coastal change to and from new development. It also offers opportunities to reduce the impacts of coastal change on existing communities and developments.
- 3.4 The new planning policy on development and coastal change is part of the plan led approach to spatial planning. The aim is to set broad policies and allocations for an area taking full account of coastal change. Once spatial plans are adopted there should be greater certainty regarding the type of development that can proceed in those allocated areas. Individual planning applications which conform to plan policies should be straightforward in granting planning permission, subject to other material considerations, as the principles for development will already have been appraised in the formulation of the plans.
- 3.5 RSSs and LDDs should deliver a full and appropriate response to coastal change, by giving effect to the Government’s objectives for planning in coastal areas affected by coastal change set out in policies DCC2 and DCC3 of the policy on Development and Coastal Change.

⁵ Government is in the process of reforming regional arrangements. References made to Regional Spatial Strategies (RSSs) and Regional Planning Bodies (RPBs) will be subject to change in light of the provisions in Part 5 of the LDEDC (Local Democracy, Economic Development and Construction) Act 2009. Namely, references to RSS will be replaced by ‘regional strategy’ and RPB will be replaced by ‘Responsible Regional Authorities’.

Regional and local planning strategies should help implement the key planning objectives⁶ by including policies tailored to local circumstances.

SECTION 1 – PLANNING APPROACH AT THE REGIONAL LEVEL

- 3.6 Policy DCC2 in the policy on Development and Coastal Change sets out the approach that Regional Planning Bodies (RPBs) should take to manage coastal change in the light of evidence on whether existing and planned coastal defences will be adequate or available in the future⁷.
- 3.7 RPBs are expected to cooperate with adjacent regions to promote consistency in assessing and responding to coastal change issues and setting up arrangements to involve and inform local planning authorities (LPAs), as coastal processes (and SMPs) cross local authority boundaries.
- 3.8 In developing a regional approach to managing the impacts of coastal change, RPBs will want to consider how to optimise the location of the region's areas for growth, particularly in relation to coastal sub-regions. This should aim to provide a consistent and coordinated approach to coastal development. The approach should also include consideration of the possibility and practicality of relocation of communities at risk to more sustainable locations.

⁶ Refer to section 3.1. of the Consultation Document

⁷ The new policy sets out in policy DCC 1.2. that this evidence should be drawn from SMPs and other strategic plans that apply to coastal areas, such as: Catchment Flood Management Plans, Heritage Coastal Strategies, Natural England's strategies for the coast, and the Environment Agency's national maps of coastal erosion , where available.

Case study

Lincolnshire Coastal Study

Whilst the impact of climate change is an issue for the whole of the East Midlands, it has particular implications for the Lincolnshire coast, which has some of the country's best and most versatile agricultural land, a successful tourism industry but also some areas of considerable social and economic deprivation.

Large parts of the Lincolnshire coast, covering the districts of East Lindsey, Boston and South Holland, are at or below sea level and may be particularly vulnerable to the impacts of climate change from rises in sea level and more frequent storms.

Although the parts of the coast vulnerable to flooding are currently well protected, the likely levels of sea level rise over the next 50 to 100 years will mean that some hard decisions will need to be taken about the scale and location of future development and investment.

The Panel conducting the Regional Spatial Strategy (RSS) examination for the East Midlands considered that more research was needed to inform a full consideration of the implications of flood risk caused by sea level rise, and this was confirmed by the Secretary of State in the published RSS who called for the development of a strategy which would consider flood risk alongside housing, regeneration, infrastructure and the protection and integrity of nature conservation sites. Until such a strategy is adopted, the RSS has limited new housing development to existing commitments in the three districts.

The Lincolnshire Study Group was formed to develop a series of options for sustainable development in the three coastal districts. The Group consists of:

- Lincolnshire County Council
- The three coastal local authorities (East Lindsey, Boston and South Holland)
- Government Office for the East Midlands
- East Midlands Development Agency
- Environment Agency
- Natural England
- East Midlands Regional Assembly
- Internal Drainage Boards

Continued

Lincolnshire Coastal Study (continued)

The Lincolnshire Coastal Study was undertaken to help inform a partial review of the RSS. Whilst a RSS will typically plan 15-20 years ahead, the Coastal Study has looked ahead over a 20, 50 and 100 year time horizon. By providing a considerably longer perspective, the Study ties in closely with the work of two Shoreline Management Plans along Lincolnshire's coast that have been updated. Further information on the Lincolnshire Coastal Study is available at:

<http://www.lincolnshire.gov.uk/section.asp?sectiontype=listmixed&catid=22527>



Mablethorpe, Lincolnshire Coast. Images courtesy of Scott Wilson

SECTION 2 – PLANNING APPROACH AT THE LOCAL LEVEL

- 3.9 LPAs are responsible for developing and implementing policies to manage and adapt to coastal change through spatial planning decisions at the local level. The approach LPAs should take to managing coastal change is set out in policy DCC3 of the Supplement to PPS25 on Development and Coastal Change.

Pre-application discussions and assessment

- 3.10 PPS1 says that local planning authorities should consider the benefits of early engagement in pre-application discussions. Early engagement is particularly beneficial for proposed developments in the CCMA. Early discussions are also useful with relevant agencies and bodies with an interest in the coast. The more the applicant and the local planning authority can explore and understand the risk, extent and nature of the coastal change impact before applications are made, the greater the chances of a successful application. This discussion will also assist in scoping the information that will be required by the local planning authority to reach a decision on the application when it is submitted.

Opportunities to achieve wider benefits

- 3.11 Taking a strategic approach to planning in areas of coastal change and working in partnership with other stakeholders can provide opportunities to achieve other wider benefits for the community at the same time as managing and reducing the risk from coastal change. For instance, opportunities through the design, construction and maintenance of coastal defences to incorporate renewable energy generation schemes in sustainable coastal defences, or more widely in coastal locations; or integrating new recreational access opportunities into adaptation and mitigation proposals.

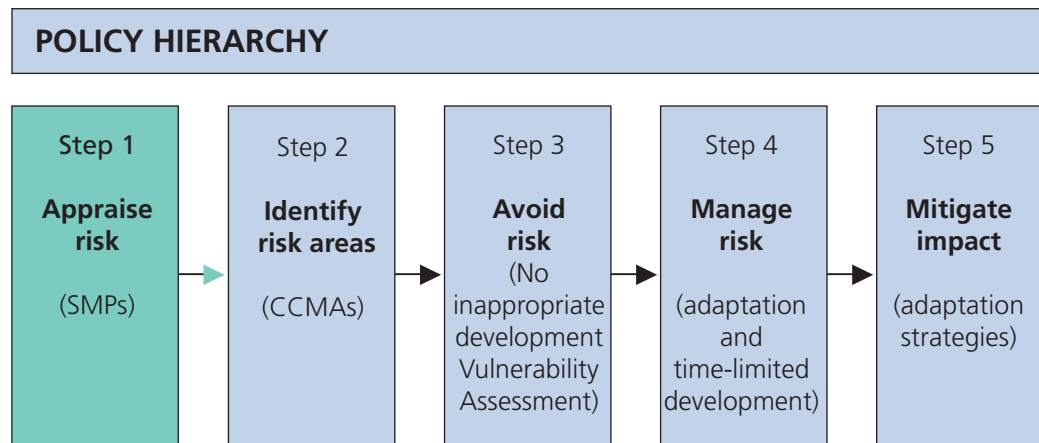
SECTION 3 – DECISION MAKING AND THE ROLE OF THE SUSTAINABILITY APPRAISAL

- 3.12 The sustainability appraisal of RSSs and LDDs provides an effective tool for ensuring proper integration of coastal change considerations at the plan making stage, but also for promoting a balanced approach within the context of wider spatial priorities (social, economic and other environmental considerations). Avoiding and reducing the impacts from coastal change to development should be identified as a sustainability objective if it is identified as a key priority regionally or locally. Information from SMPs should provide baseline information for the Sustainability Appraisal of regional and local plans.

SECTION 4 – MANAGEMENT OF THE INTERIM POSITION

- 3.13 Local planning authorities (LPAs) need to manage the impacts of coastal change in the interim, before RSSs and LDDs can be updated to properly reflect the new policy.
- 3.14 Before CCMAAs have been defined, LPAs are advised to use the information from SMPs and the Environment Agency to consider whether any planning applications coming forward in coastal locations fall within areas that are at risk from coastal change. For planning applications that come forward in these areas, and would potentially fall within a CCMA when defined, the LPA are advised to apply policy DCC5 when considering the application.

4 Assessing the impact of coastal change



INTRODUCTION

- 4.1 This chapter provides guidance on the available sources of information that will enable RPBs and LPAs to understand and assess the level of impact of physical changes to the coast within their regional and local areas, and determine whether an area is at risk, to inform their land allocations and planning strategies and policies.
- 4.2 Although regional and local plans set our spatial policy for the next 15 to 20 years, decisions made concerning land use and types of development in areas that might be vulnerable to coastal change will have implications over much longer timeframes. When setting policies and agreeing allocations planning bodies will need to agree how to factor in climate change and over what timeframe. It should be borne in mind that the costs and benefits of all publicly-funded coastal defences are considered over a 100 year time horizon in SMPs, to help ensure that the preferred options take account of long-term sustainability issues. The main source of evidence should be SMPs. Defra and the Environment Agency have strategies in place to ensure SMPs reflect the latest United Kingdom Climate Projections (UKCP) scenarios.
- 4.3 Policy DCC1 requires that LPAs should have a proportionate and sufficient evidence base on coastal change to inform their decision-making. Partnership working is key to developing a collective understanding of coastal processes and issues for planning to manage coastal change. An agreed evidence base facilitates this collective understanding and a coordinated approach to managing the physical impacts of coastal change through both the marine and terrestrial planning systems.

SECTION 1 – THE ROLE OF SHORELINE MANAGEMENT PLANS

- 4.4 Shoreline Management Plans (SMPs) provide technical information on physical changes to the coastline and options to manage the risks of coastal flooding and erosion. They provide a key source of evidence for RPBs and LPAs in developing their spatial plans. Evidence from SMPs could be augmented by Regional Flood Risk Appraisals, Strategic Flood Risk Assessments (SFRAs), Catchment Flood Management Plans and River Basin Management Plans.

Shoreline Management Plans

A Shoreline Management Plan (SMP) is a plan for future management of the risks associated with coastal processes (e.g. tidal patterns, wave height, wave direction and the movement of beach and seabed materials) which aims to reduce the impact of those risks to people and the developed, historical and natural environment. SMPs provide detailed information on the extent of coastal erosion, as well as consideration of the range of feasible coastal management scenarios for each coastal areas and their impact in shaping the coastline.

SMPs are usually led/drafted by a lead local authority; however a few are led by the Environment Agency. In both cases there is a steering group (Coastal Group), comprising the Environment Agency, all local authorities covered by the SMP, Natural England and others as required (e.g. some port authorities).

SMPs inform decisions (taken by the Environment Agency) on which schemes to fund and inform long term investment strategies.

- 4.5 The regional and local spatial responses to SMPs need to be distinctive and tailored to the places and challenges concerned. At the local level, local development documents (LDDs) will need to address the risks and issues raised by their SMP within the context of all relevant national planning policies and related evidence. Effective partnership working by the LPAs in the SMP process should help ensure that planning issues are properly considered when appraising the proposed coastal management scenarios and that LPAs properly understand their spatial implications.
- 4.6 In this context, it is proposed that SMPs fulfill a similar role to that of a Strategic Flood Risk Assessment (SFRA), in that they will provide the means of identifying the risks for a local area and proposals on how to manage them. Integrating SMPs in the planning process will ensure that they (i) provide the basis for regional strategies and local spatial plans, and (ii) will clarify they are material considerations for planning applications in coastal areas.

Case study

Use of Shoreline Management Plan evidence to inform local plans and policies – Practice Waveney District Council

The coastal zones of Waveney District experience some of the most dramatic coastal erosion to be found in the region and are covered by two SMPs. Both SMPs have recently been reviewed and formal adoption of the documents is scheduled for Autumn 2010.

Waveney have used the two relevant SMPs to inform both their adopted Core Strategy and their Development Management Policies DPD – Preferred Options. The Core Strategy contains a policy requiring proposals to avoid areas at risk of coastal erosion and ensure compatibility with the SMPs (Policy CS03). The SMPs information has also been used in the Sustainability Appraisal of the Core Strategy. The Inspector's Report on the Examination in Public of the Core Strategy makes reference to the use of SMPs as part of the evidence for Policy CS03 and found this policy consistent with national and regional policy and sound.

References:

http://www.waveney.gov.uk/Planning/Planning+Policy/Local+Development+Framework/core_strategy.htm

North Norfolk District Council

North Norfolk District Council has published guidance on Development and Coastal Erosion (April 2009). One of the aims of this document is to show how the predictions for coastal erosion contained within the relevant SMP can be applied in decisions about new development.

The guidance recommends that the information included in an SMP may be material to the consideration of planning applications. The SMP information could indicate the likely timescales in which existing or proposed development may become at risk of coastal erosion. This information may influence decisions on the appropriateness of development or the nature and timing of any potential mitigation measures.

North Norfolk District Council guidance also recommends the use of SMPs in designating its equivalent of the Coastal Change Management Area.

Reference:

http://www.northnorfolk.org/files/Development_and_Coastal_Erosion_Guidance.pdf

Continued

Use of Shoreline Management Plan evidence to inform local plans and policies – Practice (continued)



Overstrand 20, 50 and 100 year erosion lines from SMP2. Image courtesy of North Norfolk District Council

Integrating SMPs into spatial plans

4.7 Recent research funded by the Environment Agency (EA) provides useful recommendations to improve the integration of SMP evidence and spatial plans. Many of the recommendations (See case study below) are targeted at those preparing the SMPs or at Defra and the EA.

However, the research also provides useful advice for local planners including the need to:

- consider and plan for non-housing-led regeneration and economic growth in areas at risk. This is currently being investigated in Lincolnshire through the on-going coastal study;
- adopt roll-back and relocation policies in all areas at risk of coastal change. This should be done in order to reduce the social and economic impacts of managed realignment or no active intervention SMP policies;

- identify areas at risk of coastal change derived from SMPs (in line with the approach contained in the PPS);
- consider using Area Action Plans where significant levels of development are to be allowed on the coast.

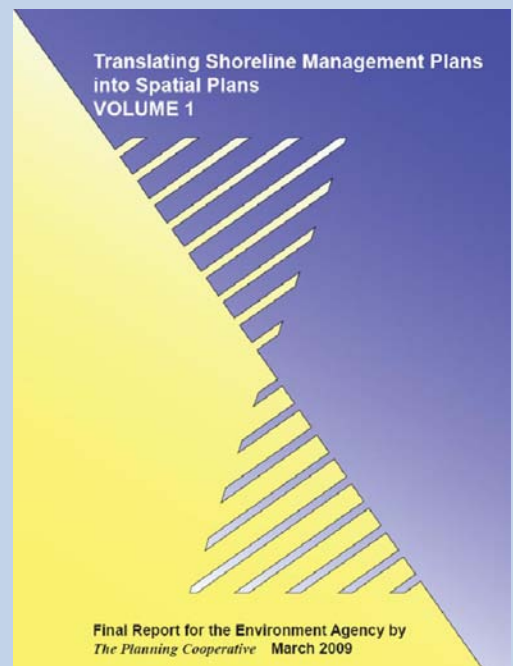
Case study

Research: Translating SMPs into Planning Policy

Shoreline Management Plans (SMPs) are produced to assess the risks associated with coastal processes and help to reduce these risks. The SMPs forecast the future shoreline position and identify policies for discrete sections of coastline in three coastal erosion risk zones defined by epochs (up to the year 2025, up to 2055 and up to 2105). This breakdown provides valuable information allowing an assessment of when a particular property or new development site is likely to be at risk.

Due to a concern that SMPs may not be well understood and/or usefully incorporated into planning policy, the Environment Agency (EA) commissioned research in 2008 to investigate the relationship between SMPs and spatial plans and how links between the two plan-making regimes could be improved. The key findings of the research include recommendations for:

- Process: including aligning timescales of SMPs and spatial plans, involvement of LPAs in SMP production, recommended revisions to the Defra guidance in relation to the generic policy options and the policy development process.
- Practice: including recommendations for SMPs to highlight areas where development can proceed as well as where it should be avoided, information from SMPs to be included on the Local Land Charges Register, use of the proposed Community Infrastructure Levy to benefit coastal communities threatened by coastal change, the use of more creative visualisation techniques to engage local communities in the SMP process, SMP recommendations should be summarised to each LPA.



Continued

Research: Translating SMPs into Planning Policy (continued)

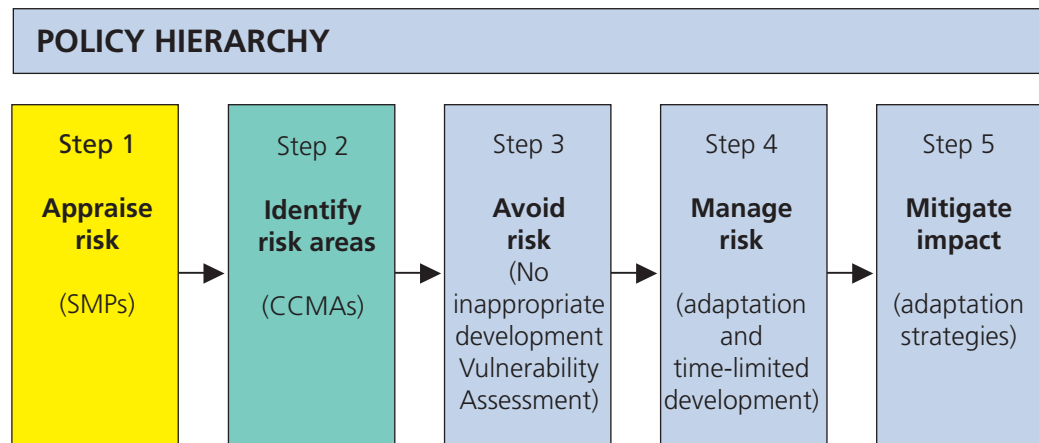
- Policy: including consideration of non-housing-led regeneration, encouragement to adopt roll-back and relocation policies, appropriate forms of development to be permitted in coastal locations according to vulnerability, identification of 'areas of coastal change' by LPAs based on the SMP findings, consideration of the use of Area Action Plans, production of a Defra/EA position statement regarding the use of SMPs for spatial planning purposes.
- Personnel: including a coastal development officer in the planning department of every coastal local authority, identification of 'coastal champions' at officer and member level in every coastal LPA, the need for effective and efficient partnership working on coastal planning and management matters.
- Publicity: including circulation of the findings of the report to all organisations with responsibilities for spatial and shoreline management planning, planning magazines, coastal forums, and an on-line training module on SMPs and spatial plans as part of the Royal Town Planning Institute's online CPD resource.

Reference: The Planning Cooperative (2009) Translating Shoreline Management Plans into Spatial Plans

SECTION 2 – OTHER SOURCES OF INFORMATION

- 4.8 Although SMPs should provide the principal source of information, to provide an evidence base at the appropriate scale and level of detail required by policy DCC1.1 planning authorities may need to use other relevant data sources on coastal change and, specifically, coastal erosion. Other sources of information include the Environment Agency's national maps of coastal erosion (when available), Catchment Flood Management Plans, and other strategic plans that apply to the coast such as Heritage Coast Strategies, Natural England's strategies for the coast, and Coastal Observatories.

5 Identifying the area at risk from coastal change



INTRODUCTION

- 5.1 This chapter explains how to identify the Coastal Change Management Area.

SECTION 1 – IDENTIFYING THE COASTAL CHANGE MANAGEMENT AREA

- 5.2 Policy (DCC3) requires LPAs to identify the area likely to be affected by physical changes to the shoreline and refer to this as the Coastal Change Management Area (CCMA). (For interim arrangements before CCMA defined see 3.13-3.14)
- 5.3 This area should be identified on the Proposals Map of the local development framework (LDF).
- 5.4 A CCMA will only be defined where rates of shoreline change are significant over the next 100 years, taking account of climate change. CCMA will not need to be defined where the SMP policy is to hold or advance the line (maintain existing defences or build new defences) for the whole period covered by the SMP.
- 5.5 To define a CCMA policy DCC 3.1 states that the LPA should draw on the evidence of impacts (DCC3.1.i). LPAs will need to demonstrate that they have considered SMPs in defining the CCMA and land allocation within it. The CCMA should be defined primarily from the evidence provided by SMPs. However other sources may help inform decisions on the appropriate area for the CCMA. These could include Catchment Flood Management Plans, Estuary Management Plans, Harbour Management Plans and River Basin Management Plans.

- 5.6 SMPs identify risk in three time horizons (up to 20, 50 and 100 years) and include maps showing the geographical extent of each risk area. LPAs will have discretion to determine how these are interpreted in planning terms to define the CCMA and whether the CCMA should show the separate zones for each of the three time horizons, or whether it should rely on the SMP for the area to provide that level of information. Where SMP policy is to hold the line over part of the period, evidence would be expected to be provided of how this may be secured.

Case study

North Norfolk District Council – Developing policy at the local level

North Norfolk's coast is characterised by low-lying areas as well as cliffs that are susceptible to erosion. Revisions to an SMP covering part of the district's coastline advocated changes which would expose large areas of the coastal cliffs to increased rates of erosion and (in the longer-term) and increase flood risk in the low lying areas. This policy increased risks in some areas to property, local communities, environmental assets and infrastructure. It also raised questions over how development would be managed in areas at risk.

Based on evidence from the SMP2 and through stakeholder engagement activities, the Council identified Coastal Erosion Constraint Areas (Policy EN11) through their Core Strategy. The policy is designed to discourage development within these areas unless it can be demonstrated that it will result in no increased risk to life or any significant increased risk to property. A separate guidance note was published providing clarity about the implementation of Policy EN11 and guidance on the nature of development that is likely to be appropriate within the Coastal Erosion Constraint Area.

To enable adaptation in advance of the actual loss of property and to minimise the potential effects of blight, the Council also developed a policy (Policy EN12) to help facilitate the 'rolling-back' of development in risk areas to 'safer' inland areas.

The Planning Inspector's report was sympathetic to those who may be negatively affected by the erosion process and the restrictive policy framework within the CECAs. However, in light of the policy alignment with PPS25, PPG20 and PPS25 Annex B on climate change and the risks identified in the SMP, the Inspector concluded '*there is no preferable policy than the identification of the 100 year CECAs which policy EN11 proposes.*'

Further information on the North Norfolk Core Strategy is available at:

Core Strategy: <http://www.northnorfolk.org/ldf/1267.asp>

Planning Inspector's Report:

http://www.northnorfolk.org/ldf/documents/Inspectors_final_report_for_web.pdf

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North Norfolk District Council – Developing policy at the local level (continued)

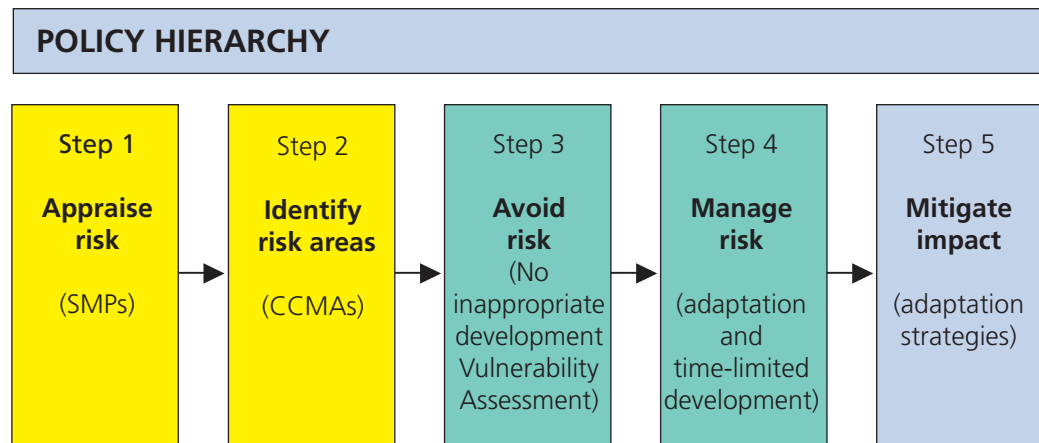


Cromer Panorama and aerial photograph of Sheringham. Images courtesy of North Norfolk District Council.

- 5.7 Policy (DCC3.1. ii) requires the LPA to take into account the wider social, economic and environmental policy objectives. Although the primary basis for defining the CCMA are the physical processes affecting the coast, the LPA may take into account the boundaries of existing settlements and requirements for facilitating roll-back and relocation of land uses.
- 5.8 Policy (DCC3.1.iii) requires the LPA to take into account the strategic approach in the Regional Spatial Strategy (DCC2) and other strategies and plans of significance to the coast.
- 5.9 Policy (DCC1 iv) requires the LPA to work in partnership with other local planning authorities and relevant agencies and bodies with an interest in the coast, joining up with any wider community adaptation activity.

- 5.10 The LPA are expected to consult the Environment Agency and any other relevant bodies when defining the geographical extent of the CCMA, and would be expected to agree the CCMA with the Environment Agency. Other bodies that the LPA may wish to consult include Natural England, the National Trust, English Heritage, the Marine Management Organisation, Primary Care Trusts and Coastal Groups.

6 Avoiding and managing the risk



INTRODUCTION

- 6.1 This chapter sets out guidance on how to decide what development may be appropriate in the CCMA. To support this it also explains how to assess the vulnerability of development to coastal change, and how to operate time-limited planning permissions.

SECTION 1 – APPROPRIATE DEVELOPMENT WITHIN THE COASTAL CHANGE MANAGEMENT AREAS

- 6.2 Policy DCC3.2 requires the LPA to set out for CCMA(s):
- i) The type of development that will be appropriate taking account of the character of the coast including designations and the variation in risk across the CCMA;
 - ii) The circumstances in which certain types of development may be permissible within the CCMA(s); and
 - iii) Allocations of land for appropriate development within the CCMA(s).
- 6.3 In assessing what constitutes appropriate development within the CCMA(s), it is important to appreciate the fundamental difference between coastal change risk and risk from flooding. Flooding may happen on a recurring basis. Development can recover from flooding (albeit at a cost) and continue to be used, although there is a safety risk to people during the flood. This is reflected in PPS25's sequential, risk-based approach that aims to locate development in areas of lowest risk first. But PPS25 recognises that where there are no lower risk sites available and development is necessary, sites can be developed in flood risk areas, providing they are safe. Accordingly, the classification of flood risk vulnerability in PPS25 is based on the risk to people's safety and well-being, as well as the capacity of different uses to adapt and keep functioning during, or start functioning soon after, flooding. Coastal change differs

from flooding in that it is a finite hazard which, when it impacts, results in actual loss of the properties, infrastructure and assets as well as a risk to the safety of residents.

- 6.4 In the light of the difference between flood risk and coastal change impact, what may be appropriate development in a high flood risk area may not be appropriate in a CCMA. The Government's objective for the policy is to prevent new development from being put at risk from coastal change. To achieve this, development would only be appropriate in a CCMA if it requires a coastal location and provides substantial economic and social benefits to communities. When allocating land suitable for appropriate development within the CCMA, LPAs are expected to take particular account of any sustainability criteria outweighing any coastal change risks.
- 6.5 Essential infrastructure (based on the definition in Table D2 of PPS25) may be permitted in a CCMA provided there are clear plans to manage the impacts of coastal change on it, and it will not have an adverse impact on rates of coastal change elsewhere.
- 6.6 Ministry of Defence installations that require a coastal location can be permitted within a CCMA provided there are clear plans to manage the impacts of coastal change. Where the installation will have a material impact on coastal processes, this must be managed to minimise adverse impacts on other parts of the coast.
- 6.7 For other development not covered by paragraphs 6.5 and 6.6 above the following criteria can be used as a basis for decisions on what may be appropriate:
 - within the short-term risk areas (i.e. 20 years time horizon) only a limited range of types of development directly linked to the coastal strip, such as beach huts, cafes/tea rooms, car parks and sites used for holiday or short-let caravans and camping. All with time-limited planning permissions;
 - within the medium to long-term risk areas (i.e. the 50 to 100 time horizons) a wider range of time-limited development, such as hotels, shops, office or leisure activities requiring a coastal location and providing substantial economic and social benefits to the community, may be appropriate. Other significant development, such as key community infrastructure, is unlikely to be appropriate unless it has to be sited within the CCMA to provide the intended benefit to the wider community and there are clear, costed plans to manage the impact of coastal change on it and the service it provides.
 - permanent new residential development will not be appropriate within a CCMA.
- 6.8 Where extensions and alterations permitted under the General Permitted Development Order are likely to result in an increase in the scale of property and number of occupants at risk from coastal change in the short-term (i.e. next 20 years), LPAs should consider whether to make greater use of an Article 4 Direction under the Town and Country Planning (General Development Procedure) Order 1995 to require planning permission to be sought.

In this event, it would be for the LPA to decide, taking into account the circumstances of any particular case, whether planning permission should be granted. The requirement for planning permission to be sought would help ensure that proper consideration is given to the possible impacts of coastal change to the development.

- 6.9 For practical reasons it is difficult to define the lifetime of development as each development will have different characteristics. For guidance, consistent with the application of PPS25 on flood risk, residential development should be considered for a minimum of 100 years, so is not appropriate within a CCMA.
- 6.10 For development other than residential, its lifetime will depend on the characteristics of that development. Planners should use their experience within their locality to assess how long they anticipate the development being present for. Developers would be expected to justify why they have adopted a given lifetime for the development when they are formulating their Vulnerability Assessment. Developers, the LPA and Environment Agency should aim to agree what lifetime is acceptable, having regard to the anticipated impacts of coastal change taking into account climate change. Where the lifetime of the development is prescribed by the time in which coastal change is anticipated to impact on it, the lifetime of the development should be controlled, e.g. by a time limited planning condition.

Case study

North Norfolk District Council – North Norfolk’s approach to in determining appropriate development in areas at risk of coastal change

North Norfolk District Council has published guidance on Development and Coastal Erosion (April 2009). This document provides guidance for planners and developers on the types of development that could be appropriate in locations at risk of coastal change and the circumstances in which development could be permitted. The Guidance aims to help strike a balance between the necessary precautionary approach to new development in areas at risk of erosion and maintaining the viability of existing communities and reducing blight.

The Guidance recognises that each development proposal should be assessed on its merits, including the level of investment, intensity and degree of use, etc. In addition, the proposals will have to be considered against relevant policies in the LDF. However, it also groups different types of developments by the nature of their vulnerability and impact. It also recommends that the scale of developments should be taken into account when assessing their appropriateness.

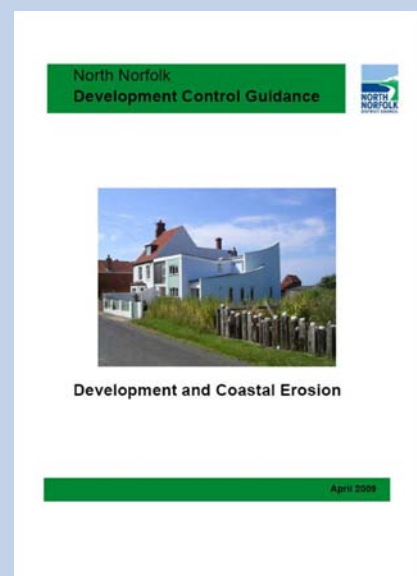
The Guidance highlights that new independent development (i.e. not associated with an existing building or use) in the area at risk of coastal change is unlikely to be appropriate. However, where the proposed development will provide a clear benefit to the wider community (e.g. community infrastructure) then that will be a material consideration.

The Guidance also states that *temporary development* may often be considered as an appropriate response to coastal change because it can help the community ‘gain time’ to enable adaptation. *Changes in use* (e.g. from residential to employment-related) of existing buildings may be another means of enabling adaptation, as they can be *time limited*, as long as they do not give rise to a potential increase in the use of the building potentially increasing risk to people. *Open land* uses are also likely to be appropriate within the at-risk zone and could be encouraged as part of the implementation of a ‘roll-back’ policy.

Infrastructure and other uses fundamental to the normal functioning of a settlement may also be considered as appropriate development in the area at-risk where it can be demonstrated that there is no other suitable location. The Guidance requires suitable conditions or agreements to be put in place to secure the removal at the appropriate time.

Reference:

http://www.northnorfolk.org/files/Development_and_Coastal_Erosion_Guidance.pdf



SECTION 2 – ASSESSING THE VULNERABILITY OF DEVELOPMENT TO COASTAL CHANGE

- 6.11 Policy (DCC4.1) requires that planning applications for development in a CCMA should be accompanied by an assessment of the vulnerability of the proposed development to coastal change and the impacts of coastal change.
- 6.12 The scope and content of the vulnerability assessment should be appropriate to the degree of risk and the scale, nature and location of the development. The detailed scope of the vulnerability assessment should be agreed in advance with the LPA in consultation with the Environment Agency and any other relevant stakeholders.
- 6.13 The aim of the vulnerability assessment is to demonstrate that the new development:
- provides wider sustainability benefits that outweigh the predicted coastal change impact;
 - does not impair, and where possible enhances the ability of communities and the natural environment to adapt sustainably to the impacts of a changing climate;
 - will be safe through its planned lifetime, without increasing risk to life or property, or requiring new or improved coastal defences;
 - does not affect the natural balance and stability of the coastline or exacerbate the rate of shoreline change to the extent that changes to the coastline are increased somewhere else; and
 - the assessment should also consider and identify measures for managing the development at the end of its planned life, including proposals for the removal of the proposed development before the site is immediately threatened by shoreline changes and how the construction materials may be re-used.

Case study

North Norfolk District Council

North Norfolk District Council has had experience of providing site specific vulnerability reports for house purchases. These assessments are based on the following sources of evidence:

- Historical rates of erosion;
- Existing coastal defences and their expected life; and
- Current SMP policies (e.g. whether an area will continue to be defended).

With regards to coastal defences in the area where the site is located, the vulnerability assessment reports include information on whether new grant aided capital works are likely to be promoted by the council (based on the funding criteria set by Central Government), and whether maintenance works will be undertaken and for how long.

The assessments also review the implications of the current SMP policies for the location in question and the three epochs (20, 50 and 100 years).

These reports include multiple caveats. One of the reasons is that there is uncertainty with regards to future rates of erosion. In addition, SMP policies may change in the future.

Reference:

Information provided by NNDC



Happisburgh defences overwhelmed in October 2002 and erosion at Cromer 2008. Images courtesy of North Norfolk District Council.

- 6.14 PPS25 requires that planning applications for development in flood risk areas are accompanied by a site-specific Flood Risk Assessment (FRA). FRA should consider the risk and impact from sea flooding (including changes in risk as a result of coastal processes). Advice on the scope and content of FRA is provided on pages 68-75 of the PPS25 Practice Guide [<http://www.communities.gov.uk/documents/planningandbuilding/pdf/pps25guideupdate.pdf>]
- 6.15 FRA and vulnerability assessment should interrelate in areas which are affected by both coastal flooding and coastal erosion.

SECTION 3 – OPERATING TIME-LIMITED DEVELOPMENTS

- 6.16 Policy (DCC5.2) requires that local planning authorities should limit the planned life-time of the proposed development to reduce the risk to people and the development, taking account of the assessment of vulnerability. Planning conditions should be applied where there is a need to:
- i. manage the risk to the proposed development during its planned life-time; and
 - ii. manage the removal of the development to minimise the impact on the community and natural environment.
- 6.17 This can be achieved by time-limited planning permissions that contain conditions relating to the review of that permission in relation to rates of coastal change and removal of the development prior to the impact of the coastal change.

Case study

Isle of Wight – an example of a temporary planning permission related to commercial development

The Isle of Wight, off the South East coast, has suffered the effects of coastal change for many generations including erosion and landslides. Projected sea level rise will increase the challenges to the island's communities. The planning authority of the Isle of Wight is considering a range of approaches to minimising the risk to people and assets while at the same time ensuring the long term sustainability of their coastal villages and towns.

One of the approaches considered is long term temporary planning permissions in relation to commercial development. A recent example was a hotel proposal on the eastern coast of the island. The development has not gone ahead but this was due to an issue with the design of the building and not with the temporary aspect of the development. Therefore the principle behind this example could be applied elsewhere.

The principle was that with current levels of sea level rise, the development would be safe and have dry access. However, based on future sea level predictions, this will not be the case in about 50 years and beyond without sea defence enhancements.

The developer and agent discussed and agreed having a time-limited consent of 50 years. The capital cost of the development would be written down over that period, including any interim refurbishments. In this respect, the process can be likened to a leasehold permission rather than freehold in perpetuity of usual planning permissions.

At the end of the consented period, a reappraisal could be undertaken as to whether current sea level rise predictions have occurred. If sea level rise had not been as severe as predicted, then additional time could be consented. The agreement also included that any sea defence plans of further protection or retreat would be formulated and based on a zero value for the consented premises.

Further consents at the end of the time frame could also build in the required investment in defences based on extending the commercial value of the development. The nature of a hotel development is that it allows full control over occupation with management on the site and the ability to evacuate the premises should extreme events exceed predictions within the timed consent. This would not be the case or possible with ordinary residential properties.

The Environment Agency was consulted and supported this approach for commercial development. As well as being consistent with the approach promoted by the PPS on coastal change, long term temporary planning consents are also suggested in the Practice Guidance for PPS 25 and were mentioned in the South East Plan panel report to the Secretary of State.

Continued

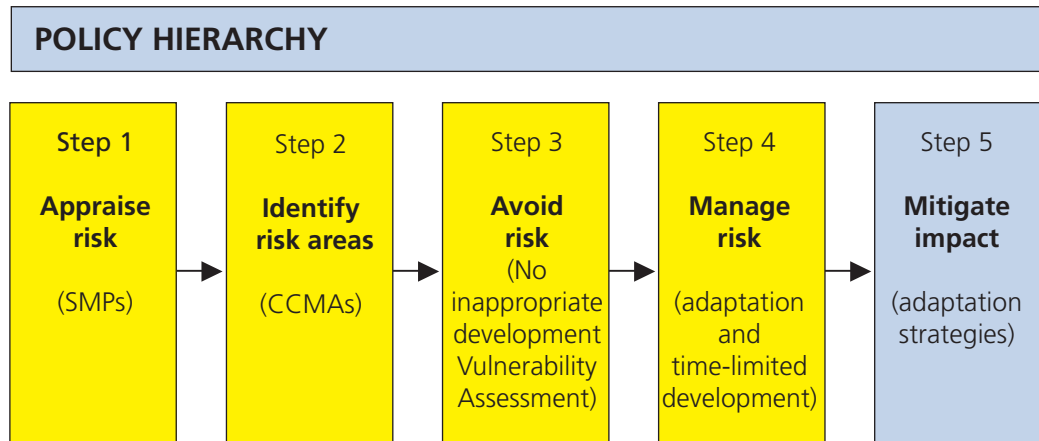
Isle of Wight – an example of a temporary planning permission related to commercial development (continued)



IoW southwest coast and IoW Chale-Terrace 2009. Images courtesy of N. Dix, Isle of Wight Coastal Visitors Centre, IWC Council

- 6.18 LDDs should consider identifying the specific risks associated with land uses allowed within the CCMA. This will help them to specify appropriate planning conditions and obligations to manage and control development with the CCMA.
- 6.19 Planning interventions can link with financial mechanisms for securing the necessary funds to finance the removal of affected development and clearing up of the site, such as insurance bonds, particularly in relation to commercial and business uses.
- 6.20 It will be particularly important to monitor compliance with planning conditions on time-limited applications.
- 6.21 Policy DCC 5.1 requires that planning applications to renew time-limited planning permissions in the CCMA where erosion has progressed at a lower rate than predicted should be given a similar consideration to new applications for development.
- 6.22 Policy DCC 5.2(ii) requires the LPA to manage the removal of the development to minimise the impact on the community and natural environment. To do this, the site of an abandoned development needs to be rendered safe, mitigating any residual health and safety or pollution risk to people and the environment.

7 Mitigating the impact



INTRODUCTION

- 7.1 This chapter explains how planners can make provision for the relocation and replacement of development and infrastructure from CCMAs and safeguard land for relocating habitat affected by coastal change.
- 7.2 To assist adaptation, the new policy promotes the principle of planned relocation and roll-back of development, infrastructure and habitat to more sustainable locations further inland from the changing coast (DCC3.3). The purpose of this is to facilitate the sustainable replacement of housing, community facilities, and commercial and business uses that are needed for the social and economic well-being of coastal communities.

SECTION 1 – RELOCATION AND REPLACEMENT OF DEVELOPMENT AND HABITAT AFFECTED BY COASTAL CHANGE

- 7.3 LPAs will need to consider whether there are appropriate links (e.g. social, economic and/or physical) between suitable land identified for relocation to the coastal community from which the development has been displaced, to sustain the long-term sustainability of coastal areas.

Making provision in plans for relocating development

- 7.4 Formally allocating land in LDFs for relocation of development and habitat affected by coastal change may be appropriate in some instances. However, some coastal authorities (North Norfolk, Waveney and East Riding of Yorkshire) have found that an ‘exceptions’ policy approach is more suitable to their specific contexts and enables greater flexibility to deal with coastal change. This approach takes into account the exceptional circumstances of having to replace existing development at risk of coastal change by granting planning permissions where normally they would be refused.

- 7.5 For instance, East Riding's roll-back policy (2005) makes provisions for the relocation of dwellings and farm buildings that are considered to be at risk from coastal erosion within the next 50 years. Although the preference is that the relocation should take place in proximity to the dwelling being replaced (if this is safe), the supporting text to the policy allows an 'exceptional approach.' This will enable dwellings to be replaced in smaller coastal settlements, if required, on the basis that coastal erosion may generate a genuine housing need in these smaller settlements. Without this approach it would be more difficult to justify the need for such development.
- 7.6 Another example is shown in (cross-ref with Waveney case study). Waveney's LDF discourages development in open countryside unless there are exceptional circumstances. One of the exceptions is 'where *the proposal would replace dwellings affected by coastal erosion*' (Policy DM22 Housing Development in the Countryside, Waveney's Development Control Policies DPD, Preferred Options). Similarly, North Norfolk's adopted Core Strategy (2008) allows replacement development to take place in the Countryside Policy Area in order to assist in minimising the blighting effects on coastal communities at risk of erosion. Development proposals must also comply with a series of criteria and should result in no detrimental impact upon the landscape, townscape, biodiversity or special designations of the area.
- 7.7 In order to help support communities in planning for and adapting to change, Defra has introduced a new coastal change pathfinder programme. On 01 December 2009 the 15 selected coastal change pathfinder authorities were announced. The pathfinders are exploring new approaches to planning for, and managing, adaptation to coastal change in partnership with their communities. The programme will run until spring 2011 (see <http://www.defra.gov.uk/environment/flooding/manage/pathfinder/index.htm> for more information).
- 7.8 Amongst the projects being explored by the pathfinders are a number looking at approaches to relocation and roll-back of development from at risk areas. The examples that these and other pathfinder projects generate will be useful to planners. They will build on the guidance and examples of practice provided here and in Defra's *Adapting to Coastal Change: Developing a Policy Framework*.
- 7.9 Planning tools that may assist in relocating development and other approaches to helping communities adapt to coastal change include:
- streamlining planning permissions;
 - land transfer incentives;
 - time-restricted alternative uses for at-risk properties that would otherwise be abandoned.

- 7.10 Relocation proposals may include, for example, housing, community facilities, health and social care facilities, commercial and business uses, and infrastructure that are needed for the social and economic well-being of coastal communities. But consideration will also need to be given to the need to relocate environmental and cultural assets which may be lost as result of coastal change.
- 7.11 The interim use and management of abandoned developments at risk can provide benefits for the well-being of the local community in advance of their eventual loss.

Case study

East Riding of Yorkshire Council

The clay cliffs of the East Riding of Yorkshire experience one of the fastest rates of coastal erosion in north west Europe. Erosion in this area is a complex process driven by wave attack at the base of the cliffs resulting in a series of small landslides. The outcome is that a significant portion of cliff may be lost in a landslide event followed by a period of time in which no further erosion takes place at that point. The coastline is eroding at an average rate of approximately 2 metres per year, however due to the process through which erosion takes place, this is not a constant rate and localised losses have been significantly higher. Approximately 60,000 residents live within the coastal zone of East Riding, the majority within the defended frontages of Bridlington, Hornsea and Withernsea. However, the majority of this stretch of coastline (86% or 73km) is undefended and along these unprotected areas, a number of properties and isolated communities are at risk from coastal erosion. The undefended stretches of coastline contribute to the character and landscape value of this area, which relies significantly on tourism and therefore, is of vital importance for the local and regional economy.

The high erosion rates on the undefended East Riding coastline put a number of homes, farms and caravan parks at risk; a significant number of dwellings have been identified as being at risk of falling into the sea over the next 100 years. In response, the East Riding of Yorkshire Council used the recommendations stemming from their Integrated Coastal Zone Management Plan (adopted in 2002) to develop the concept of 'rollback' in relation to caravan parks. The intention is to facilitate the relocation of caravan parks inland, further away from the threat of erosion. Planners investigated the implications of relocating the parks, which are often reliant on a coastal location for their appeal.

A set of guidelines, standards and policies were developed in 2003-2004 to facilitate the relocation of caravan parks. Support for this local planning policy was found in regional and national policy documents, including the UK Government's Sustainable Development Strategy, the Regional Sustainable Development Framework, PPG20, PPG21, PPG12, regional and local economic development strategies, the East Riding of Yorkshire Community Strategy and national and local Biodiversity Action Plans.

Continued

East Riding of Yorkshire Council (continued)

The policy in effect allows planning permission to be granted in areas where it otherwise would not be granted (due to sensitivity in environmental and/or planning terms) for the rebuilding of structures at imminent risk from coastal erosion. In 2005, the 'rollback' policy was extended to cover homes and farmsteads at risk from coastal erosion. The 'rollback' policy has been put into practice a number of times to facilitate coastal caravan parks at risk from erosion to relocate assets further inland.

Currently the second generation Shoreline Management Plan for the coastal zone between Flamborough Head and Gibraltar Point is being developed. This will provide baseline data to support the ongoing rollback provision and inform future coastal change policies and initiatives in the East Riding.

<http://www.eastriding.gov.uk/corp-docs/forwardplanning/html/spg.html>

<http://www.defra.gov.uk/environment/climate/action/studies.htm#rollback>



Holiday homes on the cliff top at Barmston Beach caravan park. Images courtesy of East Riding of Yorkshire Council

Case study

Waveney District Council – Developing policy at the local level

The coastal zone of Waveney District experiences some of the most dramatic coastal erosion to be found in the East of England. Government funding for flood and coastal risk management is prioritised nationally to where the best outcome (properties protected etc) can be achieved against cost to the taxpayer. This can mean rural areas, including those at the coast, do not always attract investment where the costs of work are too high in relation to benefits provided. The coastal areas of Waveney not attracting investment are not densely populated, but the risk remains for the people and properties that do exist there.

Waveney's adopted Core Strategy recognises the need to make provision for the relocation of residential and other buildings that are affected by coastal change. To reduce the impact of blight caused by the uncertainty associated with coastal change as predicted in the latest Shoreline Management Plans relocation or replacement development will be permitted where certain criteria can be met. Waveney recognises that replacement development may be needed in response to loss of investment resulting from the restrictions on new development in the coastal erosion risk zone. Waveney's approach to the relocation of residential and other developments is fleshed out in the forthcoming Development Management Policies DPD, currently at the Publication stage, and due for submission in June 2010. A separate SPD will be produced to provide further guidance.

Policy DM07 states that '*proposals for the relocation and replacement of community facilities, commercial and business uses that are considered important to coastal communities affected by coastal erosion will be permitted*' provided that the proposals meet a series of criteria. The criteria include: replacement proposals for existing developments that are forecast to be affected by erosion within 20 years, appropriate distance inland to avoid further risk, where possible it is in a location that is related to the coastal community, the existing site is either cleared and made safe or put to a temporary use beneficial to the community and that the proposal should result in no detrimental impact upon the landscape, townscape or biodiversity of the area.

The replacement of residential property is covered by policy DM22 Housing Development in the Countryside. This policy creates a presumption against development in the open countryside but includes a series of exceptions one of which is '*where the proposal would replace dwellings affected by coastal erosion*'.

Waveney's Local Development Framework pages can be accessed at:

<http://www.waveney.gov.uk/Planning/Planning+Policy/Local+Development+Framework/>

Continued

Waveney District Council – Developing policy at the local level (continued)

Coastal erosion in Waveney. Courtesy of Waveney District Council

Case study – Relocation of a whole community

Arkwright Town, Derbyshire

The old town of Arkwright was a mining community comprising some 170 terraced homes in the Derbyshire countryside. In 1988 significant quantities of the highly flammable gas methane were discovered in a large number of homes in the village. The methane originated from the extensive coal reserves situated directly beneath the town. In order to ensure the security of the residents, British Coal (now UK Coal) proposed to fund the rebuilding of the entire community, including homes, school, post office, chip shop and pub, to a site across the road, in exchange for the opportunity to extract the coal reserves via open cast mining. In addition to replacing all the dwellings, the village was increased in size by approximately 70 dwellings made up entirely of social housing. The villagers voted unanimously in favour of the move.

A competition was run to appoint an architect to lead on the project. Brook Carmichael Architects were successfully appointed on the basis of their inclusion of a large community consultation element. The architect was allowed considerable autonomy with only a light involvement from both the local authority and British Coal.

Over 18 months an extensive and exhaustive consultation exercise was undertaken which included focus groups, workshops and two monthly progress presentations to residents. The evolution of the design was constantly fed back to the residents to ensure that their decisions were reflected in the final masterplan.

The villagers were given a choice of three different settlement layouts including a similar terraced layout to the old village. Residents were also offered two different types of dwellings, semi-detached houses or detached bungalows. The vast majority opted for a rounded design of closes and cul-de-sacs.

However, a press article written in 1997 (2 years after the move) explored the reaction of the community to their relocation and the results of the design choices they made (unable to identify the source and date). Many responded by explaining that the new town lacked the bustle and intimacy of the old village. It seems the new layout had removed the casual interactions which had lent the old village its strong community spirit. Despite the extensive consultation residents did not comprehend that their new found privacy may also lead to isolation. The article concluded by explaining that the homes were of a high standard but that the process of adjusting to such a different settlement layout was proving far harder than envisaged.

It is possible that things may have changed in recent years and that the community is now happier with their new homes. However, this example highlights that the relocation of communities must be undertaken with utmost care and involvement of those affected.

Continued

Arkwright Town, Derbyshire (continued)

*Final masterplan of the new town of Arkwright and photograph of the completed village.
Courtesy of Brook Carmichael Architects*

Case study – Adaptation of infrastructure

Military Road, Isle of Wight

Military Road (A3055) passes above high chalk cliffs at Afton Down on the south west coast of the Isle of Wight. Continuing erosion at the toe of the cliff resulted in the cliff edge receding to within 15m of the road. Military Road is of significant value to the island's tourism industry and local economy. If no action were taken the road would have to be closed on safety grounds once the retreating cliff came too close.

In order to prevent closure of the road in the short term several engineering options were considered. Realignment of the road, shoring up of the toe of the cliff and intervention measures to prevent further erosion were all discounted due to the vicinity being designated as an Area of Outstanding Natural Beauty. As a result no permanent solution was found but the life of the road was extended by strengthening the bedrock around the road to slow erosion.

This solution gave the road approximately 50 more years of use. Planning permission was granted in 2002, and following a series of trials, the scheme was constructed in 2003 and the road reopened to the public. A series of sensors were installed in the works in order to monitor the deterioration of the cliff face with a view to closing the road once the situation became too dangerous. Furthermore, Isle of Wight Council have been setting aside funding for the eventual decommissioning of the structure.

This example provides useful lessons for enabling communities to adapt through 'buying time' or allowing temporary uses and maintenance of infrastructure affected by coastal erosion. This includes the need to take into account the costs of removing infrastructure once it is no longer safe from erosion.

Reference: Woods *et al* (2004) Cliff-top stabilisation of the Military Road, Isle of Wight, *Geotechnical Engineering* 157, p. 251-258

Continued

Military Road, Isle of Wight (continued)



Views of the Military Road, Isle of Wight. Courtesy of SCOPAC/Wight Light Gallery

SECTION 2 – REPLACEMENT OF HABITAT AFFECTED BY COASTAL CHANGE

Legal requirements for habitats

- 7.12 In managing coastal change, there is a requirement on competent authorities to create wildlife habitats to replace those lost in sites of international importance, as well as to enhance the natural environment.
- 7.13 Coastal change may affect habitat in two key ways. Firstly, there may be direct or indirect habitat loss of internationally important habitat as a result of ‘coastal squeeze’, where defences block natural coastal change. Secondly, the natural environment may be affected where relocation of the built environment at risk from coastal change affects habitats inland. When considering relocation of community assets such as properties or infrastructure through their LDF, LPAs will need to consider the potential impacts upon nature conservation sites.

Regional Habitat Creation Programmes

- 7.14 The Environment Agency has established Regional Habitat Creation Programmes (RHCPs) throughout England. RHCPs make an assessment of future losses to European Sites due to impacts of flooding and coastal change and identify where habitat has to be created to compensate for those losses.
- 7.15 RHCPs provide a real advantage for the delivery of Shoreline Management Plans that require compensatory habitat. It is essential that the RHCP provides the required compensatory habitat before any damage is likely to occur otherwise schemes and projects will be unable to proceed and the SMP cannot be implemented.
- 7.16 The RHCPs identify and investigate suitable sites on which compensatory habitat can be created. LPAs are expected to work with the Environment Agency and Natural England to undertake an assessment of their strategic plans to identify their habitat creation requirements. Where the Environment Agency has an active RHCP and local authorities have similar habitat creation requirements they should consider how they can work together to achieve shared objectives. This may be through a joint RHCP programme. Local Authorities should work with the Environment Agency to share areas of interest and land ownership that may be suitable for habitat creation
- 7.17 To facilitate the delivery of habitat creation under the RHCP, regional and Local Development Frameworks (LDFs) should allocate land which will be required for habitat creation to meet European biodiversity commitments and allow the development and coastal protection needs of communities to be provided.

Case study

Frampton Habitat Creation Scheme, Lincolnshire – an example of habitat creation to compensate for future losses of freshwater habitat through coastal management policies contained within the Shoreline Management Plan

This is one example of arable land purchased to provide habitat compensation. In general, finding space for relocation of habitats lost to coastal change can be challenging particularly in areas where multiple development pressures compete for land (e.g. the South East and East of England). Therefore, it is important that LPAs include policies in their LDFs to this effect, potentially including the identification of sites or areas for the purpose of habitat creation.

In this example, 94 hectares of arable land with low biodiversity value was purchased by the Environment Agency to compensate for future flood and coastal risk management activities on the north Norfolk Coast. The site acquired is located at Marsh Farm situated within the wider Frampton Marshes area and is part of the ongoing Environment Agency Anglian Regional Habitat Creation Programme (RHCP).

The Royal Society for the Protection of Birds (RSPB) identified the site as being a potentially suitable freshwater habitat and approached the Environment Agency. Terms were agreed with the landowner and habitat creation has been funded by the Environment Agency. Extensive ground works were undertaken to excavate shallow ditches and to create a reservoir to supply water to the ditches. The existing arable fields were drilled with a wet grassland seed mix to increase their biodiversity value.

The site was completed in March 2008 and is now managed by the RSPB on behalf of the Environment Agency. The RSPB has undertaken further works on adjacent land at Roads Farm to provide further freshwater features and to create a mosaic of wildlife habitats. In addition, a visitor centre and parking has been installed to provide access to the wider community.

Further information regarding the Frampton Marsh Reserve can be obtained at:

<http://www.rspb.org.uk/reserves/guide/f/framptonmarsh/about.asp>



Existing drainage ditch prior to works



Improved drainage ditch and wet grassland

Images courtesy of the Environment Agency (Anglian Region)

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