

Berwickshire and North Northumberland Coast European Marine Site: Case History

This case history describes the creation of the Management Scheme for the Berwickshire and North Northumberland Coast European marine site, and has been produced in order to share the experience gained from the production of the scheme with those about to embark upon this process.

A. General description and features of conservation importance

The Berwickshire and North Northumberland Coast is one of the most beautiful areas of the UK coast, supporting a great range of habitats and associated communities of marine plants and animals. The European marine site stretches from Fast Castle Head in Scotland to Alnmouth in England, encompassing both Lindisfarne and the Farne Islands (See Figure 1). This represents 115km of coastline and nearly 625 square kilometres of coastal waters.

The European marine site comprises the Berwickshire & North Northumberland Coast candidate Special Area of Conservation (cSAC) and the intertidal section of the Lindisfarne Special Protection Area (SPA).

The Berwickshire and North Northumberland Coast cSAC has been proposed for the following Annex I habitats and Annex II species as listed in the EU Habitats Directive:

- **Shallow inlets & bays**
- **Reefs**
- **Submerged or partially submerged sea caves**
- **Mudflats and sandflats not covered by water at low tide**
- **Grey seals (*Halichoerus grypus*)**

Lindisfarne SPA has been designated under the EU Birds Directive in that it supports:

- **Internationally important populations of regularly occurring Annex 1 species**
- **Internationally important populations of regularly occurring migratory species**
- **An internationally important assemblage of waterfowl in excess of 20,000 individuals**

Lindisfarne is also listed as a Ramsar site for its internationally important wetland status.

The importance of the Berwickshire and Northumberland Coast has been recognised by an impressive array of nature conservation and natural heritage designations. The North Northumberland Dunes cSAC extends discontinuously from Spittal to Amble. There are a further four SPAs within or adjacent to the area of the European marine site: St Abbs Head to Fast Castle, Lindisfarne, the Farne Islands, and the Northumbria Coast. The Northumberland Coast Area of Outstanding Natural Beauty runs from just south of Berwick-Upon-Tweed to Amble-by-the-Sea, whilst the North Northumberland Heritage Coast stretches from the Scottish Border also to Amble.

B. Socio-economic characteristics of the Berwickshire and North Northumberland Coast European marine site

The settlements within the coastal zone adjacent to the site comprise mostly small coastal villages with several medium sized towns such as Alnmouth, Berwick, Eyemouth and Dunbar. Most of the coastal settlements derive some income from tourism, with St. Abbs, Lindisfarne, Seahouses, Beadnell and Alnmouth being particularly popular destinations. Many of these coastal settlements are under pressure from development proposals, especially from the private housing sector.

Recreation is of considerable economic importance to this coast. Activities include walking, cycling, major angling competitions, sailing, wind surfing, and diving. This stretch of coast is renowned for its populations of wild birds and attracts bird watchers internationally.

The Berwickshire and Northumberland coast is steeped in cultural history and there are many landmark historic buildings and archaeological sites which are popular with visitors. The high landscape quality is recognised by designation as an Area of Outstanding Natural Beauty.

Coastal land adjacent to the European marine site is mostly rural or agricultural land often backed by dunes and adjacent roads, with a small amount of localised light industry. Agricultural land is mostly arable with some pasture. Livestock farming in this area is currently in decline.

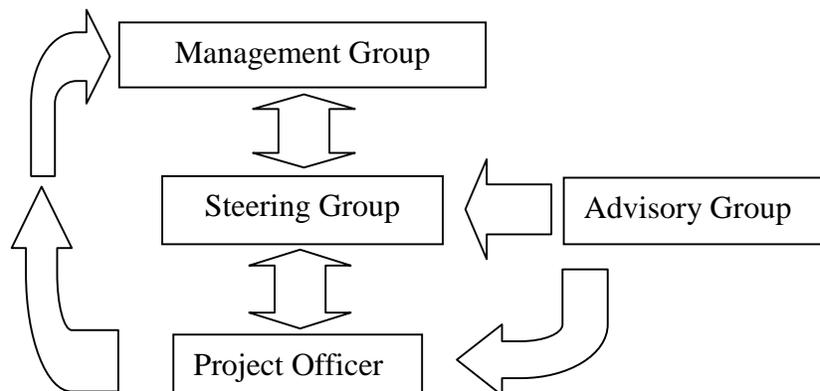
Several of the coastal towns are fishing ports. The fishing industry is now a shadow of its former self, with most fishing effort directed towards potting for crab and lobster. Some trawling activities for *Nephrops* (scampi) and pelagic and demersal fish does occur, but mostly beyond the European marine site boundary. A small amount of salmon netting still occurs on the site, however this is also currently in decline. There are fish processing plants in Seahouses and Berwick-upon-Tweed. Bait digging, mostly for lugworm and ragworm, is a relatively common practice along the coast. Bait digging is commonly carried out by amateur anglers, however, some small-scale commercial digging does occur. On rocky shores the collection of periwinkles for human consumption occurs all year round, with peak effort coinciding with the Christmas period. Most of this production is now exported to France, Belgium and Spain. Intertidal collection of lobsters, known locally as “cleaking” takes place during spring tides.

C. The Berwickshire and North Northumberland Coast European Marine Site: Relevant and Competent Authorities

- Northumberland County Council (Lead Authority)
- Alnwick District Council
- Berwick upon Tweed Borough Council
- East of Scotland Water
- English Nature
- The Environment Agency
- Government Office, North East
- Maritime and Coastguard Agency
- Ministry of Agriculture, Fisheries and Food
- National Trust
- Berwick Harbour Commissioners
- Eyemouth Harbour Trust
- North Sunderland Harbour Commissioners
- Northern Lighthouse Board
- Northumberland Sea Fisheries Committee
- Northumbrian Water Limited
- River Tweed Commissioners
- Scottish Borders Council
- Scottish Environment Protection Agency
- Scottish Executive Rural Affairs Department
- Scottish Natural Heritage
- Trinity House

D. Management Structures

The current management structure for the Berwickshire & North Northumberland Coast European marine site is as follows:



E. Key Events

1) Key staff involved with the European marine site:

- SNH Natura 2000 Project Officer, Andrew Panter (start - present) – Part-time
- EN Project Officer, Helen Davies (start - Dec 1998) – Full time
- EN Project Officer, Sian Nedwell (March 1999 – March 2001) – Full-time.
- Northumberland County Council Project Officer, Frank Fortune (Jan. 1998 – June 2000) – Full-time.
- Northumberland County Council Project officer, Mike Quigley (Aug. 2000 - present) – Full-time.

2) European Marine Site History:

Prior to the proposal of the Berwickshire & North Northumberland Coast SAC there had been an earlier initiative, the Northumbria Coast Management Plan, formulated by the County Council, local councils and the nature conservation agencies. This was a non-statutory plan.

March 1995

Proposal of Berwickshire & North Northumberland coast as a candidate Special Area of Conservation (cSAC). English Nature Project Officer appointed

1997

Formation of cSAC Management Group. This group is comprised of the relevant authorities with jurisdiction for the area of coast and sea within the cSAC and key user groups. Members were invited to join the management process through direct invitation or by advertising the site in the local media.

Jan 1998

Appointment of Northumberland County Council (NCC) SAC Project Officer. Part of the funding from the UK Marine SACs Project provided for the employment of a project officer to work on behalf of the Management Group. The principal duty of the project officer was to assist the Management Group in the formulation of a scheme of management for the cSAC. The lead authority of the Management Group, Northumberland County Council, agreed to cover the costs of administration and office space for the post, so the Officer was based at County Hall.

Feb 1998

cSAC Steering Group formed. Management Group was considered too large to operate efficiently. Consequently, a smaller Steering Group was formed to act on their behalf.

1998

A site newsletter, 'Cross Border Currents', was created as a vehicle for raising public awareness of the cSAC and related developments. Four issues have been produced so far. This has proved to be a valuable communication tool, and has been very popular. The newsletter is distributed to all members of the Management Group, local wildlife and conservation groups, recreational groups, libraries and anywhere else on request.

1998 – 1999

cSAC Topic Groups Formed. Five stakeholder topic groups were formed, covering five key areas where it was perceived that management efforts should be targeted. Membership comprised local user groups, relevant authorities and appropriate experts. Interest in the site had been considerable and Topic Groups were used as a method of channelling or focussing that interest. Five topic papers were compiled by the topic groups, each of which fed into the production of an issues paper. The topics were: fisheries, nature conservation, recreation, water quality/pollution and coastal development.

1999

Formation of cSAC Advisory Group. A need was identified for a panel of experts, with local knowledge, to advise the management group on specific issues on an on-going basis. It was decided to form the group from the chairs of each of the topic groups, and some additional invited members from regional academia.

Feb 1999

Publication of Issues Paper. Compiled from the five topic papers, this document formed the basis of the Management Scheme.

March 1999

Development of the Management Scheme initiated. The management scheme was developed through intensive consultation with the management and advisory groups and also with local user groups. Management Group meetings and workshops were held, along with one to one meetings with individual relevant authorities. The production of the scheme was an iterative process, with many drafts being produced for comment before the final version was agreed.

Feb 2000

Formation of the European Marine Site. The intertidal part of the Lindisfarne Special Protection Area (SPA), designated for bird interests, was incorporated into the scheme of management for the cSAC. At this point the cSAC and SPA combined to be known as the Berwickshire and North Northumberland Coast European marine site.

June 2000

Publication of the Regulation 33 Advice package. Regulation 33 of the Habitats Regulations requires the statutory nature conservation agencies for the site, English Nature and Scottish Natural Heritage, to formulate an advice package for the European Marine Site. The publication of this document was the culmination of two years work by both these agencies. The Regulation 33 Advice Package is of key importance to the management of the site as it identifies conservation objectives for the site and describes the operations which may impact the site features. The lengthy period required to finish this work was due to the cross-border nature of the site. Both English Nature and Scottish Natural Heritage drafted guidance separately which then had to be agreed by both parties.

Aug 2000

European marine site launch events. Two events were held to publicise the European marine site. A Beach Day was held at Beadnell, including poster displays, marine animal touch tanks, rockpool rambles, and a music workshop using items found on the beach. A Boat Day was held, going from Seahouses out to the Farne Islands. An underwater video camera was used to provide live images of the seabed around the Farne Islands. A commentary was provided by a local

marine biologist. Both days attracted media attention from newspapers, and television, and were very well received by the general public.

Jan 2001

Publication of the European marine Site Management Scheme. The culmination of three years work by the Management Group, Advisory Group, Topic Groups and Project Officers. This document is an essential management tool for relevant authorities, assisting them in carrying out their management responsibilities under the Habitats Regulations. The document describes the conservation objectives for each of the site interest features. Management measures agreed during consultation are listed along with a description of proposed monitoring work. The scheme also describes all the activities that occur within the site and lists operations that may be detrimental to the site and gives an action plan for their management.

April 2001

Publication of a European marine site Summary Document. This document is intended to provide a user-friendly summary of the site interest features, Management Scheme and Regulation 33 Advice Package. The document also describes the future management of the site so that it will be maintained for future generations to enjoy.

May 2001

Completion of the Berwickshire & North Northumberland Coast European marine site website – WWW.XBorderCurrents.com. The website will provide a great range of information in a dynamic and upbeat medium. There are pages covering marine nature conservation, wildlife, management, monitoring, education and pictorial content. There are pages for news and events and a contact page where members of the public can contact the Management Group with their views regarding the European marine site. It is also hoped to have a short video clip of features from the site, along with several zoom-able panoramas. The website designer contracted to create the site will also be responsible for servicing the site and will also assist in updating the content where necessary.

Summer 2001

A number of publicity and awareness-raising projects took place during the summer months, including displays to emphasise the cross-border nature of the site and co-operation between organisations.

3) The Future:

March 2001-March 2002 - Several projects are planned to assist relevant authorities in carrying out their management measures. Meetings will be held with each relevant authority to establish an implementation brief. This brief will describe what knowledge of the site each authority currently holds, past interactions with the site, intended management actions for the coming year and methodology for reporting results to the NCC Project Officer.

The NCC Project Officer will produce a report to the Management Group regarding the progress made by the Relevant Authorities towards achieving their agreed management measures in support of the conservation objectives.

F. Budget and Resources

The costs associated with developing the Management Scheme are as follows

CATEGORY	FURTHER DETAILS	COST (£)
Information collation	Subtidal Rocky Reefs (1998) Lindisfarne Biotope Survey (1999) Sea Cave Survey (1999)	Total 51.5k
Project Officers EN & NCC Salary + Related Costs	Frank Fortune Helen Davies Sian Nedwell Mike Quigley	Total 136.5k
Project Officer - Overheads		0.2k
Publicity and Interpretation	Posters, flyers, events and newsletters.	10.5k
Publication of Management Scheme	Design and publication.	6k
IT equipment	Computing, printing and GIS facilities.	6.9k
Total		211.6k

G. List of key documents

- Underwater Acoustic Survey – Foster-Smith & Davies (1998)
- Human Collection of Animals from Rocky Intertidal Reefs – Quigley & Frid (1999)
- Sea Caves Survey – Environment & Resource Technology, Edinburgh (1999)
- Local newsletters (4 editions)
- Berwickshire and North Northumberland Coast leaflets
- Berwickshire and North Northumberland Coast posters
- Intertidal Biotopes Survey at Lindisfarne NNR – IECS, Hull (1999)
- Biotope maps of Lindisfarne Mud and Sand flats - IECS, Hull (1999)
- EN/SNH Regulation 33 Advice Package for the Berwickshire and North Northumberland Coast European Marine Site. English Nature & Scottish Natural Heritage (2000)
- Management Scheme for the Berwickshire and North Northumberland Coast European Marine Site (2001)
- Berwickshire and North Northumberland Coast Summary Document. Northumberland County Council (2001)
- Berwickshire and North Northumberland Coast Website. UK Marine SACs Project & EC LIFE Nature Programme (2001).

H. REVIEW OF LEARNING

1) Information to support management schemes

The cross-border nature of the site has had some implications for management. Some delay resulted from difficulties between Scottish Natural Heritage and English Nature in agreeing the nature and content of the Regulation 33 Advice Package. This advice was redrafted several times resulting in confusion and frustration for Management Group members. Redrafting of the Advice Package also had detrimental effects upon the management scheme drafting process. Ideally the Regulation 33 Advice package should be completed or almost completed prior to drafting a management scheme. The Advice Package provides a sound basis from which the management scheme should develop.

It has been necessary to establish baseline information regarding site interest features such as littoral sea caves. Other gaps in knowledge have been identified and work is either planned or currently underway to address these gaps. Ideally baseline information should have been available for all the interest features prior to drafting the management scheme. More effort could have been made to incorporate existing data and information from both regional academic institutions and the scientific literature.

Topic groups provided important information about the activities and operations on the site although greater detail regarding the nature, location and intensity of these activities would have been useful. Contracted research such as the investigation into the collection of animals from rocky intertidal reefs provided useful information where it was lacking.

2) Relevant authority and stakeholder structures

With no previous formalised management structure to act as a template, the Management Group for the site was able to adopt its own structure without influence from structures assembled for other purposes. Initial progress in developing a management scheme was slow. This was not surprising in as much as the process of managing marine areas was still relatively new without much prior experience to build upon. Written documentation explaining the Habitats Directive, the 1994 Conservation Regulations and their implications for the relevant authorities were extremely useful in generating greater involvement from the relevant authorities. One to one meetings with the project officer also helped to engage authorities in the management process.

The cross-border nature of the site has also meant that a number of competent and relevant authorities are replicated, for example the Scottish Environmental Protection Agency and the Environment Agency who fulfil almost identical roles. This made the group somewhat larger than it might have been. Equally, the physical size of the site has had a bearing upon management, resulting in many participants having long distances to travel to attend meetings.

It has been important to ensure that the roles and work areas of the EN project officer and NCC project officer are clearly defined in order to avoid confusion on behalf of the stakeholders regarding the role of these key posts. The Management Group has agreed that the successful implementation of the management scheme will require continued management group meetings. The coming two years of the implementation phase will be co-ordinated by the project officer at Northumberland County Council who will act as the representative of the Management Group.

3) Methods of relevant authority and stakeholder participation

An initial workshop organised by a consultant facilitator was useful for an early exchange of information between relevant authorities and to establish a basic understanding of the concept of marine nature conservation.

The use of topic groups was very successful on this site. Initial interest in the site was considerable. The dividing of stakeholders into topic groups helped to channel or focus their involvement in the site and usually meant that stakeholders were asked to comment upon areas of management of which they had some knowledge or direct experience. Focussed meetings also helped to maintain interest as stakeholders were not required to spend time listening to matters that neither concerned nor interested them.

The development of the Issues Paper from the five topic papers provided an essential link between stakeholder involvement and the eventual content of the Management Scheme and successfully scoped user concerns and priorities.

The adoption of a smaller Steering Group to meet and act on behalf of the Management Group allowed the process of management to become much more efficient. The official chair of both the Management and Steering Groups has been a senior manager of the Environment Directorate of Northumberland County Council. Having an experienced chair sitting on both groups has greatly assisted with the continuity of the management process.

4) Techniques for involving stakeholders:

- **Consensus Technique**

The English Nature project officer initially led a consensus building exercise to encourage the Management Group to engage more actively in debating coastal issues. The exercise was not well received and the Management Group indicated that they required some initial guidance in order to provide a starting point from which a debate of related issues could grow. Whilst the creation of partnerships and consensus are key elements of the management process, it should be recognised that consensus and partnerships based upon mutual trust take time to forge. It was perhaps unrealistic to expect this to occur quickly at the start of the management process.

- **Matrices**

The use of matrices as a method of presenting information has proved a useful tool in stimulating ideas upon management of the site. The use of matrices aided effective discussion of issues by allowing interest features to be compared against those activities with the potential to negatively affect them. It should be noted, however, that the effectiveness of matrices is greatly enhanced if some initial information is provided regarding the potential impacts of activities upon a given feature. Generic information regarding human impacts upon the marine environment may be gleaned from the scientific literature.

- **Publicity**

The use of advertisements in the local press was effective in kick-starting the topic group process and generating considerable interest in the site right from the start of the management process.

A glossy newsletter, Cross Border Currents, has been developed by both the English Nature and Northumberland County Council Project Officers. This has been extremely well received by both members of the public and the relevant authorities alike. There have been four issues so far.

Other promotional materials have included a series of full colour posters and a fold-out leaflet. Both of these publications emphasised the site interest features, but still explained the basic principles upon which management would be based.

Two awareness-raising events were hosted in August 2000. A beach day was organised at a key coastal location. This event included displays from a number of marine conservation organisations, touch pools, shore walks, story telling and a musical workshop using strandline items. The second event comprised a series of boat trips out to the Farne Islands with live footage provided from an underwater video camera with commentary from a local marine biologist. Both of these events generated a good response from newspapers, radio and television alike.

The management scheme document was published in March 2001. Whilst the scheme is primarily a tool to assist site management, its production does help promote the site as it is distributed beyond the immediate Management Group.

A summary document was published in April 2000. This document, whilst promoting the interest features of the site, placed much greater emphasis upon promoting the key aspects of management and site monitoring than previous publications. The aim of this publication is to inform interested members of the public and to aid the penetration of information into those organisations that comprise the relevant authorities.

Further publications and activities are planned for the coming year, however, an increased emphasis will be placed upon forging links with both the written and broadcast media.

- **Pragmatism**

Management on the site has generally been pragmatic. If at any point in the process, members of the Management Group had felt that the commitment of their time and effort was being wasted or squandered it might have been difficult to prevent a decline in enthusiasm for the site. Hence, rather than continue to meet during repeated redrafting of the Regulation 33 Advice Package, members decided to suspend their activities until its completion.

5) Process and content of the management scheme document

The management scheme was developed over three years with key members of the relevant and competent authorities. One to one meetings were held with these members to discuss their proposed responsibilities under the management scheme. This was important as it ensured that any concerns or queries were dealt with at an early stage and thus reduced the potential for last minute disagreements just prior to publication.

The final document is comprehensive and user-friendly allowing management measures to be assessed both in terms of individual issues or the organisations to which the various management measures are related. The scheme has incorporated issues both onshore and offshore and links well with the Regulation 33 Advice Package issued by English Nature and Scottish Natural Heritage. The successful implementation of the management scheme is dependent upon

maintaining the enthusiasm generated during the drafting of the scheme. This process will be greatly assisted by all parties involved in the site working together in a collaborative and cooperative manner.

6) Interpretation

The interpretation of marine conservation areas must be carried out in a structured fashion. There are distinct differences in the requirements of the various user groups and authorities within the broad target audience related to a given site. Firstly, it is of great importance that the relevant and competent authorities for the site understand the site interest features, conservation objectives and the implications these have for their own activities. Secondly, it is also important that information generated by the Management Group is communicated throughout individual authorities and their different departments. The primary long-term interpretive goal, however, must be to create a body of informed individuals amongst those people who live and work in and around the site. This process will create a sense of ownership of the marine environment, will raise awareness of the issues affecting the area and will raise peoples' confidence to engage in environmental planning processes and decisions.

In short we must ask the question "If we are to conserve the marine environment, who or what are we conserving it for?" In order to achieve this last objective, a vehicle must be found to allow the public to become actively involved in the site. If a role can be found for volunteers within site monitoring activities, this will allow them to learn more about their marine environment and to directly assist in ensuring the future favourable condition of the area.

Figure 1



Scale 1:300,000

This map is based upon the OS map from English Nature with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. Crown copyright. All rights reserved.

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This map is indicative only. The landward boundary of the European marine site is the point of Highest Astronomical Tide. This is the limit of intermittent cover by tides at the top of the shore.

KEY

-  Intertidal mudflats and sandflats
-  Known sea cave locations
-  Intertidal and subtidal rocky reefs
-  Seal breeding and moulting areas
-  Berwickshire and North Northumberland Coast cSAC boundary