ROYAL HASKONING

Appendix B
Stakeholder Engagement

ROYAL HASKONING

Appendix B
Stakeholder Engagement

B1 Introduction

This appendix outlines the stakeholder consultation strategy for the development of the SMP and details how stakeholder involvement was achieved at each stage of the plan preparation/dissemination.

Three main groups were involved in the SMP development:

1. The Client Steering Group (CSG);
2. Representative Members Forum (RMF);
3. Key Stakeholders Forum (KSF);
4. Other Stakeholders.

The members of the CSG are outlined in Appendix A and included representatives from all the local authorities as well as Natural England, and the Environment Agency.

The involvement of Representative Members (RMF) in the process of proposal development reflects the "Cabinet" style approach to decision making operating in many local authorities. Politicians are involved from the beginning to minimise the risks of producing a draft document that does not meet the needs of the Operating Authorities. They are to be involved through a Forum, building trust and understanding between themselves, the CSG and Key Stakeholders.

Stakeholder consultation played an integral role in the development of the shoreline management policies. The lead authority Suffolk Coastal District Council (SCDC) undertook to organise the stakeholder consultation throughout the SMP development. The stakeholder group comprised representatives from groups with local, regional and national interest in addition to site specific interests. Such a group was selected to try to achieve a ‘holistic’ consultation approach, taking consideration of all interests in the coast:

Stakeholder representatives included:

- County Councils
- Town Councils
- Parish/Ward Councils
- Residential Interest Groups eg. Suffolk Coasts Against Retreat (SCAR)
- Commercial interests eg. British Energy
- Conservation bodies eg. National Trust, RSPB
- Recreational groups
- Cultural and historic interest groups eg. English Heritage

The full membership list is included in Section B2.
A summary of the stakeholder engagement strategy is shown in Table B1.1.

Table B1.1 Summary of the Stakeholder Strategy

Stage of Plan Preparation	Activity	Dates	Purpose of stakeholder involvement	Lead Organisations	Method of involvement	Information Sent
Stage 1: SMP Scope	Representative Members meeting	22 June 2006	• Inform RMF that an SMP is being reviewed. • Explain the role of the Operating Authorities and the Anglian Authorities Coastal Group. • Explain the background to the Shoreline Management Plan, management policies and the processes of review and Stakeholder Engagement. • Obtain agreement on the Constitution and Terms of Reference of the RMF. • Obtain agreement on the roles and tasks of the RMF and CSG • To explain the management issues along the coastline. • Obtain agreement to process, method of stakeholder engagement and the timetable for the review.	RMF: Three Member representatives from each of the Operating Authorities (Suffolk Coastal District Council, Waveney District Council and the Environment Agency and one Member representative from Suffolk County Council	Meeting with presentations on (1) the roles and responsibilities of the RMF, CSG and KSF and (2) the flood risk, erosion risk, environmental and land use planning issues along the coast	Pre-meeting: An agenda via e-mail. Post meeting: Electronic version of the slides used during the meeting and Minutes.

Stage of Plan Preparation	Activity	Dates	Purpose of stakeholder involvement	Lead Organisations	Method of involvement	Information Sent
Stage 1: SMP Scope (con't)	Issues identification	Oct 06 to Mar 07	• To obtain views on features and issues for the SMP for inclusion in Issues table	British Energy Natural England Suffolk Coasts & Heaths English Heritage Environment Agency SCC Archaeology SCDC/ WDC Planners	E-mail and one-to-one interviews	Draft issues table and explanatory note
	Initial Key Stakeholder contact	31 July 2007	• Inform interested parties that an SMP is being reviewed by the Operating Authorities • Obtain correct contact details • Send draft issues table for information and comment	Key Stakeholders	Letter	Draft Issues Table and questionnaire.
	Key stakeholder meeting	19 Sept 2007	• Obtain agreement on the roles and tasks of the KSF • Obtain agreement on role of individual members • To explain the management issues along the coastline • Obtain agreement to process and timetable for the review • Request information from interested parties • Gather views on issues relating to the SMP • Complete issues table	Key Stakeholders	Meeting/workshop with presentations on (1) the roles and responsibilities of the RMF, CSG and KSF and (2) the flood risk, erosion risk, environmental and planning issues along the coast. Follow-up telephone calls and e-mails. Meetings with key stakeholder groups.	Pre-meeting: An invitation letter; questionnaire on contact details, information held and issues of concern; an agenda. Post meeting: Electronic version of the slides used during the meeting and Minutes.

Stage of Plan Preparation	Activity	Dates	Purpose of stakeholder involvement	Lead Organisations	Method of involvement	Information Sent
Stage 2: Assessments to support policy	Issues table	16 Oct 2006	RMF asked to: • Check that all issues included • Review the features identified • Check that benefits identified and all beneficiaries included • Check that the objectives are a good representation of the requirements of the beneficiaries • Agree format and style of consultation with key stakeholders	Representative Members	Meeting and discussion	Draft Issues Table and explanatory note dispatched pre-meeting via e-mail
		27 Feb 2008	KSF asked to: • Check that all relevant issues have been included • Review the features identified • Check that the benefits identified are correct and that all beneficiaries are included • Check that the objectives are a good representation of the requirements of the beneficiaries	Key Stakeholders	Workshop	Draft Issues Table and explanatory note dispatched pre-meeting via e-mail
		27 Feb 2008	KSF members asked to review final issues table	Key Stakeholders	E-mail correspondence	Draft Issues Table & explanatory note
	Defining & Assessing objs	06 Nov 2007	To review and agree objectives in advance of consulting KSG	CSG and RMF	Meeting	Draft list of objectives
		27 Feb 2008	To review and agree objectives prepared by the Consultant	KSG	Email correspondence and meeting if required	Draft list of objectives

Stage of Plan Preparation	Activity	Dates	Purpose of stakeholder involvement	Lead Organisations	Method of involvement	Information Sent
Stage 3: Policy Development	Policy Development	23 Sep 2008	RMF Meeting	RMF	Meeting	Agenda and Minutes
		10 Oct 2008	Members respond to Draft Policy	RMF	Email correspondence	Draft Policy
		31 Oct 2008	Royal Haskoning revise Draft Policy	RH	Email correspondence	RMF Comments
		07 Nov 2008	CSG Meeting	CSG	Meeting	Agenda and Minutes
		30 Nov 2008	CSG Respond to v6 Draft Policy	CSG	Email correspondence	Policy comments
		01 Dec 2008	Royal Haskoning amend Draft Policy	RH	Email correspondence	Draft Policy
		02 Dec 2008	CSG Agenda issued with final Draft Policy documents	Terry Oakes Associates Ltd. (TOAL)	Email correspondence	Agenda and final Draft Policy documents
		08 Dec 2008	Update Exec Summary &produce table to show how objectives are met by each possible policies.	CSG/RH	Email correspondence	Executive Summary
		10 Dec 2008	Produce guidance on WFD compliance, plus example	RH/EA	Email correspondence	WFD and example
		06 Jan 2009	Send out CSG Agenda	TOAL	Email correspondence	Agenda & Minutes, K/S letters
		06 Jan 2009	Send out final Draft Policies to CSG	RH	Email correspondence	Final Draft Policies

Stage of Plan Preparation	Activity	Dates	Purpose of stakeholder involvement	Stakeholders involved	Method of involvement	Information Sent
Stage 3: Policy Development (con't)	Policy Development (con't)	13 Jan 2009	CSG Meeting	CSG	Meeting	Agenda & Minutes
		13 Jan 2009	Approve Executive Summary	RMF/CSG	Email correspondence	Executive Summary
		04 Feb 2009	RMF Meeting	RMF/CSG	Email correspondence	Agenda and final Draft Policies
		25 Feb 2009	CSG Meeting to agree draft Policy Docs and prepare for K/S W/shops	CSG	Meeting	Agenda ad final Draft Policies Docs
		03 Mar 2009	Final draft Exec Summary PDZs sent to TOAL for website	RH	Email	Docs
		23 Mar 2009	Final pre-workshop draft PDZs to TOAL for uploading to website	RH	Email	PDZ 1 to 7 files
	Environmental Report	09 Dec 2008	Start draft Environmental Report	RH	Email correspondence	
		13 Jan 2009	Review draft SEA Scoping Report and provide comments	EA/NE	Email correspondence	Draft SEA Scoping Report
		20 Jan 2009	SEA Scoping Report to key consultees	RH	Email	Draft SEA Scoping Report
		23 Feb 2009	Draft SEA Scoping Report available	RH	Email	Draft Scoping Report

Stage of Plan Preparation	Activity	Dates	Purpose of stakeholder involvement	Lead Organisations	Method of involvement	Information Sent
Stage 3: Policy Development (con't)	Consultation	05 Dec 2008	Draft Key Stakeholder cover letters	TOAL	Email correspondence	Draft Cover letters
		09 Dec 2008	CSG Meeting: Policy Discussion and Communications Strategy Agree format and presenters for each Forum day	CSG	Meeting Email correspondence	Agenda and Minutes
		15 Dec 2008	Book KSF venues, catering and sound.	TOAL	Phone and email	
		06 Jan 2009	Email draft Communications Plan to CSG	Sharon Bleese, EA	Email correspondence	Draft Communication Plan
		13 Jan 2009	CSG Meeting: Policy Discussion	CSG	Meeting	Agenda and Minutes
		15 Jan 2009	Complete and agree KSF Invitation List	CSG	Email correspondence	KSF Invitation List
		15 Jan 2009	Publish details of KSF on website	TOAL	Website	KSF details
		15 Feb 2009	Key Stakeholder list compiled into database for multi-purpose use	TOAL		Address database
		16 Feb 2009	Invitation letters sent to Key Stakeholders	TOAL	Email and post	Invitation letter
		25 Feb 2009	CSG Meeting: Review communications plan	CSG	Meeting	Communications Plan; Agenda and Minutes

Stage of Plan Preparation	Activity	Dates	Purpose of stakeholder involvement	Lead Organisations	Method of involvement	Information Sent
Stage 3: Policy Development (con't)	Consultation (con't)	04 Mar 2009	Place Draft Policy documents on website for Key Stakeholders	TOAL	Website	Draft Policy documents
		05 Mar 2009	Inform Key Stakeholders that Draft Policies are available on website	TOAL	Email and post	Website address
		12 Mar 2009	Prepare draft Display Boards and Leaflets for KSF	RH		
		16 Mar 2009	CSG Meeting to discuss Key Messages, FAQs and Stakeholder workshops in general	CSG	Email correspondence	Agenda and Minutes
		16 Mar 2009	Establish LA requirements for approval of Draft SMP	PFP/TOAL/JB		
		16 Mar 2009	Share Key Messages and use these consistent lines in all media interviews, and in the workshops	RMF/CSG	Email correspondence	Key Messages
		16 Mar 2009	Prepare media contact list	TOAL/SCDC/WDCEA Comms Officers	Email correspondence	Media contact list
		17 Mar 2009	Pre-forum Briefing: Hollesley Bay	TOAL	Meeting	
		23 Mar 2009	Workshop presentations sent to TOAL Consultation Team for setup	TOAL	Email correspondence	Workshop presentations
		23 Mar 2009	Gather resources required for workshops	TOAL	Various	Workshop materials/equipm't

Stage of Plan Preparation	Activity	Dates	Purpose of stakeholder involvement	Lead Organisations	Method of involvement	Information Sent
		25 Mar 2009	Pre-forum Briefing: Kessingland area	WDC/EA	Attend Kessingland PC meeting	
		31 Mar 2009	Workshop 1: PDZs 4 and 5 Riverside Centre, S/ford St Andrew	CSG/RMF/Key Stakeholders	Workshop	
		02 Apr 2009	Workshop 2: PDZs 1, 2 and 3 Southwold Pier	CSG/RMF/Key Stakeholders	Workshop	
		03 Apr 2009	Workshop 3: PDZs 6 and 7 Ufford Park Hotel, Melton	CSG/RMF/Key Stakeholders	Workshop	
		06 Apr 2009	Publish workshop presentations on website	TOAL	Website	W/shop presentations
		13 Apr 2009	Debrief workshop arrangements	RH/TOAL	Meeting	
		23 Apr 2009	CSG to review comments to date and prepare Consultation Report	CSG/RH	Meeting 22	Consultation report
		30 Apr 2009	Closing date for comments by KSF	RH	Post/Email correspondence	KSF Comments
		13 May 2009	RMF to receive report from CSG	RMF/CSG/RH	Email or Meeting, if necessary	Consultation report

Stage of Plan Preparation	Activity	Date	Purpose of Stakeholder Involvement	Lead Organisations	Method of involvement	Information sent
Stage 4: Public Examination	Public Consultation	23 Apr 2009	Decide Roadshow venues	CSG	CSG Meeting 22	
		5 May 2009	Begin booking roadshow venues	TOAL		
		5 May 2009	Book display stands for exhibition materials.	TOAL		
		11 May 2009	Start draft text for exhibition materials, including leaflets	RH		
		13 May 2009	CSG Meeting to discuss Key Messages, FAQs and Stakeholder workshops in general	CSG	Email correspondence	Agenda and Minutes
		13 May 2009	RMF Meeting to approve policies	RMF	Email correspondence	Agenda and Minutes
		8 Jun 2009	TOAL access to updated Draft SMP	TOAL/RH	Email/FTP Transfer	Draft SMP
		10 June 2009	CSG Meeting to discuss roadshows	CSG	Email correspondence	Agenda and Minutes
		17 June 2009	Share Key Messages and use these consistent lines in all media interviews, and in the workshops	RMF/CSG		Key Messages
		22 Jun 2009	Print consultation documents			Consultation documents

Stage of Plan Preparation	Activity	Date	Purpose of Stakeholder Involvement	Lead Organisations	Method of involvement	Information sent
		26 Jun 2009	Share Key Messages and use these consistent lines in all media interviews, and in the roadshows	RMF/CSG		Key Messages
		26 Jun 2009	Complete exhibition board texts	CSG	Email correspondence	Exhibition board texts
		26 Jun 2009	Deliver exhibition board texts to printers	RH		Exhibition board texts
		30 Jun 2009	Update web site	TOAL	Website	
		01 Jul 2009	SCDC, WDC and SCC Officers to advise deadline for Cabinet and Council approval of Final Draft SMP	PFP/TO/JB		
		01 Jul 2009	Send Draft SMP to EAQRP	TOAL		
		01 Jul 2009	**Consultation Period Starts**			
		01 Jul 2009	Press releases and media work	Comms Officers/CSG		
		02 Jul 2009	Regular website updates	TOAL	Website	
		02 Jul 2009	Regular FAQ updates	Comms Officers/CSG		
		02 Jul 2009	Draft Policy mailed to all Key Stakeholders	TOAL	Post/Email	Draft Policy
		04 Jul 2009	**Roadshow 1 - Southwold**	**All 12 pm – 5 pm**	**Exhibition**	Stella Peskett Hall
		07 Jul 2009	**Roadshow 2 - Kessingland**	**All 2 pm – 7 pm**	**Exhibition**	Church Hall
		08 Jul 2009	**Roadshow 3 - Walberswick**	**All 2pm – 7 pm**	**Exhibition**	Village Hall

Stage of Plan Preparation	Activity	Date	Purpose of Stakeholder Involvement	Lead Organisations	Method of involvement	Information sent
		16 Jul 2009	**Roadshow 4 – Bawdsey/Alderton/Hollesley**	**All 2pm – 7 pm**	**Exhibition**	Hollesley VH
		17 Jul 2009	**Roadshow 5 – Aldeburgh/Thorpeness**	**All 2 pm – 7 pm**	**Exhibition**	Aldeburgh Church Hall
		18 Jul 2009	**Roadshow 6 – Felixstowe - joint exhibition with Central Felixstowe PAR scheme**	**All 10 am – 2 pm**	**Exhibition**	Felixstowe Town Hall Council Chamber
		03 Aug 2009	Review feedback from exhibitions	CSG	Email correspondence	Exhibition feedback
		31 Aug 2009	Review of initial responses sent to CSG	RH	Email	
		04 Sep 09	Send out Press Release to remind public and other stakeholders to make comments by 30 September	TOAL/SCDC Comms Team	Email	Press Release
		30 Sep 2009	**End of Consultation**	Minimum of three months recommended		

Stage of Plan Preparation	Activity	Date	Purpose of Stakeholder Involvement	Lead Organisations	Method of involvement	Information sent
Stage 5: Finalise SMP	Determine revisions to Draft Policy	01 Oct 2009	Review output from public consultation.	CSG	Email correspondence	Summary of comments
		09 Oct 2009	Issue review of responses to CSG and RMF	RH	Email	
		09 Oct 2009	Develop Action Plan	CSG	To agree the Final Plan	
		19 Oct 2009	CSG Meeting to examine consultation responses	CSG	Meeting	
		26 Oct 2009	Production of Consultation Report	TOAL/CSG		
		16 Nov 2009	RMF Meeting to finalise plan	RMF	Meeting	
		30 Nov 2009	Final Draft Policy to EA External Affairs, LA Cabinets, SMP Quality Review Panel & RFDC	RH	Email	Draft Policy
		1 Dec 2009	Review of Final SMP	CSG/TOAL	Email/FTP Transfer	Draft Policy
		18 Dec 2009	Submit Final SMP to WDC, SCDC and EA	TOAL/RH	Print	Draft Policy
	Finalise SMP	Jan 2010	Prepare Final Draft SMP Documents	CSG		
		Jan 2010	SCDC, WDC and SCC Officers to submit Final Draft SMP to Cabinet and Council approval	PFP/TOAL/JB		

Stage of Plan Preparation	Activity	Date	Purpose of Stakeholder Involvement	Lead Organisations	Method of involvement	Information sent
Stage 5: Finalise SMP (con't)	Finalise SMP (con't)	Jan 2010	Final Plan to Partner Organisations for approval and adoption	WDC, SCDC, EA, NE	Officer led	Final SMP
		Feb 2010	Send Final Draft SMP document to EA for Special SMP Meeting.	KT/SB		
		26 Feb 2010	RFDC special SMP Meeting Agenda dispatched	EA	Email correspondence	Agenda
		Mar 2010	LAs and RFDC approve Final SMP	LAs/EA		
		Mar 2010	SoS IROPI approval of AA	CSG		
		Apr 2010	EAQRP approve Final SMP	CSG Officers	Internal meetings	
		Apr 2010	EA Regional Director signs off Final SMP	EA		
Stage 6: SMP Dissemination	Publish SMP	May 2010	To make stakeholders aware of the final plan	Wider public		
	Implementation	May2010	Implementation	LAs/EA		

B2 Membership lists

B2.1 Stakeholder Group

The stakeholder group comprised representatives from groups with local, regional and national interest in addition to site specific interests. Such a group was selected to try to achieve a 'holistic' consultation approach, taking consideration of all interests in the coast:

The following table indicates the organisation contacted during the Initial Stakeholder Engagement stage. Each organisation listed received the letter and questionnaire explaining that the SMP was being reviewed and requesting data and further information (refer B3 for sample letters and questionnaire).

Organisations	
Alde & Ore Estuary Planning Partnership	Hutchison Ports
Alde and Ore Association	Iken Parish Council
Aldeburgh Town Council	Ipswich & Suffolk Coastal Federation of Small Businesses
Alderton Hollesley & Bawdsey IDB	John Gummer MP
Alderton Parish Council	Andrew Hall
Aldringham-cum-Thorpe Parish Council	Kerr Farms
Associated British Ports	Kessingland Parish Council
Bailey Developments Ltd	Kirton & Falkenham Parish Council
Bawdsey Parish Council	Leiston-cum-Sizewell Town Council
Benacre Estate	Lowestoft & Waveney Chamber of Commerce
Benacre Parish Meeting	Marine Conservation Society
Blaxhall Parish Council	Maritime & Coastguard Agency
Blyford & Sotherton Parish Council	Martlesham Parish Council
Blythburgh Parish Council	Melton Parish Council
Blyth Estuary Group	Minsmere Levels Stakeholders Group
Bob Blizzard MP	National Farmers' Union
Blois Farms	National Trust
Boyton Hall Farms	Natural England
Boyton Parish Council	New Orford & Gedgrave Parish Council
British Trust for Ornithology	Orford Businesses
Bromeswell Parish Council	Ramblers Association
Butley, Capel St Andrew & Wantisden Parish	Ramsholt Parish Meeting

Organisations	
Council	
CEFAS	GeoSuffolk
Easton Bavents Ltd	Reydon Parish Council
Waveney Chamber of Commerce	River Deben Association
Chillesford Parish Council	River Deben Estuary Partnership
Council for the Protection of Rural England	RNLI
Country Land and Business Association	Royal Society for the Protection of Birds
Covehithe Parish Council	Royal Yachting Association (Eastern Region)
Crown Estate	Suffolk Coastal District Council
Defra	Shingle Street Settlement Ltd.
Department for Transport	Shottisham Parish Council
Dunwich Parish Meeting	Snape Parish Council
East of England Business Group	Southwold Harbour & River Blyth Users Association
East of England Tourist Board	Sudbourne Parish Council
Eastern Sea Fisheries Joint Committee	Suffolk Chamber of Commerce
Eastern Sea Fisheries Joint Committee	Suffolk Coast & Heaths Unit
Easton Bavents Conservation	Suffolk County Council
English Heritage	Suffolk Coast Against Retreat (SCAR)
Environment Agency	Suffolk Preservation Society
Essex & Suffolk Water	Suffolk Wildlife Trust
Farnham with Stratford St Andrew Parish Council	Sutton Parish Council
Federation of Small Businesses	Trinity House Lighthouse Services
Felixstowe Town Council	Tunstall Parish Council
Felixstowe Chamber of Trade and Commerce	Walberswick Parish Council
Friston Parish Council	Wangford with Henham Parish Council
Gisleham Parish Council	Waveney District Council
GO East	Waveney District Council
Harwich Haven Port Authority	Wenhaston & Mells Hamlet Parish Council
Hasketon Parish Council	Westleton Parish Council
Hemley Parish Council	Woodbridge Town Council
Henham Estate	Worldwide Fund for Nature
Hollesley Parish Council	Southwold Sailing Club

B3 Stakeholder Engagement Materials

The initial Stakeholder Engagement materials posted out are listed below and samples are provided in the following sections:

- A questionnaire and background text (refer B3.1)
- The invitation letter to the initial round of consultation (refer B3.2).
- The invitation letter to the second round of consultation (refer B3.3).
- The invitation letter to Key Stakeholder Workshops (refer B3.4)

Following this initial stakeholder consultation, the issues table and the objectives were developed. The second round of stakeholder consultation was then held to confirm the issues and objectives. The policy development process commenced once the objectives and values for the coast had been agreed. The Stakeholder Workshops were used to obtain feedback on the draft policies for the SMP.

B3.1 Initial Questionnaire

Questionnaire to Stakeholders

Lowestoft Ness to Felixstowe Landguard Point

The aim of this questionnaire is to allow you or your organisation to express your interests or concerns about the coast.

While the questionnaire has been set up to help trigger comments and will help us to correctly collate responses, we do not wish to constrain your views. If there are other issues that do not fit within these questions, please feel free to write them separately on the issues sheets provided.

- The initial questions establish your contact details.
- These are followed by questions which allow you to identify any information you may have which may help us understand our coast better.
- The final section allows you to record your interests, concerns or use of the coast.

While the Shoreline Management Plan focuses on the management of coastal defences; the threat and consequence of coastal flooding and erosion, we need to gain as broad a perspective as possible as to how such issues may impact upon and influence your interests. It will not be possible to solve all concerns through the Shoreline Management Plan, it is however, important the defence management is undertaken with a sound knowledge of all interests, so that where possible we work with not just natural processes but also the interests of our communities.

Please answer the following questions and return by 1st October 2007.

We would appreciate your return of the questionnaire even if you do not wish to comment on the Shoreline Management Plan. Please use the enclosed pre-paid SAE.

CONTACT DETAILS

1. Your name or name of your organisation or business	
2. Address	
3. Name of contact	
4. Position in organisation	

5. Address if different from 2	
6. Telephone No.	
7. Fax No.	
8. Email address	
9. Referring to the attached list of consultees – are there any other Stakeholders that you would recommend we contact?	

INFORMATION

Please let me know if you hold any of the following information, if so, in what format is it held and if you are willing to make it available to the Project Team.

Description (Please give brief details	Format		Availability	
	Hard copy	Digital	Yes	No
10. A map of your premises, site (s) or your area(s) of interest				
11. Any information or data about local coastal processes including photographs				
12. Study reports about coastal processes				
13. Flooding and erosion events.				
14. Design and construction of existing coastal defences				
15. Reports relating to the natural environment and ecology				
16. Reports relating to the built environment				
17.Land use mapping				
18. Coastal Industries				
19. Ports and harbours				
20. Agriculture				
21. Tourism and Amenity Usage of the coast				
22.Inshore Fisheries				

(Continue on reverse if necessary)

COMMENT

23. Is your organisation or business affected or potentially affected by the risk of coastal flooding or erosion? If so, please give brief details including any significant historic events.

24. What are the main issues relating to the way in which the coastline is managed and which you want to see being dealt with in the plan?

25. What objectives do you recommend for the future management of the coastline?

26. Do you have any views on the way in which the existing coastal defences have had an impact on the way in which the coastline has developed?

27. Do you have any views on changes that should be made to the existing coastal defences? What effect do you think this would have?

28. Do you have any views on changes that should be made to the existing coastal defences? What effect do you think this would have?

Thank you for your time in completing this questionnaire.

Yours Faithfully,

General Stakeholder Issues/Concerns

Reference No.

Location:
Issue:
Why is this important?

Reference No.

Location:
Issue:
Why is this important?

B3.2 Invitation to Initial Stakeholder Meeting

Dear Stakeholder 31st July 2007

INITIAL STAKEHOLDER CONSULTATION

I am writing to inform you that Suffolk Coastal District Council, Waveney District Council and the Environment Agency are starting a review of the Shoreline Management Plan for the coastline between Lowestoft Ness and Felixstowe Landguard Point. These authorities recognise the importance of obtaining views from the broad range of organisations and individuals who have an interest in the management of the coastline. This initial consultation builds upon the work already carried out by the authorities in drawing together the issues and concerns expressed by people during the development of the several strategies, studies and on-going involvement with managing this section of the coast. However, we need to be confident that these views from stakeholders are still relevant and that we are not missing other issues or information that stakeholders may have.

To this end, I am pleased to attach to this letter the following documents:

1. The initial list of issues that have been identified to date, based on information provided in the past.

2. A questionnaire allowing stakeholders to express other views on the management of the coast and to comment on any information or specific interests they may have.

3. A list of consultees identified to date.

Both documents are available for downloading from the project's website, where additional information can also be found: **www.suffolk.smp2.org.uk/** .

We have set a date of the 1st October 2007 for the end of this initial consultation period. Towards the end of this period we have arranged a stakeholder forum meeting to which I am pleased to invite you. This meeting will be held at Snape Village Hall at 7.00pm on Wednesday 19th September 2007. This meeting will be attended by Members and officers of the authorities. Also present will be representatives from Terry Oakes Associates Ltd, who are project managing the review, and Royal Haskoning, the consultants dealing with the technical elements of the project. This is an opportunity to review the issues and for people to discuss the process by which policy for future management of the shoreline will be developed.

I trust the information provided will assist you to become involved with the review of the shoreline management plan. If there are any matters arising before and to confirm your attendance at the initial consultation meeting please contact Terry Oakes on 01502 581822 (email: **consult@terryoakes.com**) who is project managing the review on behalf of the authorities.

Yours sincerely

B3.3 Invitation to the Second Stakeholder Meeting

21 December 2007

Dear Stakeholder

FIRST REVIEW OF SHORELINE MANAGEMENT PLAN – LOWESTOFT NESS TO FELIXSTOWE LANDGUARD POINT SECOND KEY STAKEHOLDER CONSULTATION MEETING

I am writing to invite you to the second Key Stakeholder Consultation meeting to be held at 7pm on Wednesday 27 February 2008, at the Riverside Centre, Stratford St Andrew, IP17 1LL (on the A12 between Woodbridge and Saxmundham).

For your information, following the receipt of comments made during the first consultation period, the officer Client Steering Group (CSG) has updated and clarified the definitions of "Issues", "Features" and "Objectives" to be addressed during the review. The full table will be placed on the project website (www.suffolk.smp2.org.uk) early in 2008.

The purpose of the second meeting is to provide you with an opportunity to examine the results of the review of coastal processes behaviour and dynamics which will be used to develop the baseline scenarios, identify risks and test the response and implications of different management policy scenarios over the different timescales. The draft policies will not be presented, as their development is the next stage of the review.

This meeting will be attended by Members and officers of Waveney and Suffolk Coastal District Councils and the Environment Agency. Also present will be representatives from Terry Oakes Associates Ltd, who are project managing the review, and Royal Haskoning, the consultants dealing with the technical elements of the project. If there are any matters arising before and to confirm your attendance at the second consultation meeting please contact Terry Oakes on 01502 581822 (email: consult@terryoakes.com) who is project managing the review.

Yours sincerely

B3.4 Invitation letter to Key Stakeholder Workshops

Mr/Mrs ????
Address
Address
etc

16 February 2009

**FIRST REVIEW OF SHORELINE MANAGEMENT PLAN –
LOWESTOFT NESS TO FELIXSTOWE LANDGUARD POINT**

KEY STAKEHOLDER WORKSHOPS

I am writing on behalf of the Review partners to invite you to attend one of the Key Stakeholder meetings to be held on 31st March, 2nd April and 3rd April 2009. Details of the venues, dates and programme are attached to this letter.

The partners - Waveney and Suffolk Coastal District Councils, Suffolk County Council and the Environment Agency in conjunction with Natural England, and Royal Haskoning, the consultants dealing with the technical elements of the project – have arranged six half-day workshops scheduled to examine the proposed draft management policies for the Suffolk coastline. The programme of events is attached. You are invited to send representatives to any number of sessions as long as no more than two people attend each one.

Morning sessions will start at 10.00 am; afternoon sessions at 2.00 pm. In addition, each venue will feature a drop-in session in the evening from 5.00 pm until 7.00 pm for those unable to attend during the day.

The purpose of the workshops is to provide you with an opportunity to (1) review the process used to identify possible policy options for the management of the Suffolk coastline; (2) examine the proposed draft policies for each policy zone; (3) ask questions of the experts; and (4) challenge the decisions.

Each meeting will be attended by Members and officers of the Partner organisations, along with representatives from Terry Oakes Associates Ltd, who are project managing the review, and Royal Haskoning.

To confirm your attendance at a Key Stakeholder workshop meeting, please indicate by March 14th which sessions you wish to attend and confirm the names and contact details of those who will be attending by contact me on telephone 01502 581822; by email to smp2@terryoakes.com; or by writing to the address below.) Please contact me if there are any matters arising beforehand. A light lunch can be provided if requested in advance.

The review website (www.suffolksmp2.org.uk) contains further details of the review, including Issues Tables, each of which presents a list of the key features and issues along the coast, section by section, and why these are important to stakeholders. Policy Summaries for each section of the coast will be available for viewing and downloading after 2nd March 2009.

If you are unable to view or download any of these, please contact me and I will arrange printed copies for you.

Yours sincerely

B4 Project Management Group Review Materials

The Project Management Group Meetings were often used to review and discuss proposed methodologies and findings throughout the SMP development process. The Project Management Group provided feedback on a number of documents as summarised below:

Date of Meeting	Document reviewed/ discussed	Purpose	Document location
November 2007 – May 2008	Issues Table	To review issues for correct factual information and interpretation	Appendix E
	Briefing Note regarding Setting Objectives and Characterisation of the coast	To review and discuss Characterisation of the coast and the concept of overarching principles for setting objectives	B4.1
June 2005	Briefing Note regarding Objective Evaluation/ Assessment	To review and discuss proposed method of assessing and evaluating objectives without mathematical ranking system	B4.2
November 2005	Draft Policy Development Document	To review and discuss proposed policy development methodology and format.	
May 2009	Draft SMP	To review and discuss draft SMP document.	
December 2006	Consultation response	Consider responses and agree revisions to the SMP2	B5
February 2006	Review revisions and consider action plan	Ensure that revisions to the final SMP2 reflect issues raised during consultation. Agree proposed action plan	

B4.1 Briefing Note for June 2008 Meeting regarding Setting Objectives/ Characterisation

Setting Objectives

Sustainability

A shoreline management plan (SMP) identifies how the coast can be managed in a sustainable way in terms of managing and adapting to flood and coastal erosion risk in the light of future climate change and sea level rise. In addition to this, it also aims to deliver wider environmental and social benefits as part of the SMP policies.

As an overall principle it is adequate to take the definition provided by the original 1987 statement of sustainable development: *"development which meets the needs of the present without compromising the ability of future generations to meet their own needs",* subsequently amended and adopted in the Defra SMP guidance, in relation to defence management policy as avoiding: "*tying future generations into inflexible and expensive options for defence."*

While this provided an initial intent, encapsulating the long term view being taken by the first review of the Shoreline Management Plan, it has to be realised that such a definition lacks (quite correctly, given its context) specific guidance as to the day to day, area by area management of individual sections of the coast or of risk. It is essential, therefore, to interpret this in relation to the actual situations that exist and the future that is envisaged.

There are two aspects to sustainability:

- the effort needed to deliver an outcome – such as pressure resulting from changing the coastal form, such as resisting erosion
- the harm or benefit resulting from the outcome - the vision of what is wanted of the coast

These have to take account of the issues in a particular area, for example: natural processes, ecology, homes, businesses, navigation or recreation.

The issues along the Suffolk coast have been identified from the following sources of information:

- earlier studies, such as the first SMP, strategies and scheme studies
- the first stakeholder meetings and discussions with the Representative Members Forum (RMF) and Client Steering Group (CSG)
- a review of policy documents, structure and local plans

Ideally, the most sustainable approach is not to intervene on the coast and to let it respond in a dynamic way to natural processes occurring in the North Sea. There is an increasing need to manage flood and erosion risk through

alternative methods, such as flood warnings and improving the resilience of individual properties, in an attempt to adapt to climate change and sea level rise.

This fits with the intentions of the European Water Framework Directive, which aims to restore water bodies (including coastal areas) to their natural state, unless there is a good reason not to. This can be done where there are no issues that need managing. However, the coast and hinterland are home to a wide variety of activities, features and issues often with complex interactions.

There are parts of the coast that people would not wish to change as the impact would have a detrimental effect on the sustainability of other issues or features elsewhere on the coast. These may be natural, man-made or social features that the present generation wants to pass on to future generations.

The right balance needs to be achieved between these two extremes, at the same time as making sure inflexible and expensive management plans are not passed on to future generations. Even where the coast is currently managed, future intervention may not be the right choice if it is likely that on-going management will have a detrimental effect on natural processes or impact on other parts of the coast long-term. It is likely that management in these places will increase in the future as the coast evolves or because of climate change. Careful consideration would therefore be needed to decide whether it would be sustainable to continue existing management practices rather than letting the coastline behave more naturally.

Principles and objectives

The SMP guidance indicates the following process for setting objectives:

- developing objectives for each feature in the 'theme review'
- prioritising objectives within each theme
- identifying key policy drivers – features with associated objectives likely to have overriding influence.

The issues/features/objectives table identifies the aspects that this SMP should consider. This is on the website, and it will be updated as new information is received.

The 'theme review' looks at the features under each theme, such as the natural environment, built environment etc. It also goes on to discuss different sections of the coast in more detail and tries to explain how the features interact. It has been developed in the individual characterisation of each area attached to this paper.

Underlying principles and high level objectives specific to each area of the Suffolk coast have also been developed. These will influence the development of policies. How the coastline has been split for this exercise will not influence where future policy units will be. Each of these areas will interact to some degree with adjacent areas, so frontages that have strong

connections or overall values that we can draw together have been grouped. These could be amended in the light of comments from key stakeholders.

The approach of looking at each length of coastline and defining principles and over-arching objectives for them has been used.

Key principles

The following list of principles reflects the aspirations all stakeholders. It will be used together with stakeholder objectives identified for each area of the coast and will aid policy development and to identify specific objectives. These objectives have been developed by consulting the CSG, RMF and key stakeholders, and are presented as aggregated objectives for each area. It is important to note that these come from the values that stakeholders place on the issues and features in each area. Some of these objectives will therefore conflict with others. Because of this, the SMP will not be able to achieve all of these objectives. It should be noted that these principles have been set out in no particular order.

- To avoid the loss of life through flooding;
- To protect people's homes from flooding and erosion;
- To protect the local economy;
- To contribute to a sustainable and integrated approach to land use planning;
- To support adaptation by the local coastal communities;
- To avoid damage to and enhance the natural heritage;
- To support the historic environment and cultural heritage where possible;
- To maintain or improve landscape designations and features; and
- To reduce reliance on defence.

Overview of thematic review

For each area, we have described:

- the area or coastal frontage, including land use and the natural environment; summary of coastal behaviour, including a discussion of how coastal management may interact across each area; and
- key values and stakeholder objectives

Representatives along the Suffolk coast have been asked for their views on what the key local issues are for each section of coastline. The issues and features table contains a full list of all the issues identified from historical information, previous reports and stakeholder feedback.

Values have been aggregated together and a series of over-arching objectives for the whole coast have been developed as well as a series of specific objectives for each area.

Use of words

"Sustainability" has already been defined. In this paper and the issues and objectives table, other words have been used that are open to various interpretations. Below are the definitions:

Integrated – an approach that tries to take all issues and interests into account. In taking this approach, managing one issue adds value to the way another is dealt with.

Maintain – that the value of a feature is not allowed to deteriorate.

Enhance (improve) – the value of a feature increases

Sustain – refers to some function of a feature. A feature may change, but the function is not allowed to fail.

Adaptation – implies that there may be some actual change in the way a feature, such as a habitat or a community, functions. In supporting adaptation, management has to recognise certain principles:

- That adaptation may take time and may evolve slowly so that change to the overall community does not happen immediately.
- That management should not encourage a progressively more vulnerable situation to develop, where there is a sudden change from one condition to another.

Characterisation

The characterisation is set out in the following tables for each area considered. In addition to a general description and derivation of key values for an area, the key environmental designations are being identified, together with an initial identification of features at risk based on a policy of no further intervention. A brief synopsis is also provided of the degree to which the coast wishes to change; the inherent pressure any intervention on the coast would bring about.

Area 1: Lowestoft – Lowestoft Ness to Pakefield Hall

Chainage 0km – 10.5km

Definition

The area encompasses the town of Lowestoft, Kirkley village and the village of Pakefield which lies immediately to the south. The area is separated from Area 2, which lies to the south by the less developed cliffed section of the Kessingland Cliffs. Although it is recognised that there is a clear interaction between Lowestoft and Kessingland, particularly in terms of the A12 transport link which is set back from the coastline, there is a distinction made in their respective character and values in relation to shoreline management.

Lowestoft is the largest town in the SMP area and is also the most easterly town in the UK. The town is a regional economic hub and is in the process of undergoing major regeneration. Lowestoft is a good quality medium sized resort town appealing to young families and older adults. The award winning beaches are among the finest in the country. The town offers a good mixture of sailing and other maritime activities and also supports a number of other tourist establishments, attractions and events. The sea front is heavily dependent on artificial defences and strong management, most obviously at the harbour and in the area to the north. The following background overview takes in the whole of the Lowestoft area, extending to the north and beyond the boundary of this SMP in order to provide an effective overview.

Background

Overview

Lowestoft (population around 60 000) is the most easterly town in the UK, lying between the eastern edge of the Broads and the North Sea. It is divided by Lake Lothing and the harbour. There are residential and business areas on both banks of Lake Lothing, while the main shopping area is to be found on the north bank. Lowestoft station is centrally located within the town and provides services to Norwich, Ipswich and London (via Ipswich). Over the past few years, Lowestoft has undergone something of a facelift, with approximately £45 million being spent on the re-development of the town and the construction of a new relief road. Commercially, the area supports extensive mooring and quay areas, both commercial and recreational and includes the fish dock and several marinas. Critical land-based infrastructure includes the A12 road, which crosses Lake Lothing at the Lowestoft Bascule Bridge and the railway line, which runs along the north bank of Lake Lothing. Despite the new relief road further inland, the main road to the back of the sea front and the crossing at the Bascule Bridge are still heavily used and lie very much within the coastal zone. In addition, there is an international telecom cable landing site at Pakefield.

The town is also well renowned for its beaches, two of which are the holders of Quality Standards Blue Flag, while Corton Beach (part of which is a naturist beach) is located to the north of the town. The Esplanade runs along back of the South Beach and combines various indoor and outdoor attractions and facilities. The seafront has two

piers, Claremont Pier and South Pier, which is so called as it is on the south side of both the harbour and the river mouth. Claremont Pier is an integral part of the attraction of the promenade and Esplanade, while South Pier is more closely associated with the harbour, although it does form an important end feature to the whole southern sea front. Other tourist attractions within Area 1 include Pontin's holiday camp at Pakefield, Lowestoft Maritime Museum and the Euroscope (to the north of the harbour) and is also the home of Lowestoft seafront Air Festival which attracts around 400,000 visitors each year.

In the 1665, the Battle of Lowestoft (Second Dutch War) was fought between British and Dutch forces, while the town was used as a navigation point by German bombers during WWII. Lowestoft has also been subject to periodic flooding, the most severe being in January 1953, when the present day north Denes wall was outflanked by a North Sea swell driven by low pressure and a high tide caused overtopping of the defences and deluged most of the central town and beach area.

To the south of Lowestoft lies Pakefield (population around 6 900). In common with many other coastal settlements, Pakefield has a history of coastal erosion, with a number of development sites lost to the North Sea during the 19th Century. However at present, coastal deposition is ensuring that the village remains protected. Pakefield forms a different but important element of the Lowestoft characteristic area.

Land Use

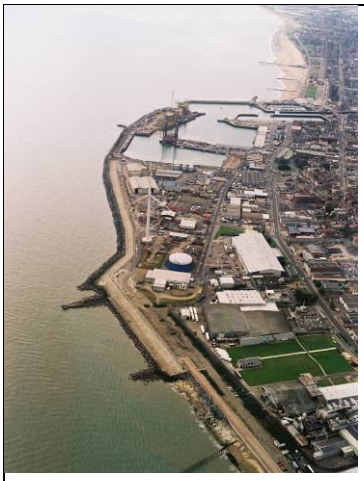
The main land use feature of this area is the urban area of Lowestoft. Lowestoft is the largest urban centre in Waveney District and according to the Interim Waveney Local Plan 2004 (WDC, 2004) is the most sustainable locations for new development in the district. Lowestoft has however suffered from an economic decline and currently has unemployment levels above the national average and 'more social problems than any other town in Suffolk' (WDC, 2004). In response to this, the Council has focussed much of their regeneration efforts on promoting a renaissance in Lowestoft. The central feature of such regeneration has been to focus on building on the strengths of existing areas and promoting mixed use development. Key areas to support such a renaissance have been identified as the South Lowestoft area especially waterside areas such as the harbour and Lake Lothing. Allocations for employment and mixed uses have therefore been allocated in South Quay and throughout the eastern areas of the town. The central theme of future land use planning in this area (and the main thrust of district wide initiatives) is therefore concentrated on building on the strengths of Lowestoft to support regeneration and growth. In this respect, the waterside resources of Lowestoft, commercial, industrial, recreational and tourism related, are critical to the sustainable development of the District. Waterside land in Lowestoft is therefore of great importance to the District as a whole.

Natural Environment

Along the coastline of this area, the key environmental feature is Pakefield cliffs, an important geological site (although not a nationally designated SSSI feature). Directly south of Lowestoft, the shingle beach and cliffs are backed by some agricultural land and parkland. The designations associated with the Broads are located further inland to the east of Lowestoft but are still considered important context for the area. The Broads include freshwater lakes, fens and marshland and support numbers of internationally important breeding birds.

Site name	Qualifying feature
Broadland Ramsar	*Ramsar criterion 2* *Ramsar criterion 6* ***Species with peak counts in winter;*** Tundra swan *Cygnus columbianus*, Eurasian wigeon *Anas penelope*, gadwall *Anas strepera* and northern shoveler *Anas clypeata*
The Broads SAC	***Primary reason for designation;*** Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp; natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation; transition mires and quaking bogs; calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; alkaline fens (priority feature); alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) (priority feature); ***Qualifying feature but not primary reason;*** *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) *Annex II species* ***Primary reason for designation;*** Desmoulin`s whorl snail *Vertigo moulinsiana*; fen orchid *Liparis loeselii*; ***Qualifying feature but not primary reason;*** Otter *Lutra lutra*
Broadland SPA	*ARTICLE 4.1 QUALIFICATION* ***During the breeding season the area regularly supports:*** Bittern *Botaurus stellaris;* Marsh harrier *Circus aeruginosus* ***Over winter the area regularly supports:*** Hen harrier *Circus cyaneus;* Bewick's swan *Cygnus columbianus bewickii;* Whooper swan *Cygnus Cygnus* *ARTICLE 4.2 QUALIFICATION* ***Over winter the area regularly supports:*** Gadwall *Anas strepera*
Barnby Broad & Marshes SSSI	Large and varied area of open water, carr woodland, fen, grazing marsh and dykes.
Corton Cliffs SSSI	Geologically important because it is the type locality for the Anglian Cold Stage of the Pleistocene.

Shoreline Management



Physical Shoreline

The shoreline is heavily managed and with the exception of the area fronting Pakefield, is protected by substantial defences. To the north of the harbour, these generally comprise rock or concrete block revetments that extend from Lowestoft Ness through to the harbour. These defences, in addition to constraining erosion due to both strong flow and wave action, also act to provide flood protection to the low-lying hinterland. There is continuing erosion pressure on these defences, controlled very much by maintenance of the position of the Ness and the shoulder created by the Hamilton Dock walls. There is no significant beach, although Ness Point acts to retain the shape of the coast to the north, thereby maintaining North Beach.

The harbour is formed around the artificial cut through at Lake Lothing to Oulton Broad. The defences within the harbour and inner harbour act as flood protection to the low-lying land on either side. While not being a natural feature, the flow into and out of the harbour, together with the direction of flow provided by the harbour piers, interacts with the nearshore banks and development of the offshore channels. The harbour and in particular the South Pier, have strongly influenced the shoreline to the south. Prior to the development and fixing of the Ness and the development of the harbour, the South Beach was an area of erosion. Over the last century, this trend has been reversed or at least stabilised.

South Beach comprises a relatively wide sandy foreshore, developed between the harbour and the cliff headland at the northern end of Pakefield Cliffs. The sea walls landward of the beach support both the promenade and the wider Esplanade. The set back in the cliff line at this northern end of Pakefield has allowed the development of a beach comprised of vegetated shingle and backed by sand in front of the village. At present, there is a healthy width of upper beach across this headland; however, in the past, the waterline has pushed up against the sea wall at this point effectively dividing South Beach from the beach at Pakefield.

In addition to the main coastal control points of the harbour and the Pakefield Cliff headland, the offshore banks and the channel between the shore and these banks play an important role in determining the width and health of the shoreline. Variation in the shape and position of these features results in cyclical periods of erosion and accretion along the whole southern section of the frontage.

Because of the long period of continued protection of South Beach and the modification at the harbour, the historical evidence of coastal trends sheds little light on future trends. The more recent trends have been for relative (although cyclic) stability, albeit with the need for the management of defences. At Pakefield, there are records of a

long-term trend of slow erosion at the cliff line; which is often associated with sporadic cliff falls, despite the otherwise healthy beach. When the beach does go through a period of erosion, the cliff becomes exposed and therefore has a tendency to erode. With increasing sea level rise, there will be increased pressure on all areas of the frontage; the influence and long term behaviour of the nearshore features will be critical to this and is currently poorly understood.

There is likely to be increased pressure and risk of overtopping along the section between the Ness and the harbour. The increase in water level will impose an increased risk of direct flooding and will constrain drainage into both the harbour and Lake Lothing. There will be increased pressure and potential reduction in the width of beach along South Beach and the potential for reactivation of cliff retreat along the Pakefield cliffs.

Interactions

To the northern section and within the harbour, the risk of flooding has a significant influence on the efforts for commercial regeneration within the important centre of Lowestoft. The threat of erosion has a more localised impact, but may be detrimental to key features such as the Euroscope (which in association with its position as the most easterly point of England is identified as a defining tourist interest to the town). Erosion would also result in loss of an important area of redevelopment and an essential element of the outer harbour.

The values of South Beach are associated with tourism and coastal recreation, although this merges to a high degree with the identified importance of the southern area of the harbour for allowing good quality waterfront development. The open ground of the Esplanade is used as a site for major attractions such as the annual air show, but is also an essential, more general entity of open ground, promenade, beach and pier, building on the identified core strength of Lowestoft as a coastal, seaside town and tourist centre. Efforts for regeneration of the town, but more immediately to the area of housing, accommodation and commercial properties to the rear of the Esplanade, are supported by this defended amenity area.

The section of promenade between South Beach and Pakefield is seen as a transition and route between the formal Esplanade and a more natural coastal environment to the south; both aspects are identified as being important to the diversity of the whole frontage. While economically significant, the properties along the cliff top of the Pakefield headland are seen as merely an extension of the hinterland development. It is recognised, however, that the open green area to the immediate south of the headland is locally significant to the community.

The Pakefield shoreline forms a distinct part of Pakefield village, although the main village is set back slightly. With the church and war memorial, together with the use of the beach for informal boat launching, this coastal area forms a local amenity and distinct cultural element of the village. In general, and notwithstanding Pakefield Cliffs,

the built environment dominates this overall area. Lowestoft is a centre for visiting and benefiting from the surrounding natural setting, rather than being integrated with the broader natural environment.

Key Values

Lowestoft is an important regional centre and tourist destination. Within a strongly managed environment, the key values vary along the shoreline from the highly developed commercially important area to the north and around the harbour, through the high value amenity frontage of South Beach of significant importance to the local tourism economy through its "Blue Flag" status, to the less formal Pakefield beach, with each section adding value to the overall character. The historic and extensive residential areas in south Lowestoft are dependent also on effective management of the beach and defences.

In particular, the economic regeneration of the harbour and those areas behind the Esplanade rely heavily upon appropriate management of the beach and promenade of South Beach. Additionally, the associated economic support derived from the harbour and the area immediately to the north means that shoreline management has to take account of overall and interrelated impacts on each of these areas. Pakefield has a distinct character and value which provides a transition to a more natural coastline to the south.

Stakeholder objectives

The purpose of these objectives is to summarise the aspirations of key stakeholders and local residents. Management policies will satisfy these objectives where possible and seek opportunities to improve the human and natural environment in the context of the dynamic coastal environment.

- To maintain Lowestoft as a viable commercial centre and tourist destination in a sustainable manner;
- To maintain critical transport links;
- To reduce flood and erosion risk to residential and commercial properties in Lowestoft;
- To protect the commercial and recreational use of Lowestoft harbour;
- To maintain navigation to Lowestoft harbour and associated areas;
- To maintain regeneration opportunities in and around Lowestoft;
- To maintain and enhance the overall amenity value of the frontage in general and in particular Lowestoft South Beach, its beach and open area behind;
- To maintain transport links in and around Lowestoft;
- To maintain the more informal character of Pakefield, retaining important cultural heritage;
- To maintain the geological value of Pakefield Cliffs; and
- To maintain access to and along the coastal path.

Area 2: Kessingland and Covehithe - Kessingland to Easton Broad

Chainage 10.5km – 21km

Definition

Although developed and defended, the village of Kessingland and the area immediately to the south is included within this area as it is fronted by the dominant and designated coastal feature of Benacre Ness. This stretch of coastline is primarily agricultural, with several features of conservation interest. The area to the south of Kessingland is dominated by environmental designations and reflects the rural character of this stretch of coastline. Even at Kessingland, the emphasis of a natural coastline is maintained through the width of vegetated backshore.

This area runs from Pakefield Hall through to Easton Broad.

Background

Overview

This stretch of coastline is predominantly agricultural, with several features of conservation interest. Pakefield Hall is now owned and operated by Pontins Holiday Parks Ltd. and lies to the north of Kessingland (population around 4 000), which is itself four miles south of Lowestoft. Once rumoured to be the richest village in England, the former fishing village now owes much of its popularity to the tourist industry. The area is popular with conservation enthusiasts and the Africa Alive attraction (to the south of Kessingland) was voted top Suffolk family attraction in 2003. Kessingland is also of interest for archaeologists, as palaeolithic and neolithic implements have been found here and the remains of an ancient forest lies buried on the seabed.

The area around the Kessingland levels is low-lying and consists of shingle beaches with secondary sea defence bunds built to reduce salt water inundation during times of tidal surge. The Hundred River runs through this zone and has an automatic pumping station to control water levels and maintain the fresh water balance. Directly behind the beach, grazing marshes flank the Hundred River, with the Suffolk Coast and Heaths path bisecting this. This area of coastline is eroding at a relatively high rate, with the area of erosion extending to the north as Benacre Ness has moved northwards. This change in erosion pattern at Benacre Ness is well illustrated where the pits created by gravel extraction are rapidly disappearing into the sea.

Further south are the villages of Benacre (population around 60), which is set well back from the shoreline and Covehithe (population around 28), which lies within 400 metres of the eroding cliffs. Both lie in the Suffolk Coasts and Heaths Area of Outstanding Natural Beauty (AONB). Covehithe was highly prosperous in the Middle Ages through the trading of wool and cloth until its port was lost to coastal erosion. Erosion also caused the coastline at Covehithe to retreat by approximately 500 metres between the 1830s and 2001, with predictions indicating that the ruins of St. Andrews church are likely to fall into the sea by approximately 2050. An indication

of this is that Benacre Broad, which is now adjacent to the coast, was much further inland in the 1700's and has lost much of its original area. The coastal frontage is mainly divided between areas of cliff and low-lying broads, with Covehithe Broad and Easton Broad having been significantly reduced in extent through erosion. The Suffolk Heritage Coast commences to the south of Kessingland and continues south as far as Felixstowe.

The coastal path runs along the frontage at Kessingland, diverting inland behind each of the broads to re-emerge at the coast at Southwold. The main A12 road link runs inland of Kessingland, crossing the Hundred River upstream of the Kessingland Levels at Latymere Dam and then, remaining well back from the shoreline, down to Southwold. The B1127 runs from the A12 down to Reydon, crossing the upstream area of the Easton Broad at Potters Bridge, with only minor roads tending to run from these two north/south routes out towards specific villages and properties. The whole area is therefore accessed from the hinterland with no main coastal route which significantly adds to the relative remoteness of the area.

Land Use

The village of Kessingland is separated from Lowestoft by a rural coastal strip designated as Strategic Gap and Open Break in the Waveney Interim Local Plan. The provision of the designated gap will ensure that the Kessingland does not become absorbed into the wider urban area of Lowestoft to the north. Kessingland itself is a distinctly different settlement from Lowestoft and the Waveney Interim Local Plan describes it as being 'a separate community (from Lowestoft) with its own character' (WDC, 2004). In land use planning terms, Kessingland is surrounded to the north, south and east by a range of environmental designations which are intended to protect the foreshore and hinterland environments from urban encroachment. To the west lies an extensive area of agricultural land. Kessingland is dependent on Lowestoft for employment, but has its own limited commercial base which is focussed on tourism and use of the foreshore. The settlement is however is considered to be a centre which is capable of providing sustainable development and growth – a sustainable village. Kessingland is therefore important as an urban area in ensuring that growth within the district proceeds in a sustainable manner. Despite its links with Lowestoft, Kessingland has its own policy base for regeneration, as the area is listed as a Suffolk Rural Priority Area. Regeneration will remain focussed on building on existing strengths of areas. In this instance, this would be likely to focus on the foreshore area in terms of coastally dependent commercial uses and also tourism and recreation. A stated objective of the Waveney Interim Local Plan relating to Kessingland is to 'safeguard and support the existing tourism industry by encouraging the redevelopment of existing facilities and the development of new facilities where appropriate' (WDC, 2004). Kessingland is therefore seen as an important component of the District's economic future.

Much of the Kessingland coastal development is set back a short distance from the crest of the cliffed shoreline. Only at Kessingland Beach, to the south of the main village, is there direct access to the shore, with a narrow strip development of housing and a road giving access to the holiday and caravan parks extending through to

Kessingland Levels.

The area south of Kessingland, including Covehithe is dominated by environmental policy designations which reflect its rural character.

Natural Environment

The key environmental features include the shingle beach in the north, low cliffs around Easton Bavents and Covehithe and a series of saline lagoons with fringing reedbeds. The lagoons, which are included within the designations, are a series of percolation lagoons (the Denes, Benacre Broad, Covehithe Broad and Easton Broad) which formed behind shingle barriers and show a wide range of salinities, from nearly fully saline in South Pool, the Denes, to extremely low salinity at Easton Broad. Sea water enters the lagoons by percolation through the barriers or by overtopping them during storms and high spring tides.

The area supports important populations of breeding birds, which are particularly associated with reedbed and shingle beach habitats. The reedbeds also support important numbers of Bittern *Botaurus stellaris* in winter. Little Terns *Sterna albifrons* feed substantially outside the Special Protection Area (SPA) in adjacent marine waters.

Site name	Qualifying features
Benacre to Easton Lagoons SAC	***Primary reason for designation;*** Coastal lagoons
Benacre to Easton Bavents SPA	*ARTICLE 4.1 QUALIFICATION* ***During the breeding season the area regularly supports:*** Little Tern *Sterna albifrons;* Bittern *Botaurus stellaris;* Marsh harrier *Circus aeruginosus*
Pakefield to Easton Bavents SSSI	Geological exposures of the Lower Pleistocene Norwich Crag formations and associated Pleistocene vertebrate assemblages.
Benacre NNR	Reedbeds and lagoons of Benacre, Covehithe and Easton Broads, together with the woodlands and heathlands on the higher ground between them.
Suffolk Coast and Heaths AONB	The AONB protects heathland, reed beds, salt-marsh and mud-flats, a rich mixture of unique and vulnerable lowland landscapes.

Shoreline Management

Physical Shoreline

Only in the northern section of this SMP area (adjacent to Kessingland) are hard defences present, with some flood protection being afforded to the Kessingland Levels and the Benacre pumping station. Over the main section of the coast there are no defences, although some action has historically been undertaken in the past to rebuild the shingle barriers in front of the broads. This management has, however, now largely ceased.

To the northern end of the area, the dominant coastal feature is Benacre Ness, which has progressively moved north to expose areas of the south to erosion and thereby providing substantial protection to the coastline behind. There is some indication that

sections of coastline immediately north of the Ness have suffered increased erosion as the Ness approaches.

The Ness is linked to the southern tail of the offshore bank system in front of Lowestoft, which extends further to the north. The movement of the Ness is thought to be intermittent with a slower underlying continuous trend. Such behaviour would be consistent with the cyclic behaviour of the nearshore banks. Currently the system means that there is some pressure on the cliffs to the north of Kessingland (at Gisleham and Pakefield), although this would be expected to reduce (with the threat of erosion moving to the north). Over the main Kessingland frontage, the massive shingle banks act to protect the sea wall, which in turn provides protection to the base of the cliffs. To the south of the Ness, however, the movement of the Ness has substantially increased erosion in front of the Kessingland Levels, threatening to bring both defences and the pumping station under pressure. Breach of the Kessingland Levels would allow saline intrusion on a regular basis potentially as far upstream as the A12, as well as radically altering the physical environment of this valley.

The cliffs over the main length of the area are continuing to erode and there is little significant structural or geological constraint on this, apart from the Southwold headland to the south in Area 3. This section of the coast is considered to respond as a drift aligned open coast, providing sediment to the south under the net wave energy. This release of sediment is the main feed of sediment, on occasion being drawn down the beach to a nearshore bar which has been identified as “fast tracking” sediment along the shoreline. The retreat of the cliffs is determining the retreat, overwash and rollback of the shingle barriers. There may be some additional feed to the overall system from the landfall of the nearshore bank system but it is uncertain to what degree. The system is seen, therefore, as being predominantly self-feeding, with the continuing pattern of erosion sustaining accretion in other areas.

Interactions

In relation to Kessingland, the area of erosion to the north of the Ness is potentially increasing erosion to the largely open ground between the village and the southern limits of Area 1. Several holiday parks are located here.

Over the main Kessingland frontage, the Ness provides substantial protection at present, although its movement could result in a return of direct pressure on the frontage in the long-term. This will pose the issue of protection and potential interference with the designated feature of the Ness. More immediately, this conflict will arise to the south of Kessingland in front of the Kessingland Beach and holiday parks and in the shorter term in relation to the management of the Kessingland Levels. In particular the issue of conflict between fresh and saline habitat is raised, in addition to the potential impact on farmland, properties and the strategically important A12 link which is less than one kilometre from the coast in the north of this area.

Over much of the rest of the area, this conflict between freshwater and marine habitats has already

developed, with the loss of the area of the broads being replaced by brackish and saline habitats. A potential area of freshwater habitat development was identified in the Coastal Habitat Management Plan as being within the Kessingland Levels. This is clearly an important possible interaction between management of different parts of this area.

The issues in relation to human land use are the loss of Covehithe and the culturally significant St. Andrews Church and the potential flood risk at Potters Bridge, to the rear of Easton Broad.

This section of coast also provides sediment to the Southwold frontage which must also be considered.

Key Values

Although in detail the area may be seen as the two distinct areas of Kessingland village and the Covehithe length of eroding cliffs and broads, there is direct linkage both in terms of management and overall character. The dominant theme is maintaining the varied but natural character of the area, within which there is a requirement to sustain tourism, existing facilities, coastal use, the natural environment and communities. The regeneration of Kessingland is a key component of this, as are the strengths of agriculture and the local community infrastructure. This combination of principal values is summarised as:

- Kessingland as a coastal village and tourist destination;
- Transport link from Kessingland to Lowestoft (A12);
- Strategic gap which delineates Kessingland from Lowestoft;
- Recreational use of the foreshore area;
- The agricultural economy;
- Community infrastructure;
- The natural and international importance of the biological and geological diversity of the coastline; and
- Cultural heritage.

All of which are within a broader environmental value of the natural coast represented by:

- A highly dynamic and rapidly changing natural coastline;
- A wide range of interdependent and internationally important coastal brackish and freshwater habitats in the marshes and lagoons to the south of Kessingland; and
- The significant archaeological, geological and landscape features of the coast.

Stakeholder Objectives

The purpose of these objectives is to summarise the aspirations of key stakeholders and local residents. Management policies will satisfy these objectives where possible and seek opportunities to improve the human and natural environment in the context of the dynamic coastal environment.

- To maintain Kessingland as a viable commercial centre and tourist destination in a sustainable manner;
- To maintain a transport link from Lowestoft to Kessingland and throughout the area;
- To maintain a range of recreational opportunities along the foreshore;
- To support adaptation of rural industries and communities;
- To maintain biological and geological features in a favourable condition, subject to natural change;
- To maintain access to and along the coastal path; and
- To support appropriate ecological adaptation of habitats, in particular the important Easton Broad National Nature Reserve.

Area 3: Southwold and the Blyth Valley - Easton Bavents to Dunwich Cliffs

Chainage 21km – 30.5km

Definition

The area includes the coastal town of Southwold, extending to the north and including Easton Bavents, Dunwich village, the Blyth Estuary and the village of Walberswick. Southwold is a premier tourist centre in the SMP area and its character and appeal is closely associated with both the coast and estuary. Walberswick has a similar strong connection with the estuary, but also with the area of coastal marshes and lagoons down to Dunwich. During consultation this broader multi-aspect nature of the area around Walberswick and Dunwich was emphasised.

The area is important for its natural environment and the balance of freshwater, saline and marine habitats between the open and coast and estuary is highly significant.

Background

Overview

Southwold (population around 1 500) is an important tourist destination in Suffolk, both as a destination in its own right and as a hub for visitors to the countryside and villages in central Suffolk. The town is bounded by the North Sea to the east, by the River Blyth and Southwold harbour to the south and by Buss Creek to the north. In effect, the town is essentially an island, with only one road (A1095) in and out of the town. Development and the protection of Buss Creek have tended to draw Southwold closer to the neighbouring village of Reydon (population around 2,600). Southwold was mentioned in the Domesday Book as an important fishing port and received a town charter from Henry VII in 1489. Over the following centuries a shingle bar built up across the harbour mouth, which prevented the town from becoming a major port.

The harbour lies to the south of the town on the River Blyth and extends from the river mouth to approximately one mile upstream, serving both fishing and small pleasure boats. A foot ferry still runs between Southwold and Walberswick, although its main function is as a tourist attraction, being part of the circular route taking in the town, the village and estuary. There is also an RNLI station, a yacht club and a caravan park near the entrance to the harbour. The harbour is an integral part of the attraction of the town, as well as being a functioning harbour and a maintained haven of refuge. In 1659, a fire devastated most of the town and severely damaged St. Edmunds Church, whose original structure dated from the 12th century. However, this event was not totally detrimental, as the fire created a number of

open spaces ('greens') within the town which were never rebuilt.

Southwold Pier, which once functioned as a steamboat stop to London, had a major refurbishment in 2001 and is now an important tourist attraction. Southwold is also the home of the renowned Adnams brewery, which was rebuilt in 1890, having been in the same location since 1660.

The town's lighthouse, constructed in 1887, stands as a landmark in the centre of the town and replaced three earlier structures which were under serious threat from coastal erosion. On Gunhill green above the beach, six eighteen-pounder cannon commemorate the Battle of Sole Bay. This was an inconclusive battle in 1672 between the combined British and French fleets and the Dutch fleet which was fought adjacent to the town. During WWII, the cannons on Gun Hill ensured that Southwold gained the status of "fortified town"; however, despite the fact that these cannon were filled with concrete and therefore unable to fire, the town became the target of many Nazi bombing raids.

The town blue flag beach is a combination of sand and shingle, which had its protection upgraded in 2005/6 with a new coastal management scheme including beach nourishment, new traditional timber groynes on the south side of the pier and rock groynes to the north. The significant value of the Blue Flag beach was recognised in the economic assessment undertaken in justifying these works.

Walberswick, which lies to the south of Southwold, was once a thriving port. However, nowadays the village is a bustling tourist attraction in the summer months, with a very high proportion (though to be as much as half) of the properties being holiday homes. Further to the south lies the village of Dunwich, which was historically a large port, although coastal erosion caused much of it to be lost between the 13th and 16th centuries.

Today, Dunwich contains the ruins of a church and a friary, both of which are of national heritage importance. Small commercial fishing boats launch off the beach, although the fishing industry has declined in recent years. It is also thought that the Roman 'Stone Street' runs from Dunwich to Caistor St. Edmund near Norwich, indicating its historical significance.

The area between Walberswick and Dunwich is ecologically important but also provides a natural setting for the two villages. It has been identified as important for walking and painting, activities that reflect the character of the villages and form a major part of their tourist attraction.

The land around the estuary is important for agriculture, with fresh water abstraction allowing farming of the higher land around the estuary. There is also important water abstraction infrastructure and the concomitant aquifer which is reliant on the maintenance of defences. A golf course lies on the northern bank of the estuary close

to Southwold, which adds to the diversity of attractions in the area. The A12 crosses the Blyth further up the estuary at Blythburgh, forming a partial barrier across the coastal flood plain.

Land Use

The settlements of Reydon and Southwold (within Waveney District Council) and Walberswick and Dunwich (within Suffolk Coastal District Council) lie within this SMP policy unit.

Policy LP1 within the settlement strategy of the Waveney Interim Local Plan (WDC, 2004) also applies to Reydon and Southwold. These are therefore seen as areas which can absorb sustainable growth and are critically important to the growth of the district. Southwold is a buoyant tourism centre which attracts visitors from the UK and abroad. The tourism base is also underpinned by the famous Adnams brewery which is a major employer in Reydon and Southwold and is a contributory factor in attracting tourists. Reydon also supports an industrial base at Fountain Way, which is covered by the Council's policy on maintaining existing economic areas – Policy E2. The land use planning issues in these areas therefore relate to ensuring that sustainable growth is possible and that the key features of the town which support tourism (its historic core, harbour, brewery and waterside facilities) are protected. The environmental policy designations for the coastal strip and open space support this. Southwold is also recognised as being a retail based area, with high levels of confidence in the local economy. Accordingly, the Waveny Interim Local Plan (WDC, 2004) has provided objectives for the area to encourage new retail and leisure facilities within the town.

The significance of Southwold and Reydon to the local economy is recognised by Waveney District Council throughout the Waveney Interim Local Plan. The proposed Local Transport Action Plan for Southwold intends to ensure that the town is provided by a transport network sufficient to serve its tourism requirements.

Crossing the border into Suffolk Coastal District Council lies Southwold's neighbouring settlement of Walberswick. Walberswick provides a similar function to Southwold in land use planning terms, providing a buoyant tourism economy supported by the cultural values, built form and coastal location of the settlement. Policy AP66 of the Suffolk Coastal Local Plan – First Alteration: SCLP (SCDC, 2001) provides guidance on the intended planning approach to tourism areas. Walberswick and also Dunwich to the south are both specified in Policy AP66 as being key tourism areas which, in addition to the estuaries within this area, are intensively used during peak periods. The Council's response with regard to this policy is to ensure that the landscape and conservation values which support this activity are protected from new development. This recognises that Walberswick and Dunwich are important to the local economy, but that the foundations of the tourist industry need absolute protection.

Natural Environment

The shoreline outside of Southwold is remote, with a combination of sand and shingle along the beach which is being eroded and push back by natural processes. The key environmental features include extensive reedbeds, consisting largely of pure stands of reed *Phragmites australis* at Minsmere and Walberswick. The Minsmere-Walberswick designations include two large marshes, the tidal Blyth estuary and associated habitats. This composite coastal site contains a complex mosaic of habitats, notably areas of marsh with dykes, extensive reedbeds, mudflats, lagoons, shingle, woodland and areas of lowland heath. The SPA is actively managed to prevent scrub and tree invasion of the heathlands, grazing marshes and reedbeds.

Site	Features
Minsmere-Walberswick Ramsar	*Ramsar criterion 1* *Ramsar criterion 2;* Bittern *Botaurus stellaris,* Gadwall *Anas strepera,* Teal *Anas crecca,* Shoveler *Anas clypeata,* Marsh harrier *Circus aeruginosus,* Avocet *Recurvirostra avosetta,* Bearded Tit *Panurus biarmicus*
Minsmere to Walberswick Heaths and Marshes SAC	***Qualifying feature but not primary reason;*** Perennial vegetation of stony banks; European dry heaths ***Primary reason for designation;*** Annual vegetation of drift lines
Minsmere-Walberswick SPA	*ARTICLE 4.1 QUALIFICATION* ***During the breeding season the area regularly supports:*** Bittern *Botaurus stellaris;* Nightjar *Caprimulgus europaeus;* Marsh harrier *Circus aeruginosus;* Avocet *Recurvirostra avosetta;* Little tern *Sterna albifrons* ***Over winter the area regularly supports:*** Hen harrier *Circus cyaneus* *ARTICLE 4.2 QUALIFICATION* ***During the breeding season the area regularly supports:*** Shoveler *Anas clypeata;* Teal *Anas crecca;* Gadwall *Anas strepera* ***Over winter the area regularly supports:*** Shoveler *Anas clypeata;* Gadwall *Anas strepera;* White fronted goose *Anser albifrons albifrons*
Minsmere-Walberswick Heaths and Marshes SSSI	It contains a complex series of habitats, notably mudflats, shingle beach, reedbeds, heathland and grazing marsh
Pakefield to Easton Bavents SSSI	Important for the geological exposures of the Lower Pleistocene Norwich Crag formations and associated Pleistocene vertebrate assemblages, and the coastal geomorphology of Benacre Ness.
Suffolk Coast NNR	Walberswick, Hen Reedbed and Dingle Marshes exhibit many types of habitat including reedbed, fens, dykes, hay meadows, grazing marshes and a variety of woodlands. Hen Reedbed also holds a significant proportion of the UK's marsh harrier and bittern populations.
Suffolk Coast and Heaths AONB	The AONB protects heathland, reed beds, salt-marsh and mud-flats, a rich mixture of unique and vulnerable lowland landscapes.

Shoreline Management

Physical Shoreline

Southwold acts primarily as a hard control point, anchoring the drift aligned (when coast develops parallel to the line of longshore drift, normally at an angle of 40 – 50° to the direction of wave approach) coastline to the north. This most immediately affects the cliffs of Easton Bavents by limiting their erosion in the long term, but potentially also allows the coast to align to net wave energy further to the north. Drift over the Southwold frontage, although net to the south, is also characterised by significant northerly movement of material under specific conditions.

To the south, Southwold's defended headland control is supplanted by the influence of the estuary and in particular by the presence of the harbour structures to the north and south of the entrance. While constraining the mouth and maintaining high flows and navigation, the structures also have a controlling influence on the shape of the coastline. A wide area of dunes has built to the north with material being retained through to the cliffs below the town. This has been an area of accretion since the construction of the north pier.

The entrance and its structures also act as the updrift control to the coast, the downdrift control being determined by the cliffs at Dunwich. Between, the coast comprises a curving narrow shingle ridge. Actual drift erosion of the ridge is relatively small, although there is significant northerly and southerly movement of sediment under specific wave conditions. Overall, the shoreline is considered to be swash aligned (where waves approach at approximately 90° and therefore there is not much longshore drift) and the primary movement is a process of overwash and roll back. The ridge has in the past been managed with breaching through to the low lying marsh behind being repaired. This has tended to make the system more fragile and more likely to breach. This practice has largely ceased, with overwash being more frequent as the system adjusts. In the vicinity of the harbour, the south pier acts to support (by reducing wave energy and allowing accretion) a narrow width of dunes which are located in the immediate south. Any change in the management of the harbour mouth will influence the behaviour of the coastline and any abandonment of the harbour structures will be likely to result in significant erosion affecting both the beach to the north and the alignment of the coast to the south. This would almost certainly increase the threat of erosion to Southwold and would potentially result in additional pressure to the retired flood defence line to Walberswick to the south. Continued management of the harbour mouth is strongly linked to the management of key areas within the estuary, most particularly the defence of Reydon marshes.

The Dunwich cliffs erode slowly and irregularly. In addition to the direct impact on the village, this tends to influence the alignment of the shingle bank to the north. There have been minor works to attempt to temporarily slow the erosion of the cliffs but this is seen a short term measure.

Interactions

The importance of Southwold beach to the town is reflected by the fact that much effort has been expended over the past century and a half to control sediment movement through the use of groynes. This coastal management has also resulted in disagreement regarding both the form and impact of such structures, which is analogous with the overall sensitivity of the coastline, with discussion still occurring regarding the impact of the current scheme on the Easton Bavents cliffs. In part, this is also driven by the conflict in values between limiting erosion or allowing natural coastal change in the vicinity of the small community of Easton Bavents, the international designation and archeological interests in maintaining that erosion. The natural closure (albeit influenced by anthropogenic intervention) of Buss Creek may have influenced behaviour of this system. However, this area is currently defended, which maintains both properties and infrastructure, including the significant road link into Southwold.

The recent strategy for the Southwold frontage highlights the value of the beach to those visiting the town. However, it is equally recognised that this value goes well beyond the intrinsic value of just the beach. The future development of the town aims to build on its strengths as a tourism centre and therefore maintaining the beach is one significant element of this. A diverse range of activities and features add to this, including the historic character, the pier, the harbour and estuary and the highly valued natural setting.

In terms of the harbour, there is a duty on the harbour authority to maintain navigation as a harbour of refuge. The harbour is in effect a functioning community, gaining mutual benefit from Southwold and Walberswick. Management of the harbour area and its operation is dependent on the management of other areas, within the estuary in particular but also in relation to the coast. The continued management of the harbour also determines the structure and hence management of the coastal alignment.

Not least in this interaction is the impact on Walberswick and maintaining the flood defence protection to the village. The village in turns relies upon its broader character within the semi-natural setting of the estuary and coast to the south and the landscape values associated with this. There is a similar interaction between the threat to the village of Dunwich, due to possible flooding and continued erosion and the benefit gained to the village and its tourist attraction in maintaining its overall remote setting.

Underlying all this complexity is the basic national and international value of the mosaic of designations to a broader society and the underpinning agricultural contribution to the region and the important regional infrastructure in terms of the A12 road link, water supply and other industries.

Key Values

The overall values in this area are made up of a complexity of interrelated and interlinked issues, leading to potential conflicts but also opportunity for mutual benefit between individual sectors of interest. Underlying these individual elements are the internationally and nationally important aspects of the area:

- The Southwold / Walberswick / Dunwich area as a nationally valued destination for heritage and tourism;
- The national and international importance of the wide range of interdependent coastal, brackish and freshwater habitat in the cliffs, marshes, mudflats, lagoons and beaches of the coast and estuary; and
- The important characteristic landscape.

Within these broader values, specific values are seen in:

- Southwold (including Reydon) and Walberswick as coastal towns and tourist destinations, integral with the historic and functional aspects of the harbour and associated tourism activities and attractions within the broader area;
- Dunwich as a heritage centre and tourist destination;
- Recreational use of the harbour and foreshore area including the Blue Flag beach at Southwold;
- Geological interest and habitat of the cliffs (to the north of Southwold and south of Dunwich);
- The semi-natural and natural landscape; and
- Environmentally valuable areas of Dingle and Westwood Marshes.

Stakeholder objectives

The purpose of these objectives is to summarise the aspirations of key stakeholders and local residents. Management policies will satisfy these objectives where possible and seek opportunities to improve the human and natural environment in the context of the dynamic coastal environment.

- To maintain Southwold, Reydon and Walberswick as viable commercial centres and tourist destinations in a sustainable manner;
- To sustain recreational opportunities of beaches and associated facilities;
- To maintain the cultural value of Southwold and the Blyth Valley;
- To develop and maintain the Blue Flag beach;
- To maintain the character, commercial and recreational activities and navigation to Southwold Harbour and associated area;
- To maintain the regional transport link and transport links throughout the area;
- To support adaptation of the agricultural interest;
- To support adaptation by the local coastal communities, including Dunwich;
- To maintain Dunwich as a viable community;
- To support appropriate ecological adaptation of habitats, in particular the important Suffolk Coast National Nature Reserve;
- To maintain biological and geological features in a favourable condition, subject to natural change; and
- To maintain or enhance the high quality landscape.

Area 4: Minsmere – Dunwich Cliff to Thorpeness

Chainage 30.5km – 40km

Definition

This area is dominated by the presence of two nationally important features: Sizewell nuclear power station and Minsmere RSPB Reserve. The area also includes other valuable features such as Dunwich Heath and Sizewell village and beach front. The predominant nature of the foreshore is a relatively static shingle frontage which is supported by a range of environmental designations. This area also marks the start of the Suffolk heritage coast and the continuation of the coastal footpath.

Background

Overview

The only settlement along the coast is Sizewell (population around 300), although to the north and somewhat associated with this area is the village of Dunwich. Individual properties are present along the crest of Sizewell cliff to the south of the area and there is a caravan park and buildings associated with Dunwich Heath National Trust area.

To the north of Sizewell village is the power station, which is set back from the immediately active section of the shore, with outfall and inlet platforms situated within the nearshore zone. To the north of this is the internationally recognised RSPB site at Minsmere, which is a large expanse of freshwater habitat and marshes extending back from the coast some 2.5km within the valley of the Minsmere river. The shingle sand beach extends along the whole length of the coast in this area, acting as a flood bank for the lagoons and freshwater courses in the marshlands. The marshes drain through Minsmere sluice, which cuts across the beach and partially acts as a groyne. The Suffolk Coast and Heaths path maintains access both along the coastline and to the designated areas.

The village of Sizewell, whilst in the shadow of the nuclear power station, does attract a significant number of tourists. The shingle beach is accessible along the whole zone, even in areas directly in front of the power station. Sizewell power station is a big industrial site, with two nuclear plants, one of which is in the process of being decommissioned. Mitigation measures for Sizewell B included the regeneration of waste land into Sizewell Belts. Dunwich Heath similarly

attracts a significant number of visitors, with the supporting infrastructure and properties lying typically some 70 metres from the actively eroding cliff line.

To the south of the Sizewell area are a series of individual properties which are typically set back some 30 to 70 metres from the cliff line. To the southern end of the frontage is Thorpe Ness, a wider accumulation of sediment attached to the shore but also extending out within the nearshore zone. Beyond the Ness is the village of Thorpeness itself, which is discussed in Area 5.

Land use

This area is provided with a range of policies which seek to protect the quality of the natural coastal environment. Lying within this outstanding landscape are the coastal town of Leiston (approximately 2.5km from the shoreline) and the village of Thorpeness to the south of the area, which is noted for its tourism interest. Additionally, Sizewell power station is located centrally within this area. Leiston is a designated 'town' within the SCLP (SCDC, 2001) and is therefore considered to be an urban area with a capacity to absorb housing based growth.

Natural environment

The key environmental features of this area include the shingle beach backed by saline lagoons, wet meadows and reedbeds. From Minsmere cliffs to the south, the area is low lying with the shingle beach providing a protective barrier for the saline lagoons behind it. The designations include the coastal lagoons within Minsmere-Walberswick area and varied habitats between Sizewell and Aldeburgh. In addition to some areas of agricultural land, there are areas of woodland especially around the power station site. Thorpeness Meare, which is located to the south of Thorpeness, is a lake which supports large numbers of wildfowl and attracts high numbers of visitors.

Site name	Qualifying features
Minsmere-Walberswick Ramsar	*Ramsar criterion 1* *Ramsar criterion 2;* Bittern *Botaurus stellaris,* Gadwall *Anas strepera,* Teal *Anas crecca,* Shoveler *Anas clypeata,* Marsh harrier *Circus aeruginosus,* Avocet *Recurvirostra avosetta,* Bearded tit *Panurus biarmicus*
Minsmere to Walberswick Heaths and Marshes SAC	***Qualifying feature but not primary reason;*** Perennial vegetation of stony banks; European dry heaths. ***Primary reason for designation;*** Annual vegetation of drift lines.
Minsmere-Walberswick SPA	*ARTICLE 4.1 QUALIFICATION* ***During the breeding season the area regularly supports:*** Bittern *Botaurus stellaris;* Nightjar *Caprimulgus europaeus;* Marsh harrier *Circus aeruginosus;* Avocet *Recurvirostra avosetta;* Little tern *Sterna albifrons* ***Over winter the area regularly supports:*** Hen harrier *Circus cyaneus* *ARTICLE 4.2 QUALIFICATION* ***During the breeding season the area regularly supports:*** Shoveler *Anas clypeata;* Teal *Anas crecca;* Gadwall *Anas strepera* ***Over winter the area regularly supports:*** Shoveler *Anas clypeata;* Gadwall *Anas strepera;* White fronted goose *Anser*

	albifrons albifrons
Sandlings SPA	*ARTICLE 4.1 QUALIFICATION* ***During the breeding season the area regularly supports:*** Nightjar *Caprimulgus europaeus;* Woodlark *Lullula arborea*
Leiston-Aldeburgh SSSI	A rich mosaic of habitats including acid grassland, heath, scrub, woodland, fen, open water and vegetated shingle.
Minsmere-Walberswick Heaths and Marshes SSSI	Contains a complex series of habitats, notably mudflats, shingle beach, reedbeds, heathland and grazing marsh
Sizewell Marshes SSSI	Important for their large area of lowland, unimproved wet meadows which support outstanding assemblages of invertebrates and breeding birds.
Westleton Heath NNR	Part of the best remaining tract of heathland in Suffolk. Birds of open heath and light scrub are well represented here.
Suffolk Coast and Heaths AONB	The AONB protects heathland, reed beds, salt-marsh and mud-flats, a rich mixture of unique and vulnerable lowland landscapes.

Shoreline management

Physical shoreline

The drift along the shore is weakly in a net southerly direction but with a higher degree of variation to both the north and south under specific wave conditions. Historically, the area between Minsmere and Thorpe Ness has been shown to be stable, with periods of erosion and accretion. The cliffs to the north continue to erode but intermittently and at a relatively slow rate. Both these cliffs and Thorpe Ness are the main controls on this shoreline. In addition, the frontage gains a degree of protection from the offshore banks, where there is an indication of net northerly drift. There is also a depression in the height of these banks adjacent to Minsmere which is potentially associated with the old channel of the Minsmere River, although this association is unconfirmed by any geophysical information. This persistent lowering in the line of the banks is also aligned with the position of the sluice, which certainly acts to some degree as a groyne in terms of the upper beach.

There is more minor perturbation of the shoreline alignment caused by the outfall to the power station, while the beach to the southern end is relatively healthy and little erosion of the Sizewell Cliffs has been reported.

The whole system is seen as predominantly closed. Sediment is fed from the cliffs to the north and is distributed along the shore, where it appears to be fed back through the nearshore banks with the potential return of material to the shoreline. The rate of sediment supply and the degree of pressure on the lower lying frontages is to a degree dictated by the erosion of the cliffs. Thorpe Ness holds the overall structure of the system.

Clearly, with sea level rise the whole frontage would tend to roll back to some degree, largely determined by the retreat of the Thorpe Ness headland. The response of the nearshore banks is not easily determined and their behaviour would be significant in relation to the shoreline behaviour.

Interactions

The main interactions in terms of shoreline behaviour affect the power station, although more immediately the Minsmere reserve. There is increasing pressure for the shingle beach to roll back, potentially exposing the flood defences and increasing the risk of flooding to the reserve. The extent of flooding may also extend to the rear of the power station.

Key values

The core value of the area is its natural environment, although clearly the presence of the power station has to be recognised. Areas such as Dunwich Heath rely on the overall natural setting and the properties along the cliff top similarly benefit from this natural character of the coast. Sizewell village is locally important but also acts as a way point and access to the shore and coastal path. The elements of the key values of the area may therefore be set out as:

- The relatively natural coastal habitat and landscape including the different aspects of the shingle beaches, marshes and wet grassland and heathland;
- The national and international importance of the biological and geological interests of the coastline and hinterland;
- The nuclear power station at Sizewell; and
- Recreational use of the coastal area including the coastal path and access and facilities offered by Sizewell.

Stakeholder objectives

The purpose of these objectives is to summarise the aspirations of key stakeholders and local residents. Management policies will satisfy these objectives where possible and seek opportunities to improve the human and natural environment in the context of the dynamic coastal environment.

- To maintain the location and safe operation of Sizewell power station and any future development of the site;
- To maintain the tourism interest of this area;
- To maintain and enhance coastal biodiversity and ecology;
- To support appropriate ecological adaptation of this habitat and in particular the Minsmere RSPB reserve;
- To maintain a range of recreational activities along the foreshore;
- To support adaptation of the Sizewell community and individual interests along the frontage to any change; and
- To promote ways to maintain access to and along the coastal path.

Area 5: Aldeburgh – Thorpeness to North Weir Point

Chainage 40km – 62km

Definition

The main centre of this area is Aldeburgh, a small coastal town renowned for its artistic and musical heritage and located in a beautiful coastal setting. Although at a local scale quite distinct from the area around, Aldeburgh is closely associated with the village of Thorpeness to the north and the surrounding landscape. This includes the shingle backed bay between the two settlements, the hinterland of the Alde-Ore estuary with both its natural attraction and its recreational and core agricultural interests and the natural and remote magnificence of Orford Ness which extends some 15km to North Weir point and the mouth of the estuary.

Background

Overview

At the northern extent of the area is Thorpeness, a small rural village of about 400 people in winter but with a summer population of over 1 600 people. The village was originally a small fishing hamlet until it was bought by a Scottish barrister in 1910, who developed Thorpeness into a private fantasy holiday village, with many buildings being built in mock-Jacobean and Tudor styles. The town remained as a mostly privately-owned village until 1972, when many of the houses, the golf course and country club were sold to pay death duties.

To the south of Thorpeness is the strip development of Thorpeness Haven, built along the crest of the shingle ridge running to the south to Aldeburgh. This ridge continues a further 1.5km, acting as a barrier to low lying marshes to the rear. The main coastal road linking Thorpeness and Aldeburgh runs along the back of the natural ridge.

Aldeburgh is the main town of this area and was a leading port in the 16th century with a flourishing ship-building industry. Sir Francis Drake's ships Greyhound and Pelican (later renamed Golden Hind) were both built at Aldeburgh. When the mouth of the River Alde moved south and became more constrained, larger ships could not be accommodated and the area went into decline. Aldeburgh survived principally as a fishing village until the nineteenth century, when it became popular as a seaside resort. Limited numbers of fishing boats still launch off the beach at Aldeburgh for the small scale commercial fishing operation which still exists. However, this use of the steep shingle beach adds to the overall character of the town.

The Aldeburgh Moot Hall, which is over 400 years old, is a timber-framed building which has been used for council meetings since its construction. Aldeburgh is also famous for its fish and chip shop. Upstream on the Alde at the limit of the tidal influence within the estuary is the Snape Maltings. This is the venue for the Aldeburgh Festival, which is held every June and was founded by Benjamin Britten, Eric Crozier, and Peter Pears in 1948. Britten and Pears are buried in the churchyard of St Peter and St Paul's Church in Aldeburgh. The beach at Aldeburgh was awarded the Blue flag rural beach award in 2005 and on this beach, a short distance north of the town centre, stands a sculpture known as the “The Scallop”, which is dedicated to Benjamin Britten who used to walk along the beach in the afternoons. The sculpture is meant to be enjoyed both visually and tactilely and people are encouraged to sit on it and watch the sea.

Aldeburgh also has a unique quatrefoil Martello Tower, untypical of the others found to the south. Just south of the beach at Aldeburgh is Orford Ness, a popular sea fishing spot, which can be reached by a track leading from Aldeburgh. The village of Slaughden, which lay to the south of Aldeburgh, has now succumbed to coastal erosion, as has the Martello Tower at Slaughden.

Orford Ness spit lies to the south of Aldeburgh and continues for 15km. There is a sense of remoteness about the area which complements Aldeburgh’s historical character. A large proportion of the Ness and the fresh water marshes behind the shingle bank are now owned by the National Trust, which runs a limited number of walking trips to this remote area.

The most significant turning point in the history of the Ness was the arrival of part of the Central Flying School's Experimental Flying Section in 1915. This event ushered in a 70 year period of intense military experimentation, which as well as leaving a variety of physical traces has given the place what has been described as 'the mystique of secrecy'. At the height of the cold war, the Atomic Weapons Research Establishment and Royal Aircraft Establishment used Orford Ness for developmental work on the atomic bomb. The 'pagodas' which remain have become a well-known landmark on this part of the coast. Orford Ness was one of many large cold war experimental sites involved with the research and development of the British atomic bomb and is perhaps the most architecturally dramatic of all of these sites. Another relic of the cold war period is the huge, grey, steel structure which once housed a top secret Anglo-American radar project, code-named 'Cobra Mist', which now functions as a BBC World Service transmitting station.

Orford Ness lighthouse is situated at the most south-easterly point of Orford Ness, at a notoriously dangerous area for shipping. The first lighthouse was built at Orford Ness after a great storm in October 1627, when 32 ships were wrecked off the Ness and many lives were lost. The present lighthouse dates from 1792. The town of Orford lies inland on the River Ore and has a harbour and yacht club. Two other yacht clubs are located at Orford Haven and near Slaughden Quay (to the north) and

there is also a castle at Orford which dates back to 1165. Much of the estuary is now used for sailing and recreational use, including pleasure boat trips. Access to the open coast is through North Weir point, where there are massive continuously shifting shingle banks. Much of the flood plain of the Alde / Ore estuary is reclaimed and lies behind extensive flood defences. This provides an important agricultural base to the area in its own right but abstraction and storage of freshwater upon the lower marshes also allows use of the higher land around the estuary.

Havergate Island, owned by RSPB, now covers 267 acres and lies between Orford beach and the mainland. To the northwest, it is bounded by the Lower Gull and The Gull channels (part of the Ore), and to the southeast by The Narrows (part of the Alde). Havergate mostly lies below sea level but it is drained by a series of channels and is protected by dykes. It is a marshy nature reserve run by the RSPB, with large populations of avocets and terns. Originally the island was two gravel banks which later joined.

Land use

This area has a range of policies which seek to protect the quality of the natural coastal environment. Thorpeness is a tourist based settlement which is provided the same policy coverage as Walberswick. The factors which provide Thorpeness' tourism industry – its coastal features and landscape, will therefore be provided full protection under policy AP66.

Aldeburgh is identified as a town within the SCLP (SCDC, 2001) and is therefore an area that can expect to see sustainable levels of future growth. Aldeburgh is seen as a settlement with a key role to play in the future development of the district, especially in its role of offering new infill development in a rural coastal location. A suite of policies (AP124-132) forms the framework for this growth, whilst still protecting the character of the town. The town is surrounded by policy to protect the coastal and estuarine areas around Aldeburgh and the Blyth area.

Orford Ness benefits from a specific policy within the SCLP that seeks to ensure that the remote character of this area is protected from development (Policy AP 163 Deben Peninsular): Orford Ness and Havergate Island specifies that development will be resisted due to the need to protect the ecological, geological and landscape importance of the area. This 'catch-all' policy recognises the inherent social and environmental values of the area, which is of benefit to the district, without making a significant contribution to the local economy.

Natural environment

The key features in this area are the shingle beach between Thorpeness and Aldeburgh, Orfordness shingle spit and the Alde, Ore and Butley rivers. The shingle acts as a flood defence to the agricultural land backing it which covers a large amount of the unpopulated land in this area. To the south of Thorpeness lies Thorpeness Meare, which is a large lake supporting numbers of wildfowl and with high numbers of visitors and is part of the Leiston Aldeburgh SSSI.

The designated conservation areas are primarily centered around the River Alde and the Ore. The area is relatively natural, being largely undeveloped by man and with very limited industrial activity. The whole area, but particularly the 15km long spit is very remote due to limited access. The bar spit has been extending rapidly along the coast since 1530, pushing the mouth of the estuary progressively south-westwards. The Alde / Ore is relatively wide and shallow, with extensive intertidal mudflats on both

sides of the channel in its upper reaches and saltmarsh accreting along its fringes. Its diverse and species-rich intertidal sand and mudflat biotopes grade naturally along many lengths of the shore into vegetated or dynamic shingle habitat, saltmarsh, grassland and reedbed. The smaller Butley River, which has extensive areas of saltmarsh and a reedbed community bordering intertidal mudflats, flows into the Ore shortly after the latter divides around Havergate Island. The RSPB reserve at Havergate Island is an important breeding ground for avocets and tern, while the RSPB have a further reserve at North Warren.

Site name	Qualifying features
Alde-Ore Estuary Ramsar	*Ramsar criterion 2* *Ramsar criterion 3* *Ramsar criterion 6;* ***Species regularly supported during the breeding season:*** Lesser black-backed gull *Larus fuscus* ***Species with peak counts in winter*** Common redshank *Tringa totanus*; Avocet *Recurvirostra avosetta*
Alde-Ore & Butley Estuaries SAC	*Annex I habitats* ***Primary reason for designation;*** Estuaries ***Qualifying feature but not primary reason;*** Mudflats and sandflats not covered by seawater at low tide; Atlantic saltmeadows (*Glauco-Puccinellietalia maritimae)*
Alde-Ore SPA	*ARTICLE 4.1 QUALIFICATION* ***During the breeding season the area regularly supports:*** Marsh harrier *Circus aeruginosus;* Avocet *Recurvirostra avosetta;* Little tern *Sterna albifrons;* Sandwich tern *Sterna sandvicensis* ***Over winter the area regularly supports:*** *Avocet Recurvirostra avosetta;* Ruff *Philomachus pugnax*
Orfordness-Shingle Street SAC	*Annex I Habitats* ***Primary reason for designation;*** Coastal lagoons; Annual vegetation of drift lines; Perennial vegetation of stony banks;
Crag Pit, Aldeburgh SSSI	This site is of geological interest because it represents the most northerly existing exposure of Pliocene Coralline Crag.
Leiston-Aldeburgh SSSI	A rich mosaic of habitats including acid grassland, heath, scrub, woodland, fen, open water and vegetated shingle.
Alde-Ore Estuary SSSI	A number of coastal formations and estuarine features including mud-flats, saltmarsh, vegetated shingle and coastal lagoons which are of special botanical and ornithological value.
Orfordness-Havergate NNR	Large lichen and moss communities. Many plant species that are nationally rare are found here in abundance. The shingle supports a number of rare and scarce invertebrates - particularly beetles and spiders - and the site is also an important breeding place for many bird species including terns and avocets.
Suffolk Coast and Heaths AONB	The AONB protects heathland, reed beds, salt-marsh and mud-flats, a rich mixture of unique and vulnerable lowland landscapes.

Shoreline management

Physical shoreline

Thorpe Ness controls the alignment of the coast to both the north and the south. To the south, this links through to the currently defended shoreline position at the southern end of Aldeburgh, retaining a relatively stable curved bay between. The net drift over this bay is very low, although there is significant movement to both north and south on occasions. It is suggested through modelling that there is a slight northerly net drift at the north end of the bay towards Thorpeness. This in reality indicates a high degree of stability to the frontage, rather than indicating a drift divide resulting from the slight net drift further south. While stable in terms of drift, there can be quite high gross movement and the general trend is for the shingle to roll back. Occasionally, under extreme storm conditions such as 1953, there can be significant overwash of the ridge and this is shown by the shingle fans behind over the low lying area. This overwash may become relatively more common with sea level rise, putting some pressure on the road and influencing the ecological condition of the low lying areas.

Aldeburgh has suffered loss to the sea in the past. The frontage is now protected from erosion and flooding. The main defence is still the width of shingle beach in front of the hard defences. However, the main pressure on this defence is towards the southern end, where the sea wall can become exposed. At present, such exposure may be reversed from time to time with the movement of sediment from the beaches to either side. Further roll back of the natural defence or breaching at Slaughden is likely to increase pressure on this corner of hard defence.

Much of the north Orford Ness has suffered from slow erosion; recent measurements have been slightly distorted by the recycling of material and therefore show a more varied pattern of change. Whilst this general roll back is occurring (in certain areas by as much as 70m over the last 100 years) the frontage would appear to gain some protection from the nearshore banks.

At the actual Ness, erosion is higher and exceeds 100 metres over the last 100 years, with this increasing at ever more rapid a pace. The release of sediment from the massive shingle ridges tends to feed south, with accretion having occurred over the last decade. This is not, however, indicative of a long term trend. Wave conditions from the northeast sector will move sediment rapidly off the spit to feed Area 6 at Shingle Street.

Within the estuary, the system is relatively delicately poised. There is an ongoing loss of saltmarsh and some areas of defence are under pressure. However, changes in sea level or, possibly more significantly abandonment of existing defences would result in increased hydrodynamic pressure over much of the estuary. The situation at Slaughden and the narrowing of the ridge between coast

and estuary is principally due to coastal pressure, rather than the pressure of flow within the estuary significantly wishing to break seaward.

Interactions

This frontage is subject to slow erosion at Thorpeness, which may be likely to increase under rising sea levels, although the main pressure to the north of Aldeburgh is for roll back of the shingle ridge. The effect of both these factors will be to increase pressure on both Thorpeness and Thorpeness Haven. In addition to this, the predominant risk will be to the road and the low lying land behind.

Continuing erosion, which is likely to be exacerbated by sea level rise, will increase the pressure on Aldeburgh, especially at the southern end, in the vicinity of the beach. An additional key issue is the continued defence at Slaughden; although driven by pressure from coastal change, the major impacts would be on the form and function of the estuary. This interaction is currently being considered by another study and the conclusions of this need to be taken into account within the SMP. Further to this, the ongoing process of erosion at Orford Ness will continue to provide a release of sediment beneficial to other areas of the Suffolk coast.

Key values

The area demonstrates the need to balance the three integrated values of culture, ecology and economics. The strong cultural core is provided by Aldeburgh, Thorpeness, Snape, Orford and even Orford Ness. These strong traditional characteristics provide a core to sustaining communities and encouraging future development, which is underpinned by a wide amenity base from sailing to walking, beach use and by the strong tourism, agricultural and (more limited) fishing industries. Equally important locally and regionally as well as with respect to the broader national value is the natural environment, from which the above values derive significant additional value. This combination of values is expressed below:

- Thorpeness as a coastal villages and tourist destination;
- The North Warren RSPB reserve;
- Aldeburgh as a coastal town, artistic community and tourist destination;
- Recreational use of the coastal area including the sailing activity to the south of Aldeburgh and generally within the estuary;
- The remote nature and ‘wilderness’ experience afforded by Orford Ness;
- Geological value of the area;
- Heritage values of the military installations on Orford Ness; and
- The national and international importance of the biological and geological diversity of the coastline and estuaries, including vegetated shingle beaches, one of the largest shingle spits in the country and the estuarine areas of the rivers Ore, Alde and Butley.

Stakeholder objectives

The purpose of these objectives is to summarise the aspirations of key stakeholders and local residents. Management policies will satisfy these objectives where possible and seek opportunities to improve the human and natural environment in the context of the dynamic coastal environment.

- To maintain in a sustainable manner Thorpeness as viable coastal settlement and tourist destination recognising its cultural and heritage significance;
- To maintain in a sustainable manner Aldeburgh as viable commercial and tourism centre, recognising its cultural and heritage value;
- To maintain a range of recreational activities along the foreshore and within the estuary, including sailing and navigational access;
- To maintain Orford Ness as a designated site of international and European importance;
- To support the adaptation of local coastal communities;
- To support the adaptation of the local coastal farming communities;
- To maintain biological and geological features in a favourable condition, subject to natural change;
- To support appropriate ecological adaptation of habitats; and
- To promote ways to maintain access to and along the coastal path.

Area 6: Deben Peninsula and valley – Shingle Street to Cobbold's Point

Chainage 62km – 73km

Definition

Relative to the remoteness of Orford Ness to the north, this area is a well visited, popular area of the coast, especially in the south. There are six Martello towers spanning this area of the coast that offer a unique insight into the history of Napoleonic era Britain. Much of the northern part of this area is agricultural, which contrasts with the more populous and recreational areas around the mouth of the Deben and along the coast of North Felixstowe. This area finishes at Cobbold's Point and although well within the development of Felixstowe and recognised to be an important resource to Felixstowe, the area, from a coastal perspective, is considered to be different from the lower-lying sections of the town which sit on the coastal plain of the Orwell estuary.

Background

Overview

Shingle Street, which is in the north of this area, is a small coastal hamlet at the mouth of Orford Ness, between Orford and Bawdsey. This part of the coast is also known as Hollesley Bay, with a HM Young Offender Institution (Hollesley Bay Colony) being located nearby. Shingle Street was originally a home for fishermen and river pilots for the River Ore. Many of the original buildings date from this period, but several buildings were destroyed during WWII, including the hamlet's pub.

During WWII, many strange happenings were reported to have taken place at Shingle Street, which include a supposed failed German Invasion. The village is sited on the back crest of a shingle ridge which runs down to and protects much of the low lying area behind. It is a strip development extending nearly 1km in length from the car park and Beacon Cottage at the mouth of the Ore to the first of a string of Martello Towers at the southern end of the village. Access to the village is along one narrow road; even so, the village is a well recognised visitor location both for the unusual nature of the village, the impressive bank system at the mouth of the estuary and the beach and surrounding countryside. There is also currently a coastguard station at Shingle Street.

Hollesley Bay runs a further 3km through to the rising land of Bawdsey Cliffs at East Lane. The designated area of the shingle bank over Hollesley Bay acts as the primary defence to an extensive area of farmland behind. However, there is also a

set back flood defence bank behind this shingle bank. At the southern end of the bay, East Lane is now a defended headland, which lies slightly to the north of a significant change in the alignment of the coast. The headland was created initially in defence of WWII fortifications, which contrasts with the older Napoleonic fortifications evidenced by the fourth of the Martello Towers along this section. The flood area to the rear of the bay extends to the outskirts of Bawdsey and Alderton villages, which lie some 1 – 1.5km in land. The flooding experienced during the storm surge of 1953 inundated parts of the Deben, cutting the only road between Bawdsey and Bawdsey Manor.

Bawdsey Manor was built in 1886 and enlarged in 1895 as the principal residence for Sir William Cuthbert Quilter. It was requisitioned by the Devonshire Regiment during WWI and was eventually purchased by the Air Ministry in 1936 for the establishment of a new research station for the development of radio direction finding (radar). Bawdsey Manor continued as an RAF base throughout the cold war, with Bloodhound missiles being sited on the cliffs until this force ceased operations in 1990. The station was finally closed in 1991. There is now a sailing school and the northern landing stage of the Felixstowe ferry on this side of the river. The ferry forms the start of the coastal pathway and provides a popular link from Felixstowe to the Deben peninsula.

Across the river is Felixstowe Ferry, which boasts a church, two pubs, the Ferry Cafe, a boat yard, sailing club, fishermen's cottages, two Martello towers, a gallery and a golf course. The hamlet is divided either side of a flood defence embankment, with a substantial part remaining unprotected. Most of the properties in this area have been built on short brick stilts, which have been periodically replaced and raised. Much of the character of this part of the hamlet indeed comes from this feeling of living on the edge in addition to its wide variety of activities and interests.

Immediately upstream of the Felixstowe Ferry entrance, the estuary is quite broad with a considerable number of moorings. Recreational sailing and boat use are an important activity across the estuary as a whole. Further upstream, the river flows between embankments which protect extensive farmland, before becoming constrained by natural high ground. The channel passes several riverfront pubs including those at Ramsholt and Waldringfield before reaching Woodbridge. At Woodbridge, part of the town is defended from flooding and there are numerous boat related businesses, including a marina.

The most southerly town along the frontage is Felixstowe, which has been continuously settled since before the Norman conquest, eventually becoming a linchpin in England's defence, as proved when in 1667 Dutch soldiers landed and

failed to capture "Landguard Fort" (Area 7). From Cobbolds Point to Felixstowe Ferry (North Felixstowe) there is a walkway and path, although it is necessary to walk inland and to rejoin the coastal path at Jacobs Ladder, where the path then runs before beach huts and the golf course through to Felixstowe Ferry.

The frontage has been defended by a field of closely spaced groynes retaining a limited width of beach in front of different sections of sea wall. Even so (or potentially because of the compartmentalisation of the beach) the frontage is very popular with great demand for beach huts in the area.

At Cobbolds Point the coastal protection work now prevents pedestrian access along the beach, although at low tide from this walkway it is possible to glimpse the seaweed-covered remains of a Roman fort in the water about 50m from the coast.

Land use

Apart from Felixstowe in the south, settlements in this area are Felixstowe Ferry, Bawdsey, Alderton and Shingle Street. The Deben peninsula benefits from a range of polices within the SCLP, but the majority of these relate to non-coastal sites. Bawdsey is a settlement where development will be confined to the settlement boundary (under policy AP 27 SCLP (SCDC, 2001)) and so can only expect limited growth. Shingle Street is an area recognised for its unique location and appearance. The primary planning policy base for this area relates to environmental protection for the coastal and estuarine landscape and ecology. Policies relating to Felixstowe are provided under the following area.

Natural environment

The key environmental features include shingle banks around Shingle Street backed by coastal lagoons and perennial vegetation of stony banks. The designated sites include the land surrounding the Rivers Ore and Deben and inland geological features. Around Bawdsey there are approximately 2km of low cliffs which are of geological interest providing evidence of the Butleyan division of the Early Pleistocene Red Crag.

Site name	Qualifying features
Deben Estuary Ramsar	*Ramsar criterion 2* *Ramsar criterion 6* ***Species with peak counts in winter:*** Dark-bellied Brent goose *Branta bernicla bernicla*
Alde-Ore & Butley Estuaries SAC	*Annex I habitats* ***Primary reason for designation;*** Estuaries ***Qualifying feature but not primary reason;*** Mudflats and sandflats not covered by seawater at low tide; Atlantic saltmeadows (*Glauco-Puccinellietalia maritimae)*
Orfordness-Shingle Street SAC	*Annex I Habitats* ***Primary reason for designation;*** Coastal lagoons; annual vegetation of drift lines; perennial vegetation of stony banks;

Alde-Ore SPA	*ARTICLE 4.1 QUALIFICATION* ***During the breeding season the area regularly supports:*** Marsh harrier *Circus aeruginosus;* Avocet *Recurvirostra avosetta;* Little tern *Sterna albifrons;* Sandwich tern *Sterna sandvicensis* ***Over winter the area regularly supports:*** *Recurvirostra avosetta; Philomachus pugnax*
Deben Estuary SPA	*ARTICLE 4.1 QUALIFICATION* ***Over winter the area regularly supports:*** Avocet *Recurvirostra avosetta* *ARTICLE 4.2 QUALIFICATION* ***Over winter the area regularly supports:*** Dark-bellied Brent goose *Branta bernicla bernicla*
Alde-Ore Estuary SSSI	Coastal formations and estuarine features including mud-flats, saltmarsh, vegetated shingle and coastal lagoons of botanical and ornithological value.
Bawdsey Cliff SSSI	The cliffs provide over 2km of section in the Butleyan division of the Early Pleistocene Red Crag.
Deben Estuary SSSI	Important for its populations of overwintering waders and wildfowl and also for its extensive and diverse saltmarsh communities.
Gedgrave Hall Pit SSSI	This site consists of two pits of geological importance for the study of the development and stratigraphy of Coralline Crag deposited in the Pliocene age.
Red House Farm Pit, Sudbourne SSSI	This pit is of geological interest for its exposure of Pliocene Coralline Crag.
Sandlings Forest SSSI	Coniferous woodland supporting internationally important populations of woodlark and nightjar.
Valley Farm Pit, Sudbourne SSSI	This pit is of geological interest for its exposure of Coralline Crag.
Suffolk Coast and Heaths AONB	The AONB protects heathland, reed beds, salt-marsh and mud-flats, a rich mixture of unique and vulnerable lowland landscapes.

Shoreline management

Physical shoreline

This section of the coast benefits from a slightly shallower nearshore zone formed by the underlying Red Crag. The basic shape of Hollesley Bay is determined by the mouth of the Ore and the higher ground of Bawdsey Cliffs. This natural down drift headland has been supplanted by the defended headland of East Lane. East Lane, therefore, artificially maintains the line of the coast forward of where it would otherwise naturally be expected to be. Combating erosion at this location holds shingle over the whole curve of the bay though to Shingle Street. Sediment is derived from the erosion of Orford Spit and Ness. This supply is erratic and dependent upon storms from a north-easterly direction, which moves sediment along the shore beyond the periodic accumulation at Shingle Street. Over the last twenty years, this accumulation has allowed the beach at Shingle Street to expand by over 100 metres in places. A major release of sediment would depend on the breach on the Orford Spit side of North Weir Point.

Drift through the bay is in a net southerly direction, but is quite weak. In principle, the bay configuration is quite stable with an anticipated mechanism of roll back in response to sea level rise. East Lane acts to regulate rather than stop sediment drift to the south. Movement of sediment past the headland is to a degree matched by the drift of shingle beyond, down to the Deben.

At the Deben, the coastal sediment system interacts with the strong flows into and out of the estuary. This is reflected in the development of the Knolls banks, which provide a sporadic mechanism of transfer from the north across the estuary and on to the North Felixstowe Shoreline.

It has been demonstrated that despite the strong flows within the estuary entrance, there is capacity to adjust to some increase of tidal prism within the estuary. Loss of control of this entrance or significant increase of tidal prism (such as might arise from withdrawal of defence to the lower estuary flood compartments) would have significant impact on the entrance configuration and disrupt the coastal sediment transfer system.

With transfer of sediment dependent on the cyclic breakdown and rebuilding of the knolls, the supply and therefore health of the beaches to North Felixstowe varies, with periods of low beaches and coastal pressure being balanced by periods when sediment is more abundant.

The overall message on this section of coast is that the sediment is finite with no significant new input. Supply from Orfordness is likely to continue well beyond the period of the SMP, in terms of hundreds of years, but the sediment that is present in the whole system is very much that which is available for coastal management.

Interactions

There are three primary sections of interaction with expectations for coastal management:

i. Hollesley Bay where the sporadic supply of sediment and the control of the coastal alignment at East Lane dictate the future use of the coastal zone, with the defence of Shingle Street and the low lying area behind relying on both. Failure of East Lane would result in increased pressure on the natural beach and the flood defence to the rear, with the potential increased pressure on Shingle Street and therefore potential inundation of the area behind. The frontage has similarities with the situation south of Walberswick,

with the development of a natural overwashed barrier system.

ii. The mouth of the Deben; without management of the frontage and the maintenance of the constraint imposed by the entrance, the bank system may well fail with the Deben acting as a significant sediment sink, thereby increasing pressure on defence of Felixstowe Ferry and North Felixstowe.

iii. The North Felixstowe cliffs have a history of instability, relying on defence of the toe against erosion. Loss of this defence would lead to loss of the coastal road to Felixstowe Ferry, the golf course and a quantity of housing.

Key values

The area at the mouth of the Deben, including the North Felixstowe frontage, is an important amenity to the town of Felixstowe and a gateway to the more natural coastal environment to the north. Its significance goes beyond the local area, acting as an important tourist attraction for the region but also reflecting in Felixstowe Ferry an intrinsic value in terms of its unique combination of facilities, heritage and community. The same basic qualities are recognised in Shingle Street, combining a spirit of living within a fundamentally natural location with strong community values.

The area between has a strong link to rural agricultural activity, supporting local communities. Overall the area has a range of coastal heritage features such as the Martello Towers and the more recent links to the military defence of the nation. The heritage, community and recreational attributes are all set within a broader context of important ecological and geological value. These overall values are reflected in specific features:

- The strong recreational value of Felixstowe Ferry, represented by sailing and water sports, the golf course, the start of the coastal path and the foot ferry itself;
- The strong community identity of Felixstowe Ferry, Shingle Street and other villages within the area;
- The tourism and recreational features of the North Felixstowe seafront;
- The heritage value of the Martello Towers, the East Lane military defences and the historic use of Bawdsey Manor;
- The underpinning strength of agricultural activities, both within the Deben and along the coastal area;
- The national and international importance of the biological and geological diversity of the Deben Estuary; and
- Coastal and estuarine habitat, in addition to natural and semi-natural environment.

Stakeholder objectives

The purpose of these objectives is to summarise the aspirations of key stakeholders and local residents. Management policies will satisfy these objectives where possible and seek opportunities to improve the human and natural environment in the context of the dynamic coastal environment.

- To maintain the beach use of North Felixstowe;
- To maintain access to Felixstowe Ferry;
- To maintain the overall and specific recreational features associated with the entrance to the Deben, including the diversity of facilities such as the golf course and water sport activities;
- To maintain the character and community of Felixstowe Ferry and Bawdsey;
- To promote ways to maintain access to and along the coastal path;
- To maintain the core heritage value of the area;
- To support the adaptation of agricultural communities;
- To maintain transport links in the area;
- To maintain the semi natural and unique quality and community of Shingle Street;
- To support the other rural communities in the area and the underpinning agricultural activities; and
- To maintain biological and geological features in a favourable condition, subject to natural change.

Area 7: Felixstowe – Cobbold's Point to Landguard

Chainage 73km – 84km

Definition

This area covers the main town and seafront of Felixstowe and also considers the port of Felixstowe, the UK's largest container port, which is outside the boundary of this SMP.

Background

Overview

This section of Felixstowe has a strong association with its coastal frontage. During the late Victorian period, Felixstowe became a fashionable resort, which was initiated by the opening of Felixstowe railway station, the pier and a visit by the then German imperial family. In 1953, 38 people died when a storm surge hit the town. The recent planning permission for the expansion of the Port and the Felixstowe Futures work reflect the aspirations of the Town to both regenerate itself and expand its economic and social role

The frontage is centred on the pier at the apex of the bay, while to the north the frontage has a narrow promenade and road, with rising land behind. Along this length is the Spa Pavilion and associated formally laid out gardens. Other key features of this frontage include several restaurants and hotels. To the south of the pier, the land behind the promenade is lower lying, with a leisure centre, extensive housing and caravan sites. This low lying land runs through to the docks. Further to the south, there are areas of open ground and car parking, with Manor Terrace properties and facilities.

During WWII, the majority of the pier, which at the time was one of the longest in the country, complete with its own train, was intentionally demolished by the Royal Engineers to negate its used as a landing point for enemy troops in the event of an invasion. However, unfortunately, after the war the damage was never repaired and the pier never regained its original length.

Nowadays, major tourism development has taken place around the landward end of the pier to enhance the area.

Felixstowe has a pebbly to sandy Blue Flag beach, which has suffered from erosion in recent years. The beach is an integral aspect of the sea front and its maintenance forms an important feature of the present strategy plan for coastal defence. To the lower lying southern end of the built frontage, the existing flood defence barrier has been constructed to the rear of the promenade to improve both the visual association of the frontage with the shore and to allow ease of access. Further south, the flood defence wall runs along the shingle crest before returning inland to close with the bank behind Landguard Common, providing flood defence to the residential property and the port. Landguard Common itself is a nature reserve with a bird observatory located at Landguard Fort.

Landguard Fort was built in 1718 near the site of 1540s fortifications on Landguard Point to protect the port of Harwich. It was later given support by the building of Harwich Redoubt in the early 19th century and was enlarged and strengthened in the 1870s as part of Lord Palmerstone's programme to protect the major sea ports. Historically this fort has secured its place in history as the site of the last opposed invasion of England in 1667 and the location of the first land battle of the Royal Marines. In common with the other parts of this coastline, there are also a number of Martello towers.

The town became a major port in 1886 and now ranks as the largest container port in the United Kingdom, dealing with approximately 35% of the UK's container cargo. In addition to this, Felixstowe is Europe's fourth busiest port, after Rotterdam, Hamburg and Antwerp and ranked 20th in the world (in terms of trade through) in 2002, being capable of handling over 3.7 million containers per year. As well as containerised traffic, the port also has a RO-RO terminal.

Land use

Along with Lowestoft, Felixstowe is one of the primary economic anchors of this region. The port operations of Felixstowe, coupled with the role of Felixstowe as a regional centre, are critically important to the regional and national economy. The recent planning permission for expansion of the Port and the Felixstowe Futures work reflect the aspirations of the Town to both regenerate itself and expand its economic and social role.

Natural environment

As the area is largely urbanised, the key environmental features are located around Landguard Common. Landguard Common is predominantly a sand and shingle spit, which protects the northern entrance to the haven ports of Harwich and Felixstowe. It consists of a loose shingle foreshore, which is backed by a stabilised, vegetated beach, earth banks and scrub. Pioneer shingle plants and vegetated shingle beaches are highly fragile and are a nationally scarce habitat type. The site is also of some ornithological interest as a landfall site for passage migrants and for breeding shorebirds, while the bare shingle is also used by nesting little tern and ringed plover.

Site name	Qualifying features
Landguard Common SSSI	The site is important for the loose shingle foreshore backed by a stabilized, vegetated beach, earth banks and scrub. Pioneer shingle plants and vegetated shingle beaches are fragile and nationally scarce habitat type.

Shoreline management

Physical shoreline

The area has a wide, yet shallow nearshore platform which has a significant volume of available sediment. Overall, the area is considered to be primarily a closed system with material being drawn offshore to the nearshore system and then returned on occasion to the shoreline. The general alignment of the frontage is relatively stable, although there is movement in both northerly and southerly directions during specific wave conditions. This pattern of limited drift tends to support the occasional accumulation of sediment in the area of the pier, although shingle can also be deposited on occasion towards the Landguard Common area, from whence it tends not to return northward. This accumulation does eventually spill around the Point and relatively small quantities of shingle are removed from the shore within the mouth of the estuary.

Some supply of sediment can be driven past Cobbolds Point, but finer material may tend to be deposited within the nearshore area. Coarser shingle material will tend to move along the shore.

Given the general stable alignment of the shore and the variability of drift under specific storms, the existing groyne system, which splits the shore into discrete units, has tended to restrict major realignment overall response. However, historically there has been a general loss in a cross-shore direction. The works at Cobbolds Point have created conditions which are more capable of retaining material under a range of conditions. However, this has also resulted in a readjustment of the material within the artificial bays created causing a draw down on beaches central to each bay against the back shore defences.

Notwithstanding the reduced maintenance of the groynes in the area of Manor Terrace, compared to work carried out further north, this section of the shore clearly stands forward of the overall natural alignment running through to Landguard Common and to a degree creates an division in the shoreline in terms of local drift behaviour.

A scheme is also underway in Felixstowe, which will see rock groynes and beach recharge being employed along the frontage between the War Memorial and Landguard Common. Planning permission for the scheme was granted in 2005 and subject to funding, construction of the scheme will commence in spring 2008 and be completed by autumn 2008.

Interactions

Maintaining a healthy backshore beach is fundamental, not only to the important tourism and hence regeneration of the sea front, but also in defence of the essential port infrastructure, local commerce and properties within an area of particular focus to regeneration of the town overall. Efforts towards regeneration rely on each of these aspects and, therefore, good sustainable coastal management underpins the future of the area.

Within this overall need, critical local areas withy ongoing risk are those associated with the area south of Cobbolds Point and the management of the Manor Terrace area. In the former there is little width for manoeuvre from the defence of the immediate coastal use. In the latter location, land use associated with the transitional area between the valued natural frontage of Landguard Common and the southern limit of development to the town requires careful consideration regarding the balance between coastal defence and the value of land use.

The main threat to the whole frontage is that of sea level rise, which will be likely to create conditions of increasing pressure in the long term for roll back of the relatively stable shoreline. This is partially mitigated by the general closed nature of the system in terms of sediment.

Key values

Felixstowe is a regionally and nationally important economic centre and tourist destination, with recognised Blue Flag standards. This general value emphasises the integrated approach which will be needed when managing the coastal strip. The recent planning permission for the expansion of the port and the Felixstowe Futures work reflect the aspirations of the town to both regenerate itself and expand its economic and social role. The aspects to be considered include: regeneration; the development opportunities of the port and local commerce; reducing flood risk to core residential areas; enhancing the tourism opportunity; and maintaining and enhancing the limited areas of open land and the natural ecological function of such areas. Many of these are built upon the heritage interest of the area. The values of the area are very much those of looking forward to what can be achieved rather than purely maintaining what exists within the area. The key values for coastal management are:

- Enhancing the defence function of the shoreline;
- Protecting the nationally important asset of the Port of Felixstowe;
- The importance of an accessible and sustainable beach, supported by core facilities and vibrant coastal zone, supporting in turn essential tourism and employment;
- The historical heritage;

- The limited but important natural areas; and
- The national importance of the biological and geological diversity of the Landgurad Common SSSI.

Stakeholder objectives

The purpose of these objectives is to summarise the aspirations of key stakeholders and local residents. Management policies will satisfy these objectives where possible and seek opportunities to improve the human and natural environment in the context of the dynamic coastal environment.

- To improve Felixstowe as a viable commercial centre and tourist destination in a sustainable manner;
- To protect the Port of Felixstowe and provide opportunities for its development;
- To develop and maintain the Blue Flag beach;
- To maintain a high standard of ongoing defence to the area;
- To maintain existing facilities essential in supporting ongoing regeneration;
- To integrate maintenance of coastal defence, while promoting sustainable development of the hinterland;
- To maintain the historical heritage of the frontage; and
- To maintain biological and geological features of Landguard Common SSSI in a favourable condition.

Summary	
Lowestoft to Pakefield Hall	Lowestoft is an important regional centre and tourist destination. Within a strongly managed environment, the key values vary along the shoreline from the highly developed commercially important area to the north and around the harbour, through the high value amenity frontage of South Beach of significant importance to the local tourism economy through its "Blue Flag" status, to the less formal Pakefield beach, with each section adding value to the overall character. The historic and extensive residential areas in south Lowestoft are dependent also on effective management of the beach and defences. In particular, with the economic regeneration of the harbour, areas behind the Esplanade and residential areas to the south of the pier, this is heavily reliant upon appropriate management of the beach and promenade of South Beach. Additionally, the associated economic support derived from the harbour and the area immediately to the north means that shoreline management has to take account of overall and interrelated impacts on each of these areas. Further to this, Pakefield has a distinct character and value which provides a transition to a more natural coastline to the south.
Kessingland to Easton Broad	Although in detail the area may be seen as the two distinct areas of Kessingland village and the Covehithe length of eroding cliffs and broads, there is both direct linkage both in terms of management and also overall character. The dominant theme is maintaining the varied but natural character of the area, within which there is a need to sustain tourism, existing facilities, coastal use, the natural environment and communities. The regeneration of Kessingland is a key component of this as are the strengths of agriculture and the local community infrastructure. This combination of key values is summarised as: • Kessingland as a coastal town and tourist destination; • The transport link from Kessingland to Lowestoft (A12); • The strategic gap which delineates Kessingland from Lowestoft; • Recreational use of the foreshore area; • The agricultural economy; • Community infrastructure; • Cultural heritage; and • The national and international importance of the biological and geological diversity of the coastline.

	All of which are within a broader environmental value of the natural coast represented by: • A highly dynamic and rapidly changing natural coastline; • A wide range of interdependent coastal brackish and freshwater habitats in the marshes and lagoons to the south of Kessingland; and • The significant archaeological and geological features of the coast.
Easton Bavents to Dunwich Cliffs	The overall values within this area are made up of a complexity of interrelated and interlinked issues, leading to potential conflicts but also opportunity for mutual benefit between individual sectors of interest. Underlying these individual elements are the internationally and nationally important aspects of the area: • The Southwold / Walberswick / Dunwich area as a nationally valued destination for heritage and tourism; • The national and international importance of the wide range of interdependent coastal, brackish and freshwater habitat in the cliffs, marshes, mudflats, lagoons and beaches of the coast and estuary; and • The important characteristic landscape. Within these broader values, specific values are seen in: • Southwold and Walberswick as coastal towns and tourist destinations, integral with the historic and functional aspects of the harbour and associated tourism activities and attractions within the broader area; • Dunwich as a heritage centre and tourist destination; • Recreational use of the harbour and foreshore area including the Blue Flag beach at Southwold; • Geological interest and habitat in the cliffs (to the north of Southwold and south of Dunwich); • The semi-natural and natural landscape; and Environmentally valuable areas of Dingle and Westwood Marshes.
Dunwich Cliffs to Thorpeness	The core value of the area is its natural environment, although clearly the presence of the power station has to be recognised. Areas such as the Dunwich Heath rely on the overall natural setting and the properties along the cliff top similarly benefit from this natural character of the coast. Sizewell village forms a locally important community but also acts as a way point and access to the shore and coastal path. The elements of the key values of the area may therefore be set out as: • The relatively natural coastal habitat and landscape including the different aspects of the shingle beaches, marshes and wet grassland and Heathland;

	• The national and international importance of the biological and geological interests of the coastline and hinterland; • The nuclear power station at Sizewell; and • Recreational use of the coastal area including the coastal path and access and facilities offered by Sizewell.
Thorpeness to North Weir Point	The area demonstrates the need to balance the three integrated values of culture, ecology and economics. The strong cultural core is provided by Aldeburgh, Thorpeness, Snape, Orford and even Orford Ness. These strong traditional characteristics provide a core to sustaining communities and encouraging future development, which is underpinned by a wide amenity base from sailing to walking, beach use and by the strong tourism, agricultural and (more limited) fishing industries. Equally important locally and regionally as well as with respect to the broader national value is the natural environment, from which the above values derive significant additional value. This combination of values is expressed below: • Thorpeness as a coastal village and tourist destination; • The North Warren RSPB reserve; • Aldeburgh as a coastal town, artistic community and tourist destination; • Recreational use of the coastal area including the sailing activity to the south of Aldeburgh and generally within the estuary; • The remote nature and 'wilderness' experience afforded by Orfordness; • Heritage values of the military installations on Orfordness; and The national and international importance of the biological and geological diversity of the coastline and estuaries, including vegetated shingle beaches, one of the largest shingle spits in the country and the estuarine areas of the rivers Ore, Alde and Butley.
Shingle Street to Felixstowe Golf Course	The area at the mouth of the Deben, including the North Felixstowe frontage, is an important amenity to the town of Felixstowe and a gateway to the more natural coastal environment to the north. Its significance goes beyond the local area, acting as an important tourist attraction for the region but also reflecting in Felixstowe Ferry an intrinsic value in terms of its unique combination of facilities, heritage and community. The same basic qualities are recognised in relation to Shingle Street, combining a spirit of living within a fundamentally natural location with strong community values. The area between has a strong link to rural agricultural activity, supporting local communities. Overall the area has a range of coastal heritage features such as the Martello Towers and the more recent links to the military defence of the nation. The heritage, community and recreational attributes are all set within a broader context of important ecological and geological value. These overall values are reflected in specific features: • The strong recreational value of Felixstowe Ferry, represented by sailing and water sports, the golf course, the start of the

	coastal path and the foot ferry itself; • The strong community identity of Felixstowe Ferry, Shingle Street and other villages within the area; • The tourism and recreational features of the North Felixstowe seafront; • The Heritage value of the Martello Towers, the East Lane military defences and the historic use of Bawdsey Manor; • The underpinning strength of agricultural activities, both within the Deben and along the coastal area; • The national and international importance of the biological and geological diversity of the Deben Estuary; and Coastal and estuarine habitat, in addition to natural and semi-natural environment.
Felixstowe Golf Course to Landguard Point	Felixstowe is a regionally and nationally important economic centre and tourist destination, with recognised Blue Flag standards. This general value emphasises the integrated approach which will be when managing the coastal strip. The recent planning permission for the expansion of the Port and the Felixstowe Futures work reflect the aspirations of the Town to both regenerate itself and expand its economic and social role. The aspects to be considered include: regeneration; the development opportunities of the port and local commerce; reducing flood risk to core residential areas; enhancing the tourism opportunity; and maintaining and enhancing the limited areas of open land and the natural ecological function of such areas. Many of these are built upon the heritage interest of the area. The values of the area are very much those of looking forward to what can be achieved rather than purely maintaining what exists within the area. The key values for coastal management are: • Enhancing the defence function of the shoreline; • Protecting the nationally important asset of the Port of Felixstowe; • The importance of an accessible and sustainable beach, supported by core facilities and vibrant coastal zone, supporting in turn essential tourism and employment; • The historical heritage; • The limited but important natural areas; and • The national importance of the biological and geological diversity of the Landgurad Common SSSI.

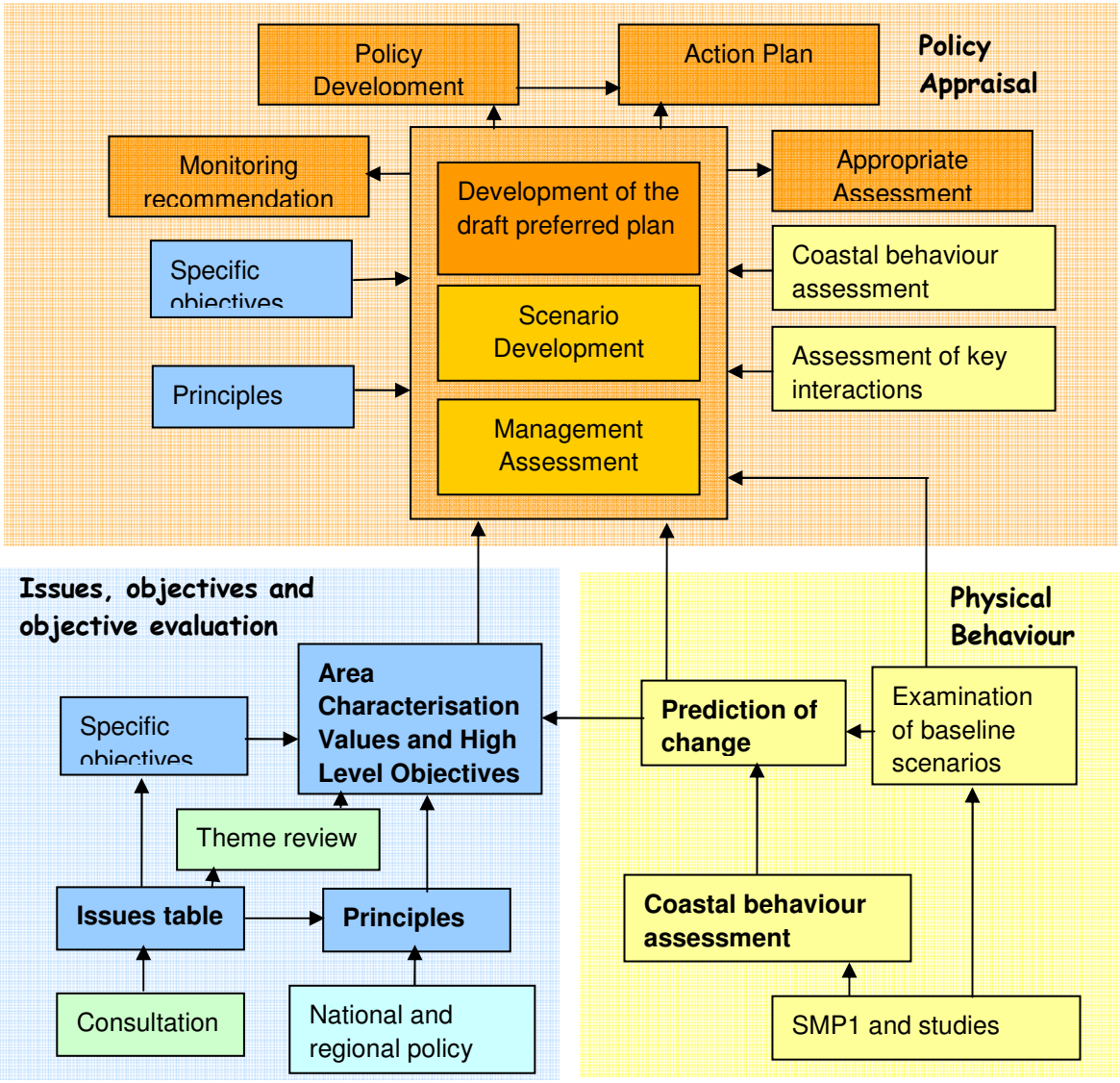
B4.2 Briefing Note and Figure for June 2008 Meeting regarding Objective Evaluation / Assessment

Development of Policy

Introduction

Following discussion at the Client Steering Group on the 4th June 2008, it was felt to be useful to set out in a simplified manner the process that has been undertaken in developing draft policy for the SMP2 area. This document sets out this process, relating this to the steps identified in the procedural guidance, the use of principles, objectives and the characterisation process. The aim of the document is to demonstrate the transparency of the process, how methods have been adapted to the specific situation of the Suffolk Coast and how different elements of the SMP procedure contribute to the policy selection.

The following diagram attempts to show how the various elements of the work fit together. The text that follows describes the process in more detail.



General principles for developing the SMP

The Shoreline Management Plan seeks to provide sustainable shoreline management, considering potential conflicting pressures on the coast and possible constraints on management. The SMP, therefore, seeks to provide an optimised plan, one which provides balanced sustainability, i.e it needs to consider people, nature, historic and socio-economic realities. The SMP2 process is one of review of the policies developed under SMP1; the process is, therefore, not one starting from first principles. However, this does involve questioning these initial policies; in particular considering the implications over the 100 year horizon. A guiding principle is, therefore, that the SMP2 needs to define a long term sustainable **plan**. This plan represents the long term vision, considering the interactions and implications across the whole SMP area. This preferred plan is achieved through the development of **policies** for individual areas over discrete timescales. The SMP does not set policy for anything other than coastal defence management. Nonetheless, it must be recognised that the policies being delivered by the SMP can have considerable implications for a large number of people. The SMP must take account of other existing planning initiatives and legislative requirements, and is intended to inform wider strategic planning. It is important that the plan is realistic and does not promise policies that cannot be delivered; there is no value in a long term plan which has polices that are driven by short term objectives.

General approach to policy development

The plan must address the problems that may exist in the future and has to be realistic. Despite obvious areas of uncertainty, developing policies for different epochs should not be used as an opportunity to defer difficult decisions. There has to be a robust analysis supporting policy decisions. The process by which key decisions are made has to be clear and with clear ownership. The process has to be clearly recorded.

In developing actual policy there are three primary factors that are central to the process.

- An appropriate evaluation process which considers the relative importance of issues /objectives and links this through to policy assessment.
- A focus on the analysis of policy scenarios, rather than individual policy options.
- An emphasis upon analysing shoreline interactions and response.

An important feature of the approach is that policy decisions are initially taken upon the appraisal of achievement of objectives, not on an economic appraisal. Economic assessments are only undertaken to provide a check on the viability of the selected preferred policies. This is an important factor in delivering the best sustainable solution, rather than a purely economically driven one.

Application of General Principles to the Suffolk SMP2

Principles and Objectives.

An initial report was prepared for consideration by the CSG setting out the approach and understanding of sustainability in relation to the Suffolk Coast (*Use of Objectives and Establishing Principles for Policy Development).* This document identified the need to consider two aspects sustainability in terms of the effort required to manage the coast and the intent to sustain key values of coastal interest and use.

The document set out the underpinning principles for management. Principles are defined as the high level aims for good management of the coast, notwithstanding the

recognition that at the specific level there is a need for balanced sustainability; as described in the SMP2 procedural guidance. These principles are based on the aims set out in national policy, incorporating regional aims identified in planning documents and agreed with the Representative Forum (RMF).

The document also sets out the approach taken to identifying and evaluation of objectives. Objectives relate to the specific issues associated with management of the Suffolk Coast and are identified through the thematic review, collating information:

- From earlier studies; such as the current Shoreline Management Plan, strategies and scheme appraisals;
- From the first round of stakeholder meetings and discussion with the RMF and the Client Steering Group (CSG);
- From a review of the various policy documents, structure or local plans.

At a more local level issues were identified initially by the CSG during the initial scoping work on the SMP and subsequently through development of the features and issues tables.

The issues tables and document setting out the principles has been reviewed by the RMF and KSF. Comments from both the RMF and KSF, together with comments from the CSG, have been incorporated within the tables and document. It is recognised that there are potential conflicts between some specific objectives and that not all specific objectives may not be achievable:

- due to constraints imposed by the realities of coastal management,
- and the underpinning principles for developing a sustainable plan.

However, the principles, issues and objectives are considered to reflect the aspirational intent of management against which the plan needs to be developed.

Physical Behaviour

Information as to the physical behaviour of the coast has been collated and analysis and prediction of future trends carried out. This has been undertaken assessing behaviour at an SMP scale and at a more local scale. The work identifies the overall linkages over the area and defines uncertainty. The basic approach to assessing future behaviour was presented to and discussed with the CSG. A report on the physical behaviour was prepared and issued to the CSG. Predicted behaviour of the coast has been mapped for the baseline scenarios and reviewed by the CSG. This information has been subsequently used in assessing management scenarios.

Key Drivers and Objective Evaluation

The aim of this process is to assess the relative importance of the specific objectives used in providing criteria for policy development. An initial assessment is made through use of the issues table. In this table, associated with each feature and issue is an identification of: to whom it is important and what benefits it generates, the scale of importance, whether there is enough of this benefit and to what degree this benefit may be substituted. This provides a degree of ranking of significance. However, it cannot the assumed that ranks between different themes are directly comparable nor that ranking can necessarily compare the value of several features in combination (e.g. one beach cannot necessarily be equated to two car parks.) The procedural guidance cautions against an overly prescriptive approach being taken.

The procedural guidance identifies the potential for key drivers in terms of management. These are defined as being features that have sufficient importance that they have an overriding influence upon selection of policy at the wider SMP scale. The benefits derived from such features will often be a key requirement at a national or regional level. These drivers would give firm direction to choice of possible policies both at that feature location and at other locations which are in some way interrelated. This assessment of key drivers becomes apparent through the assessment of both the significance of the feature and through the assessment of how management of that feature determines or influences coastal behaviour over the whole coast.

Application of Objective Evaluation and definition of Key Drivers to the Suffolk SMP2

Objective Evaluation.

Specific objectives and general principles were agreed with the RMF and KSF through use of the **issues/objectives tables** as discussed earlier. From previous SMP work the difficulty of identifying a sensible ranking of specific objectives was anticipated. In relation to the Suffolk Coast it was appreciated that with over 600 specific objectives identified by the CSG, RMF and KSF, the danger that focus on individual objectives may fail to identify the true interrelationship between these objectives and fail to provide suitable guidance in developing a sustainable plan for management of the shoreline. This was also a concern expressed directly by the RMF.

The issue was discussed within the CSG and an approach adopted whereby the individual issues being raised could be aggregated to provide an overall identification of essential values defining the intent of management. It was further recognised that because of the diverse nature of the coast, these core values would vary from section to section of the shoreline. Seven general areas were identified, within which high level objectives could be defined. These **high level objectives** were derived from the **specific objectives,** agreed by the RMF and KSF, providing overall criteria through which SMP policy might be developed. The approach provides an integrated approach to management, reflecting specific objectives and providing a mechanism for assessing the significance of those specific objectives in context of their broader contribution to management aims. Integration at a broader level of the SMP area as a whole is maintained through applying the underpinning principles agreed with the RMF. This characterisation of the coast; through identifying key values and high level objectives, was taken to the RMF and agreed through consultation with the KSF. This process has been documented in the Characterisation Document which along with the supporting issues/objectives tables and Thematic Review will be included as an appendix in the Draft SMP.

Key Drivers.

The aim of defining key policy drivers is to identify features which might have an overriding influence upon policy of the SMP area as a whole.

There are aspects of the Suffolk Coast, such as the overall balance of nature conservation interest, general socio-economic and economic factors; represented by the core towns and villages, tourism and agricultural industry, and national and regional policy, which have to be considered over the whole SMP area. These general drivers for management are reflected in the key principles agreed with the RMF and KSF.

Through the above characterisation process, key local drivers have been identified and these are reflected in the key values and high level objectives.

Prior to actual assessment of policy, a document was prepared for consideration by the CSG (*Policy Development, April 2008*). This report considered initially the physical linkage and control features of the coast over the whole SMP area. The document identified some 21 features; both natural and man made features of the coast, which might impose significant influence on coastal behaviour in general. Following an initial screening, it was concluded that there were 10 features where a high level decision as to policy might determine the subsequent development of policy over significant lengths of the coast. Objectives associated with these locations might, therefore, be considered as key policy drivers determining an approach to management elsewhere on the coast. These 10 locations were assessed in more detail.

Of these, five were natural features. Only at Benacre and Orford Ness, would management decisions significantly influence coastal development and, in both cases, it was concluded that overriding consideration of nature conservation interests, together with issues of technical sustainability, would dictate that a policy of No Active Intervention was most appropriate.

In the case of the five managed coastal features, in was concluded that at Lowestoft Ness and at Landguard Point there were key drivers (maintaining the overall values of Lowestoft and maintaining the nationally important navigation to the Port of Felixstowe and the sustainable management of the regionally important sea front of Felixstowe, respectively). In effect, at the SMP area level, this assessment confirmed the boundaries of the Cell 3c SMP. In other locations, regardless of the decision with respect to Southwold or in relation to the management of Cobbold's Point, the local choice would not, at a high level, dictate policy for the coast; irrespective of the local management decision these locations would still impose a long term natural control on coastal behaviour. At South Aldeburgh similarly, although associated with the high level objective to sustain Aldeburgh, this location could not be confirmed as a key policy driver for management, requiring as it did local consideration of how best to deliver objectives.

The assessment, combining both the analysis of the **physical behaviour** of the coast at an SMP level in combination with the assessment of **high level objectives**, gave firm direction to choice of possible policies at the feature location, defining also the key interrelationships with respect to other features. The assessment provided a rational for dividing the coast into policy development zones, within which policies could be determined taking account of specific objectives.

The assessment is recorded in the Policy Development document, which would be included within the Draft SMP.

Policy appraisal

The plan represents the long term vision, considering the interactions and implications across the whole SMP and identifies the changes required to achieve that. The policies are the means of achieving this plan at the local level over discrete timescales.

The approach for development of a sustainable plan is through the assessment of policy scenarios, rather than considering locations in isolation. The aim is to identify the appropriate combinations of policies to be appraised for the whole SMP frontage. The number of scenarios developed needs to reflect the range of polices that may be needed to sustain the SMP coastline and meet the stakeholders' aspirations. However, it is not necessary to attempt to appraise all possible combinations; rather the scenarios should be tailored to gain maximum understanding of the implications of alternative policies.

Application of Policy Appraisal to the Suffolk SMP2

Policy Development Zones.

The preceding analysis demonstrated the complex nature of the Suffolk Coast both in terms of the interrelationship between values associated with different areas of the coast and with respect to the local interaction of physical processes over relatively short sections. The overall assessment of physical behaviour and the identification of few key drivers at an SMP level has allowed sub-division of the coast into general zones, such that a more detailed assessment of policy is possible.

This local scale complexity within each zone, however, prevents any further sensible pre-emptive sub-division down to potential policy units. Each zone has to be considered initially as a whole; different management scenarios generating a different range of policy units. The derivation of a preferred scenario for the zone generates specific policies aimed at delivery of that scenario.

Baseline Scenarios.

Although developed initially at the level of the SMP, providing an overall assessment of interactions and prediction of coastal behaviour, the baseline scenarios also provide an initial starting point for examining management of each zone. The **With Present Management** (WPM) scenario, developed from the SMP1 policy and incorporating information from subsequent strategies and agreed schemes, in combination with the **No Active Intervention** scenario, provides that initial understanding of the implications of alternative policies. These baseline scenarios are tested with respect to the high level objectives, taking account of the overall principles in developing a long term sustainable plan.

Preferred Plan

Discussion of these management scenarios highlight areas where **high level objective**s are being met or where they are not met. It also highlights where there may be issues of sustainability and practical management. Based on this, alternative scenarios are able to be examined, looking at how management can better achieve a sustainable plan. In considering these alternatives, reference is made to the specific **issues/objectives.** This discussion has led to a proposed draft plan for shoreline management. This is defined in terms of policies, developed over the three epochs, to allow adaptation of management, recognising the changing nature of the coast. These policies are, where appropriate, combined as management areas, highlighting how individual policy units interact. An Appropriate Assessment is developed alongside the development of the preferred plan, being produced ultimately as a stand alone document. The preferred plan is developed around the aim to meet the high level objectives for each area but is also examined in relation to the specific issues and objectives.

B5 Key Stakeholder Consultation Report: consultation on the Draft SMP2 document

(Full Stakeholder Consultation Report is attached as an Appendix to this report) .

5.3 Revisions to the SMP2 document

All responses identified within the Key Stakeholder Report, together with further discussion on specific issues raised, were taken into consideration in preparing the final draft SMP2.

In many cases it was felt that the main issue was in a lack of clarity in what the draft SMP2 document was saying or in the intent of the policies. This has been addressed. This clarification may either be in providing a better explanation or in highlighting the importance of some aspect of the coast. This in some areas has resulted in additional objectives being identified.

In a few situations the actual policy was found not to fully address new issues that had been identified or situations where policy was influenced by new information becoming available during the consultation process. In such circumstances the policy has been reviewed and where necessary revised to reflect this new information.

The report in the Appendix set out the key issues raised during consultation. The responses identify whether issues were raised by individuals, by representative groups or by the steering group or national organisations. The report provides a brief comment on the issues and identify in what way the issues have influenced the final SMP2 document.

B6.3 General Issues

Where issues relate specifically to areas within the SMP2 frontage these have been addressed as set out above. However, there were two more general issues raised:

Social Justice. A number of stakeholders have raised the issue of 'Social Justice' in relation to an aspiration for coastal protection during the consultation phase of the draft Suffolk Shoreline Management Plan 2 (SMP2). A discussion of the issue has been added to section 3 of the SMP2 document, explaining how the issue has been acknowledged in the development of policy.

Strategic Environmental Assessment. The need for a "Strategic Environmental" (SEA) of the policies developed in the SMP2 was identified both by consultees and by Defra. A brief explanation of the purpose and requirement for the SEA is provided in section 2 of the SMP2 document. The full SEA process and conclusions is described in a new Appendix (appendix F) to the SMP2 document.