

SOLWAY FIRTH EUROPEAN MARINE SITE - CASE HISTORY

This case history has been prepared as a record of the work undertaken on the Solway Firth in establishing a management scheme on the European marine site as a means of sharing the experiences and good practice that has emerged from it.

A. General description and features of conservation importance

The Solway Firth is a candidate Special Area of Conservation for the following Annex 1 habitats as listed in the EU Habitats Directive:

1. estuaries;
2. sub-tidal sand banks;
3. intertidal mud and sand;
4. pioneer saltmarsh;
5. saltmarsh.

The site is also classified as a Special Protection Area and it supports:

1. internationally important populations of regularly occurring waterfowl;
2. internationally important assemblages of waterfowl; and
3. internationally important populations of three SPA Annex 1 species - barnacle goose, whooper swan and golden plover.

The Solway Firth is one of the largest, least industrialised and most natural sandy estuaries in Europe. It extends from the Mull of Galloway in Scotland, across to St. Bees Head on the Cumbrian coast of north-west England. The Solway Firth European Marine Site includes the inner reaches of the Firth, from Dubmill Point in Cumbria to Craigneuck Point near Sandyhills Bay in Dumfries and Galloway.

The north-western corner of the European marine site is dominated by Criffell a 565 metre tall granite peak which descends to Southernness point and easterly to the Nith estuary. The rest of the land around the European site is low lying with peat domes of coastal mosses and some of the best agricultural land of the region. With the notable exception of Annan, the landscape is predominately rural and sparsely populated. The county town of Dumfries sits inland on the River Nith close to the site boundary and the town of Carlisle lies on the Eden. The port of Silloth towards the south-west edge of the site marks a change to the more populated coast that leads to the historic industrial ports of Maryport, Workington and Whitehaven south of the site.

There is a rich history of nature conservation and landscape designation in or for the site including: 2 National Scenic Areas, Area of Outstanding Natural Beauty, Ramsar site, Biosphere Reserves, National Nature Reserve, a Special Protected Area (SPA) designated in 1988 under the European Birds Directive and the candidate Special Area of Conservation (cSAC) designated under the 1992 Habitats Directive.

The European marine site, of around 44,000 ha, supports extensive habitats which are of international importance. At low water the area of the inner Solway Firth almost completely dries out exposing extensive fringing mudflats and sandflats. These, with extensive subtidal sandbanks, form one of the largest continuous areas of sedimentary habitats in the UK.

The estuary is also important for migratory fish, particularly sea trout and salmon as they pass through the estuary into the rivers Nith, Annan, Sark, Kirtle Water, Border Esk, Eden

and Wampool. The mudflats and sandflats of the site provide important nursery and feeding grounds for commercial and recreational fish species, as well as providing a significant food source for birds. It should be noted that although these species are important they do not qualify as interest features of the European marine site.

B. Socio-economic characteristics

Over half the resident population of Dumfries and Galloway and of Allerdale Borough lives in the civic parishes located along the coast. In 1991 the total resident population in districts (Nithsdale, Annandale & Eskdale, Carlisle, and Allerdale) adjacent to the Solway Firth European marine site area was 290,363.

The most densely populated part of the Solway Firth is outwith the Solway Firth European Marine Site coastal zone, centred around the three historic industrial and port towns of Whitehaven, Workington and Maryport. Traditional industrial employment in coal, iron and steel has declined significantly over the last 25 years. The dominant employer in the area is British Nuclear Fuels at Sellafield which, although outside the Solway Firth, draws workers from much of West Cumbria especially Whitehaven and Workington. North of Maryport the coastal zone is essentially rural with significant self-catering caravan and chalet developments between Allonby and Drumburgh. Much of this northern stretch of coastline lies within the influence of Carlisle rather than West Cumbria. The least densely populated parts of the Solway Firth are Dumfries and Galloway especially in the west.

The economy has a high dependence on a limited number of sectors principally agriculture, forestry, food-related manufacturing, transport and tourism. The marine and coastal zone also supports a significant commercial fishery. Major job losses have been in agriculture and manufacturing. The whole area is generally remote from the major industrial and commercial markets and ports of entry to the UK as well as from the national strategic road and rail networks, but this is probably more significant to the economy of West Cumbria. However, the growing features of the economy are the importance of small businesses, a very high level of self-employment and an increase in service sector employment.

Opportunities for economic growth are likely to come from expansion in key sectors such as tourism, agriculture (including food processing), technology related to the nuclear industry and the potential to develop jobs based on teleworking. A number of support networks and partnerships have become established by which social and economic regeneration could be driven forward.

C. The Relevant and Competent Authorities

Relevant Authorities

Allerdale Borough Council
Annan District Salmon Fisheries Board
Associated British Ports (Harbour Authority)
Carlisle City Council
Cumbria County Council
Cumbria Sea Fisheries Committee
Dumfries and Galloway Council
English Nature
Environment Agency
Ministry of Agriculture Fisheries and Food
Nith District Salmon Fisheries Board
North West Water

Scottish Environment Protection Agency
Scottish Fisheries Protection Agency
Scottish Natural Heritage
West of Scotland Water Authority

Competent Authorities – all the above and:

Crown Estate
Department of Environment, Transport and the Regions
Food Standards Agency
Ministry of Defence
Scottish Executive Rural Affairs Division

D. Management structures

The Solway Firth European marine site project was set up under the existing Solway Firth Partnership (SFP). The SFP was formed in 1994 through the Focus on Firth Initiative of Scottish Natural Heritage. Its aims and objectives were to draw up a voluntary strategy for sustainable management through a partnership approach with the multiple users of the Solway. This was the first time that a partnership approach to the management of the firth was taken.

A three tiered management model was adopted:

1. A working group was established to steer the SFP and consists of members from Dumfries and Galloway Council, English Nature, Scottish Natural Heritage, Carlisle City Council and Scottish Environment Protection Agency.
2. A main management group was formed, consisting of twenty-six members drawn from local authorities and national nature conservation agencies.
3. Broader topic groups provided the management link to the users. Ten such topic groups in total were formed to scope knowledge on the Solway and to write the Solway Firth Review. Each group was commissioned to write a chapter on their own specialist interest for the review. The information contained in the review led to the development of an 'issues' paper, which in turn fed into the Solway Firth Strategy that was finally launched in July 1998.

In 1996 the Solway was put forward as a demonstration project under the UK Marine Special Area of Conservation project with LIFE Funding. In 1997 a Project Officer was appointed and the management structures developed under the Solway Firth Partnership were utilised for the European marine site. To ensure a close working relationship between the Solway LIFE project and the Solway Firth Partnership the remit of the Solway Project Working Group was extended to provide steer and advice to the LIFE project. The group was renamed as the Joint Projects Working Group. The Solway Firth European Marine Site management group meets quarterly and comprises of all the Relevant Authorities around the site and many of the members represent their organisations on the Solway Firth Partnership steering group. Meetings have been consecutively with the Solway Firth Partnership steering group and such meeting structure ensures that there is a close link between the two projects.

The topic groups for the Firth were disbanded in 1998, and for a period there was no formal advisory group structure to the area. A broader advisory group had been suggested to the management group, however, they were concerned that this would either duplicate effort with no clear role, or antagonise decisions reached through existing networks in the area. Thus,

dispersed informal networks of contacts for wider advisory purposes were employed. More specifically, to aid in scientific advice a network was established that included the RSPB, the Wildlife Trust, Marine Conservation Society, and local fishermen.

Close links were established between the Local Biodiversity Action Plan (LBAP) process as well as the Solway Firth Partnership. From this a Coastal and Marine Advisory Group was established to service the needs of the coast for the whole of the Solway. The group is proactive, with a remit of providing technical advice to project officers and is answerable to the respective management groups it services.

E. Key events

Early 1996

The Solway was put forward as a demonstration project under the UK Marine Special Area of Conservation project with EU LIFE funding. The Project Officer for the Solway Firth Partnership organised a relevant authorities workshop to explore their responsibilities under the Habitats Directive.

September 1997

A Project Officer was appointed. The management structures developed under the Solway Firth Partnership were utilised for the European marine site (see above).

Autumn 1997

Base scientific work undertaken - identification of the extent and distribution of interest features, Geographical Information System (GIS) developed and broad data sets mapped. The project officer arranged a meeting with a small conservation working group to discuss and develop the conservation objectives for the site.

November 1997

A Steering group meeting was presented with table of proposed conservation features for the Solway Firth. Other than some minor teething problems over the use of technical language, the group was generally supportive. The project officer further discussed the need for an information strategy for the area, which again met with broad approval.

Winter 1997-1998

Delays in providing Regulation 33 guidance for conservation objectives from the National Conservation Agencies for the Solway. This issue was particularly compounded due to the cross border nature of the site. Accordingly the management group focused discussions on developments in the information management strategy, and to the structure of a possible advisory group.

A management group meeting due in May 1998 was postponed again due to further amendments in the conservation advice, and no future date was set until the matter could be resolved.

Summer 1998

Publicity for the project was promoted with articles published in local press expressing the aims and objectives of the European marine site scheme. An A4 leaflet was produced and was distributed locally, and through the mailing list of the Solway Firth Partnership with a target audience of over 1000. Survey work was commissioned to establish baseline condition of the site comprising of subtidal scar ground survey, intertidal scar ground survey and saltmarsh survey.

November 1998 – spring 1999

Planning and Landscape Consultant David Tyldesley led a seminar on the Habitats Directive for the management group members. The workshop was well received clarifying issues related to the Habitats Directive and the Conservation Regulations 1994.

Presentation to the management group by members of SNH and EN involved in providing guidance to local officers on the Regulation 33 advice. Received mixed reception, in part due to the complex terminology used. Regulation 33 advice package still incomplete.

To ensure closer working between the Solway Firth Partnership and the LIFE project it was agreed to hold the management group meeting and the SFP steering group meeting back to back. The format worked well and has been adopted as the most suitable mechanism for ensuring links between the two projects are maintained.

Due to the continued lack of draft conservation objectives the project timetable was being severely impacted and it was decided that assessments of site management should be made using draft favourable condition tables as a substitute for the conservation objectives.

Draft conservation objectives and operations advice were presented to relevant authorities in May 1999 - little thought had been given to Special Protection Area objectives at this time.

Spring-Summer 1999

The Project Officer undertook a series of one-to-one meetings with the relevant authorities and stakeholders in the area to assess current management issues in the area. Discussed uses of the environment and their management responsibilities in light of background discussions with the nature conservation agencies. Interest increased in the project. The 1:1 meetings were successful in that they achieved a wider ownership for the project and allowed greater input to the process from relevant authorities.

September 1999

The consultation draft of the “Conservation Objectives and Operations” (Regulation 33 advice) was finally issued. Publicity to the aims of the project was given using a now regular feature in the Solway Firth Partnership’s magazine “Tidelines”.

Autumn – Winter 1999/2000

Work on drafting the management scheme continued. The management group agreed that maximum use should be made of the existing initiatives in place, where appropriate actions highlighted, should be carried forward to the management scheme. This would ensure that in implementing the management scheme other plans would also benefit and vice versa. Also the format of the management scheme should follow that suggested in the “European marine sites - an introduction to management” booklet. The project officer was given the responsibility of drawing up the scheme in consultation with the relevant authorities. The joint projects working group was given responsibility for viewing and providing direct input to the developing scheme.

February 2000

Following 25 sets of comments the “Conservation Objectives and Operations” (Regulation 33 advice) was published. The project’s website was launched – www.solway-ems.co.uk.

March 2000

Broad agreement on draft management scheme allowed the launch of the consultation draft for responses to be returned within 12 weeks. A CD-Rom of the GIS output from the project

was commissioned and distributed to all members of the steering group. The project officer left her post to follow a different career.

Summer 2000

With no project officer in post response to the management scheme was poor. The appointment of a new project officer later in the summer meant the deadline for comments on the management scheme was extended.

Autumn 2000

Further survey work on interest features was commissioned. Response to the management scheme consultation led to re-drafting of the document for final comment from the steering group. The Solway Firth Partnership annual conference included a section dedicated to the Solway Firth European Marine Site with talks from the UK Marine SAC's Project Manager and the site's Project Officer.

Winter 2000-01

Final amendments were made to the management scheme which was officially launched in mid-February with good press coverage. The scheme was launched with a public summary leaflet/poster which is distributed widely throughout the Solway Firth EMS hinterland. Display boards are also manufactured publicising the scheme.

March 2001

The website was updated and the management scheme added to be read on-line or downloaded.

F. Budget and Resources

CATEGORY	£k
Information collection	50.3
Project Officer – salary and T&S	67.9
Project Officer – overheads (accommodation, training)	
Publicity and interpretation	12.9
Publication of management scheme	4.9
IT equipment	1.6
TOTAL	137.6

G. List of key documents

English Nature, Scottish Natural Heritage (2000). *Solway European Marine Site - English Nature's and Scottish Natural Heritage's advice given in compliance with Regulation 33(2) and in support of the implementation of the Conservation (Natural Habitats &c) Regulations 1994*. English Nature, Scottish Natural Heritage.

Geowise (2000) *Solway Life Project Arcview GIS – CD-rom* English Nature, Scottish Natural Heritage, LIFE

Hawker D (1999) *Survey of Saltmarsh in Solway Firth European Marine Site*. Scottish Natural Heritage Report BAT/98/99/62

Institute of Estuarine and Coastal Studies (1999) *Intertidal Scar Ground Mapping of the Solway Firth*. Report to Scottish Natural Heritage

Seamap Research group (1999) *Solway Firth - Marine SAC Mapping. Subtidal Sediments and Scars*. Report to Scottish Natural Heritage

Solway Firth European Marine Site (1998) *Solway Firth European Marine Site Life Project leaflet* English Nature, Scottish Natural Heritage, LIFE

Solway Firth European Marine Site (2001) *Solway Firth European Marine Site Management Scheme + Supplement – Action Plans* English Nature, Scottish Natural Heritage, LIFE

Solway Firth European Marine Site (2001) *Solway Firth European Marine Site Management Scheme Summary leaflet/poster* English Nature, Scottish Natural Heritage, LIFE

Solway Firth Partnership (1998 – 2001) *Tidelines Issues 8-15* Solway Firth Partnership

H REVIEW OF LEARNING

1. Information to support management schemes

The scientific information forming the basis of support for the management scheme has been fragmented and the management scheme process has highlighted areas that require further investigation. The site had not been surveyed as a whole since a Joint Nature Conservancy Council review in 1992 and a major concern is that there is an inconsistency in biotope mapping and the data sets. For example, SNH had carried out a detailed survey in 1995 for their part of the site, yet there was no English equivalent.

The Solway Firth Review (*Solway Firth Partnership 1996*) had already identified much of the interest of the site with topic groups from a variety of interests contributing to the chapters of the review. A broad scale habitat-mapping contract, let by Scottish Natural Heritage, had been undertaken prior to the project being set up, again indicating the extent and value of habitats within the site but did not include the English intertidal areas. Further surveys were carried out to provide baseline information about the interest features under the life of the project.

Disagreement over guidance on the Regulation 33 package caused significant delays to the project timetable. A more effective development of the management scheme could have been achieved had structured guidance with regard to conservation objectives and content of the Regulation 33 package been agreed by the nature conservation agencies and available at the start of the project.

2. Relevant authority and stakeholder structures

The structures developed through the Solway Firth Partnership have been sensitively engaged and played a fundamental role in the development of the European marine site management scheme. While this has in part been a strength it has also meant that advisory groups have not been formed specifically for the European marine site. Responsiveness to specific site challenges has, therefore, been more gradual with the European marine site not seen as a higher priority than any other initiative. Whilst this has been constructive in ensuring that there is full integration of the issues, it has led to some delays in advice on specific actions for the site.

The approach of using existing initiatives gave the opportunity to involve an advisory group. Close links were being established between the LBAP process and with the Solway Firth

Partnership a Coastal and Marine Advisory Group was established to service the needs of the coast for the whole of the Solway Firth.

The initial involvement of wider stakeholders in the process was prior to the project, essentially through the writing of the Solway Firth Review. Topic groups were set up to scope knowledge in the area and to form the basis for the management plan. Interested parties in the area were encouraged to take a role in establishing the Partnership, and to pull together its voluntary strategy.

Wider publicity to promote the management scheme was through press releases in the local papers. This led to a public consultation phase again supported through the Solway Firth Partnership mailing list.

The Project Officer for Solway Firth European Marine Site shared an office with the Project Officer for the Solway Firth Partnership, which allowed close working between the two projects from the outset. This has built in an awareness of the issues relating to the European interest in the role of the Partnership's project officer.

Some members of the Steering Group felt that, although the Solway Firth European Marine Site has little major industry, there needed to be a better balance of interests with industry being fully represented. The Solway Firth Partnership itself is perceived as lacking better representation from industry and this reflects onto the management of the European marine site. The management scheme is therefore seen by some quarters as coming from a purely ecological and not an environmental (including people) background. Whilst the management scheme has been written by Relevant Authorities it is hoped that there will be a greater involvement of industry in the implementation of the scheme.

3. Methods of relevant authority and stakeholder participation

One-to-one meetings: These were important for sensitively progressing issues at various critical stages of the management process. They were particularly useful at facilitating the process during delays to the Regulation 33 package and helped to engender a feeling of ownership of the project and the likely management requirements on the site.

Group discussions: Groups of relevant authorities were brought together to discuss certain issues such as the Environment Agency and the Scottish Environmental Protection Agency to agree on their approach to water quality issues. Being a cross-border site and bringing agencies with the same remit together led to a consensus of opinion and a strategic way forward. This built greater relationships between respective bodies and was generally beneficial.

Newsletters: These have played an important role in promoting the site. In particular they have been well disseminated through mailing lists developed in the area by the Solway Firth Partnership. This up-to-date reporting on the development of the project has allowed interested parties to input other perspectives into the development of the scheme. Having a joint newsletter with the Partnership has saved on some of the costs and effort required in preparing and publishing newsletters on a regular basis.

Training days: A training seminar for the relevant authorities, by planning and landscape consultant David Tyldesley, was well received and a valuable learning experience for all those who attended. A follow-up meeting would have been of further benefit as many ideas came from the first meeting. Representatives cascaded information back to colleagues; this could have been developed further at a second meeting.

Informal networks: As much of the management structures were in place at the time of the Project coming into place, the use of informal networks for advice and assurance during the progression of the management scheme offered both critical perspective and support. These included networking with other European marine site project officers, personal contacts, and a variety of casual contacts.

It is important to note that many management initiatives already exist on the Solway. Efforts were made to reduce the chances of duplicating effort. The management scheme builds on existing management structures and draws suitable actions from plans already in place.

4. Process and content of the management scheme document

From the outset the management scheme has been developed with regard to existing initiatives around the Solway Firth. Sitting within the framework outlined by the Solway Firth Partnership the scheme has been able to integrate into the work already underway such as the Local Biodiversity Action Plan and the Shellfish Management Plan. The Shellfish Management Plan is being drawn together to address a particular management issue on the Solway: that of over-exploitation of the cockle resource. A Regulating Order is being sought to ensure that the shellfishery stocks of the Solway Firth are sustained and the management plan is the tool that will underpin the management of the shellfishery. This work is presently ongoing (spring 2001) and is referred to throughout the management scheme.

With so many other plans already in place there is a concern that there is a risk of fatigue through all the various partnerships being required to service so many plans. By separating out each relevant authority's action plan within the final consultation a better response was achieved as each could see clearly which sections they were involved in. The production of a supplement to the management scheme with each of these action plans listed has been well received and will allow a clear reporting mechanism to be employed.

The management scheme was developed from the Regulation 33 package process although it was well underway before the final agreed version of that document was published. It was possible to draft and agree a considerable proportion of the document on the basis of the initial conservation objectives and operations advice. The scheme was compiled from one-to-one meetings with relevant and competent authorities and users of the site. This process engendered a feeling of ownership of the document by the parties involved. The Steering Group and Joint Project Working Group meetings also shaped the look and content of the scheme.

Unlike the Regulation 33 package, which was seen as too technical with much repetition, the management scheme document is more straightforward. The document uses tables to list activities and issues and highlights in the management solutions whether the work is already being undertaken, requiring revision, or a new initiative. The document is comprehensive in its review of activities and clearly indicates whose responsibility each issue concerns. A supplement has been produced listing the action plan for each relevant authority for ease of use.

The scheme appears to have been well received by the relevant authorities and wider interests, as it does not set out sweeping changes: the issues in the Solway are comparatively few and minor. However, the scheme is seen to give a good basis on which to make informed decisions about future management measures. Only upon implementation will the true support for the scheme become apparent.

5. Interpretation and publicity

Workshops: A workshop/training event by planning and landscape consultant David Tyldesley was well received and a valuable learning experience for all those who attended. This helped to raise awareness about the project's aims in helping the relevant authorities to realise their responsibilities under the Habitats Directive. This could have been expanded and built upon had further workshops been organised. Public workshops to provide wider consultation on the management proposals were envisaged but not developed due to the absence of a Project Officer for a few months and time constraints of the project.

Conference talks: were given by the Solway Firth European Marine Site Project Officer at the Solway Firth Partnership standing conference publicising the project and allowing for direct questioning by the audience. Using this forum had major benefits as it projected and emphasised the integrated nature of the two initiatives. The use of an illustrated presentation engaged people's interest and was well received – later feedback endorsed this view.

Displays: The production of highly mobile, bright, simple but informative display sets draws peoples attention to the project and leads them to finding out further information either through the Management Scheme Summary leaflet or the full scheme documents. Earlier static displays had a similar effect with handout documents readily being taken. A successful approach at catching the attention of people at shows, exhibitions, etc.

Leaflets: Two full colour leaflets were produced. The first details the LIFE project and contains contact information that is often the point for public involvement into the project. The second is a summary of the management scheme and includes a foldout poster of the interests of the site and a detachable summary of the action points to be addressed. Both leaflets have been widely circulated and have encouraged people to contact the project. The Summary leaflet has had many complimentary comments and requests have been received for further copies for distribution to other user groups and as an educational resource.

Newsletters: The Solway Firth Partnership newsletter "Tidelines" has been an invaluable vehicle for publicising the projects work and achievements. With a wide local circulation of interested parties this is the main communication route of the project. Articles have also appeared in more national, specialist newsletters indicating good practice techniques for others to employ.

Press coverage: The local media (TV, radio and newspapers) have also been used to publicise the work of the project and have been widely seen/read. Comments and requests from both local and wider sources for further details arose from the publicity generated showing this to be a successful form of communication.

Public Events: Attendance of the project officer at local agricultural shows and environment fairs with display material and handouts helped to raise the profile of the project in the mind of the local populace. Good for direct contact with the local general public.

Launch of documents: A public relations event to mark the publication of the Solway Firth European Marine Site Management Scheme and Summary documents was well attended and received high press coverage. A media celebrity, identified by his environmental and social views and being native to the area, gave a keynote speech alongside the project's key players in front of an invited audience of all consultees and local political representatives. This approach acted as a marker in the history of the project and has helped focus the minds of

relevant authorities, it also was successful in drawing the public's attention to the management scheme.

Website: The project's own website (www.solway-ems.co.uk), with an interactive map of the site, is well designed and easy to navigate. The site has been updated following the production of the management scheme that is now readable either on-screen or can be downloaded. Up to the upgrade there was no counter facility but now statistics on usage will be produced to see how the site is being accessed. Access to the site will most likely be by individuals from beyond the local area but keeping the action plan updated will encourage locals to revisit the site to monitor progress made.