

## **Morecambe Bay European Marine Site – Case History**

This case history has been prepared as a record of the work undertaken in Morecambe Bay 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**

Morecambe Bay European marine site qualifies as a candidate Special Area of Conservation (SAC) for the following Annex 1 habitats:

- Large shallow inlets and bays
- Intertidal mudflats and sandflats
- Pioneer saltmarsh
- Saltmarsh

The site is designated as a Special Protection Area (SPA) as it supports:

- Internationally important assemblages of waterfowl and seabirds;
- Internationally important populations of regularly occurring migratory species; and
- Internationally important populations of regularly occurring Annex 1 species

Morecambe Bay European marine site extends along the north-west coast of England from Walney Island, through Barrow-in-Furness to Fleetwood in the south. As well as the embayment, the site comprises four main estuaries of the Bay's major rivers, the Leven, the Kent, the Lune and the Wyre. These drain into the Ulverston, Lancaster and Grange Channels, which converge and pour their waters into the 'Lune Deep', a steep-sided subtidal channel that was formed during the Ice Age.

Morecambe Bay is the second largest embayment in the UK, with 310km<sup>2</sup> of intertidal sandflats and mudflats making it the largest continuous intertidal area in the whole of Britain. The Bay is broad and shallow with a large tidal range of up to 10.5 metres at spring tides and an ebbing tide that can fall back to 12km. This reveals half of the Bay's total area as expanses of sands, meandering channels and tidal pools.

The outer parts of Morecambe Bay are predominantly mobile well-sorted sands with fringing shingle. Towards the inner bay and estuaries the sediments become muddier and less saline allowing saltmarshes to develop on the higher shore levels. Boulder scars or "skears" occur around the Bay, relics of boulder clays eroded following the last glaciation.

The diversity and composition of biological communities that occur in or on the sediments of Morecambe Bay are influenced by a number of key ecological factors. These include the hydrophysical regime, the nutrient levels, temperature, oxygen levels, salinity and the composition of the substrate. The Bay is also important as a fish nursery area and is an important habitat for migratory fish species such as salmon, sea trout and eels.

### **B. Socio-economic characteristics**

As many as 200,000 people may live and work around the shores of the Bay. Industries conduct their business and visitors come in large numbers for sport and recreation.

Morecambe Bay is an important location for commercial fishing and for recreational angling. The Bay supports valuable shellfish and finfish populations and the fishing has developed from its origins as a subsistence activity to its present status as an international industry. Many species of fish, including flatfish, bass, cod and whitebait are caught in the Bay or landed at its ports. Shellfish are also important and the mussels and shrimps are caught for both local consumption and for export to Europe. Cockles can also be an important part of the shellfisheries, but in recent years their low abundance has affected the viability of the fishery. Within the commercial fishery a diversity of techniques are used by the fishermen. Some work on the shore when the tide is out, while others fish from boats. Throughout the Bay a mixture of traditional and modern fishing methods are used.

Shipping and the transport of resources have always been important to Morecambe Bay. The industrial growth of Barrow-in-Furness was built upon the iron industry and through Vickers shipbuilding and engineering operations, including the building of Vickerstown on Walney Island and the bridge linking the town to Barrow. The ports of Barrow, Heysham and Fleetwood are important economic interests.

The saltmarshes and adjacent coastal land, much of it claimed from the sea and now protected by defences, and some by pump drainage, is important agricultural land. Traditionally sheep grazing of the saltmarshes has created the conditions, which support large populations of many birds.

Tourism is an important contributor to the local economy. The maritime heritage of Morecambe Bay features strongly in regeneration initiatives at Morecambe, Lancaster, Barrow and other tourist centres around the Bay. A wide range of recreational activities take place in the Bay including the “Cross-Bay” walks led by the Queens Guide to the Sands.

Just offshore from Morecambe Bay lie extensive gas fields, which supply more than 10% of the UK’s gas demand. Heysham nuclear power station is a conspicuous landmark on the shores of the Bay.

## **C. The Relevant and Competent Authorities**

Associated British Ports  
Barrow Borough Council  
Cumbria County Council  
English Nature  
Environment Agency  
Heysham Port Authority  
Lake District National Park Authority  
Lancashire County Council  
Lancaster City Council  
North Western and North Wales Sea Fisheries Committee  
South Lakeland District Council  
United Utilities  
Wyre Borough Council

## **D. Management Structures**

In 1992 English Nature launched its Campaign for a Living Coast at a time when local authorities and others were aware of increasing issues and conflicts affecting the coastal zone. The Morecambe Bay Partnership was formed to help address some of these issues and conflicts. The Partnership reviewed the economic, social and environmental interests and issues in the Bay and explored opportunities to address these in more sustainable ways. It promoted co-operation on the site between the user groups, built on existing professional and social relationships, as well as forming new ones, and generally

raised the profile of the estuaries. English Nature facilitated the process by providing a project officer to help run the project, and continues to contribute to the funding of the current project team.

The beginning of the management process was the establishment of four key topic groups by the Morecambe Bay Partnership on the themes of:

- Heritage, landscape & tourism
- Fisheries, pollution & wildlife
- Industry, transport & development
- Land management & sea defence.

The topic groups scoped both differing uses as well as potential conflicts in the area. Over 1000 local people and organisations were involved in extensive consultations that gathered together information describing the features of the Bay, the concerns of the local people and identified solutions to the management issues. From these consultations technical reports were produced and these were used to compile the Morecambe Bay Strategy published in 1996, the purpose of which was to improve the way the Bay is managed by:

- promoting integrated management – by encouraging statutory bodies to work together and to consider the management of the Bay as a whole;
- promoting a new management framework – that will bring users and regulators together to discuss and resolve issues at a local level.

Around the time the Strategy was produced Morecambe Bay was proposed as a candidate SAC under the Habitats Directive which requires that a single scheme of management be developed to protect the wildlife features of designated sites. Government guidance on the preparation of a management scheme recognised the value of a process similar to that which was used to develop the Strategy. Close links were established between the Morecambe Bay Strategy and the Management Scheme.

The Morecambe Bay Partnership Management Committee has a broad membership, comprising some forty individuals from statutory agencies and key user groups, so a separate European marine site Management Group comprised of 16 representatives of 13 relevant authorities was established, chaired by Cumbria County Council. From this a smaller working group was drawn to support the functions of the Management Group.

The Morecambe Bay Partnership has a Standing Conference which meets twice a year and engages the users of the Bay. In order to provide support for the management group and ensure that the views of a wide range of stakeholders were represented it was decided that the standing conference would take on the role of the European marine site Advisory Group.

## **E. Key Events**

### **March 1995**

English Nature initiated Consultations on the proposed SAC.

### **October 1996**

The site was confirmed as a candidate SAC.

### **January 1997**

LIFE Project Officer left post and the project continued with English Nature's Maritime Development Officer organising management group meetings and producing drafts of the Regulation 33(2) advice. A sandwich student started a placement in April developing a MapInfo based GIS. Existing survey data  
April 2001

for the Bay was digitised and a data directory was prepared providing information on existing data sets held by relevant authorities around the Bay.

### **September 1997**

New LIFE Officer was appointed to the project. Contracts organised for surveys of subtidal and intertidal areas. Aim of survey work to provide a good foundation of knowledge on which to base conservation objectives.

### **November / December 1997**

Meetings held to discuss development of conservation objectives and operations advice (Regulation 33), plus developments with survey work.

### **Spring – Summer 1998**

English Nature Maritime Team concerned that Regulation 33(2) packages being developed in isolation and with varying quality. Introduced quality assurance process to ensure same standards on all marine SACs. The current Regulation 33(2) drafts were withdrawn and a management group meeting cancelled once the quality assurance process was introduced. Ideas for producing a high quality 36 page colour booklet about the wildlife and human interactions of the Bay began to be formulated.

Six habitat surveys were commissioned which included the mapping of coastal vegetated shingle, a subtidal survey of rocky scars, vegetation mapping of saltmarsh and a survey of the extent of eelgrass beds.

### **September 1998**

General endorsement of the Regulation 33 package accepting that conservation objectives as presented would be general and broad with more detail provided in the favourable condition table. Also discussed was the development of advice on sensitivity of the interest features to help the management group review activities under their control against the wildlife features. Survey information digitised and used in the production of high quality colour maps showing the location of all the key wildlife features and habitats, which could be used to inform discussions with local people and user groups.

### **Early 1999**

Produced maps showing the location of wildlife habitats and tables with information on their sensitivity that were taken to a series of meetings with relevant authorities and local users. At each meeting information was collected on where the main human activities and issues for wildlife were within the Bay. This information was then used to assist with production of Regulation 33 advice. The meetings were very useful as they enabled informal discussion with management group members and users about concerns over the whole process.

### **March 1999**

For the Morecambe Bay Partnership Standing Conference information packs containing high quality interpretive material were produced for the 120 attendees. These included a colour map showing the location of wildlife interests in the Bay, a questionnaire asking for information about where there may be management issues in relation to these interests and a newsletter giving examples of conservation objectives and feedback about progress being made with survey work. A poster presentation showing line drawings of marine wildlife commissioned from a local artist and results from survey work was displayed and a presentation about progress with development of the management scheme was given. A good feedback to the visual aids was received but there was a poor response to the questionnaire.

### **April 1999**

Draft structure of the management scheme document was produced and a discussion was held about the possibility of using CCW Management Planning approach for further development of the

management scheme. There was general support for using this process as it provided a clear template for how to develop the scheme and also looked at incorporating immediate and possible issues, therefore providing a clear audit trail to show that all issues had been covered.

### **July 1999**

A list of activities taking place within the Bay was produced with the aim being for the management group to identify relevant authorities responsible for regulating these activities and for them to then review the effectiveness of current management measures. This approach was a useful way for the relevant authorities to carry out their own reviews within a clear framework.

### **Summer 1999**

Five habitat surveys were commissioned including baseline monitoring of intertidal rocky skears and a water quality review.

### **September 1999**

Guidance notes were produced for each relevant authority undertaking a review of current management and a proforma for producing the text was also supplied so that a level of consistency between the reviews could be achieved. Maps showing the location of key wildlife habitats and target notes detailing issues that had been raised in relation to human activities on these features were produced. A workshop was run to identify the key contacts needed to undertake the reviews of activities taking place in the Bay.

The focus of management group meetings has now moved away from English Nature and Regulation 33 advice to development of the management scheme. Management Group members took over the running of key parts of the meetings so that they had greater clarity and a sense of ownership of the scheme.

### **December 1999**

LIFE Project Officer left post and a contractor was hired to collate the management reviews and produce a first draft of the management scheme whilst a new officer was recruited. Other work to ensure the management scheme continued to progress, including liaison with the relevant authorities was carried out by the European marine site Support Officer. Discussions were held about the contributions being produced by the relevant authorities and it was agreed that the scheme should be developed collaboratively with the individuals writing the reviews consulting with other colleagues, other councils etc, to try and ensure that Bay-wide coverage was achieved.

It was also agreed that the clear audit trail being developed for the Morecambe Bay management scheme was essential and that the reviews text would be needed to support tables of actions within the scheme. This would aid understanding and act as a useful reference as to why each action in the scheme was decided on.

### **March 2000**

A new LIFE project Officer was appointed. Drafting of the management scheme had made significant progress with all reviews from the relevant authorities (from now on referred to as annexes) completed and a first draft of the full scheme produced. The Project Officer held one-to-one meetings with the relevant authorities to discuss requested changes to the general text and annexes, outstanding points that required clarification and resolve any conflicts between the drafted document and the Regulation 33 advice. At Morecambe Bay Partnership Standing Conference English Nature and Cumbria County Council gave a presentation on the progress of the Management Scheme – ‘what its about’, ‘role of RA’s’ and ‘where up to’ as it was considered essential to keep the users of the Bay up to date with progress.

### **April / May 2000**

Management group agreed that the scheme should recognise other initiatives that already existed and needed to take greater account of timetabled actions from such strategies within the management scheme. A revised version of the scheme was used as the consultation draft for the relevant authorities internal consultations. The purpose of this round of consultation was for the relevant authorities to agree the management actions and responsibilities set out in the scheme, prior to public consultation.

### **June / July 2000**

The full management scheme document, incorporating comments and amendments from the relevant authorities consultation period was to be used for the public consultation but it was decided that the large document would not necessarily appeal to a wide audience. With this in mind a special edition of the Morecambe Bay Partnership newsletter "Baywatch", containing a four- page article on the management scheme was produced, through joint working between the LIFE and Morecambe Bay Partnership project officers, for use as the vehicle for the public consultation. It explained in simple language all about the Bay's wildlife, the scheme and how the proposals would affect people. A questionnaire was also incorporated into the feature, which asked people to give their views on the important issues around the Bay, and gave the opportunity to request a full copy of the scheme. The newsletter was sent out to over 3000 people and the response was very positive with people wanting to know more about how the Bay was to be managed.

### **Sept / Oct 2000**

A 12 page summary of the scheme called 'Caring for Morecambe Bay' was written by the LIFE project officer and took the form of a glossy booklet which was pitched between the newsletter and the full scheme. The aim of this document was make the scheme accessible to a wide public audience by attractively describing the essence of the scheme and getting the management messages across without using any jargon. The summary was distributed widely using the Morecambe Bay Partnership mailing list and local libraries and it was extremely well received.

Although the full document was not finalised it was decided that the Morecambe Bay Partnership Standing Conference in October would be a good time to launch the management scheme. The summary document was completed in time for this and eye-catching display boards were manufactured to provide a backdrop and publicise the scheme. The launch itself took the form of three presentations. The project officer gave a talk focusing on the content of the scheme and the positive actions and benefits that would come out of it. This was followed by an exciting talk and slide show about the Bay's wildlife and habitats from a local marine biologist, and concluded with a perspective from the Environment Agency.

### **Dec 2000 – Feb 2001**

Due to the substantial number of comments received from the relevant authorities and the resulting significant changes that had to be made, the Management Scheme was not ready for printing in November as planned. Many of the comments, although received after the consultation deadline, were considered to be very important and vital to ensuring the scheme would produce the best results possible and so had to be taken into consideration. This required further consultation and individual meetings between the project officer and some relevant authorities, and many of the issues raised took considerably longer to resolve than was anticipated.

### **March / April 2001**

All outstanding issues and concerns were resolved with corresponding changes made to the scheme. Although considering these issues delayed the production of the scheme, incorporating the last comments was worthwhile in the long term as a greater degree of confidence and support for the scheme from the relevant authorities was achieved and this is thought to be essential for its successful implementation.

The Management Scheme was published and distributed at the end of April 2001 with the full support of all the relevant authorities. It was added to the downloads page of the Morecambe Bay website at the beginning of May.

## F. Budget and Resources

CATEGORY	£k
Information collation	55.1
Project Officer – salary and T&S	82.9*
Project Officer – overheads (accommodation, training)	1.5
Publicity and Interpretation (including website)	16.1
Publication of management scheme	13.9
IT equipment	1.2
<b>Total</b>	<b>170.7</b>

\* Includes salaries for contracted time of 3 Project Officers

## G. List of key documents

Christine Isherwood, 1998. Selection of line drawings depicting marine scenes and habitats from in and around Morecambe Bay.

English Nature, Environment Agency. 1999. Walney Channel Inter-tidal Vegetation Study – Evaluation of the Environment Agency’s Compact Airborne Spectrographic Imager (CASI) as a practical technique for mapping and assessing changes in the distribution and quality of eel grass beds and saltmarsh vegetation. Environment Agency. National Centre for Environmental Data and Surveillance.

English Nature. 2000. Morecambe Bay European marine site. English Nature’s advice given under Regulation 33(2) of the Conservation (Natural Habitats & c.) Regulations 1994: English Nature 14 January 2000.

Harwood, T.R., 1998 / 1999. Coastal vegetated shingle plants in the north of Morecambe Bay – mapping survey of shingle habitats. Report to English Nature, Cumbria Team.

Harwood, T.R., 2000. Rare and Uncommon plant species and vegetation on the saltmarshes of Morecambe Bay European marine site. Report to English Nature, Cumbria Team.

Hawker, D. 1998. Survey of Saltmarsh in Morecambe Bay European marine site. Report by David Hawker Ecological Consultancy to English Nature.

Holt, T.J., Hartnoll, R.G. & Dryden, C., 2000. *A Review of Water Quality and Ecology of Morecambe Bay*. A report to Environment Agency NW Region, English Nature and North West Water. The University of Liverpool Centre for Marine and Coastal Studies.

Morecambe Bay European marine site. 2000. Caring for Morecambe Bay – Management Scheme Summary booklet. English Nature, Morecambe Bay Partnership and LIFE.

Morecambe Bay European marine site. 2001. Morecambe Bay European marine site Management Scheme. English Nature and LIFE.

Morecambe Bay Partnership. July 2000. Baywatch Newsletter issue 3. Edition dedicated to the European marine site Management Scheme. By English Nature, Morecambe Bay Partnership and LIFE.

Morecambe Bay -The Secrets of the Sands. 1999. Booklet funded by English Nature, EU LIFE Project, Cumbria County Council, Morecambe Bay Partnership and British Energy.

Tittley, I., Paul, A.M., Rumsey, F.J. & Chimonides, P.J., 1998. *Mapping, monitoring and management of Eelgrass (Zostera) beds in the South Walney Channel*. A report to British Gas Hydrocarbon Resources Limited. The Natural History Museum, London. Pp. 21.

Tittley, I., Paul, A.M., Rumsey, F.J. & Chimonides, P.J., 1999. *Monitoring of Eel Grass beds in Morecambe Bay European marine site*. A report to British Gas Hydrocarbon Resources Limited. The Natural History Museum, London. Pp.16.

Walney Channel Video. 2000. Funded by the EU LIFE Project and produced in partnership with English Nature, Lancashire Marine Conservation Society and Morecambe Bay Partnership. Videography and Photography by Paul Kay Marine Wildlife Photo Agency. Video Editing by Syrenia Productions.

Woombs, M. 1999. Monitoring of Biotopes on Rocky Skears in Morecambe Bay European marine site. Report by WA Marine & Environment to English Nature, Cumbria Team.

Woombs, M. 2000. A Sublittoral Survey of Biotopes on Rocky Scars in Morecambe Bay, European marine site. Report by W. A. Marine & Environment to English Nature, Cumbria.

## **H Review of Learning**

### **1. Information to support management schemes**

Initially (1997) there was limited information available on the extent and quality of the features across the site. This information was needed to underpin English Nature's advice on the conservation interests and management of the Bay and so contracts were organised for many of the habitats within the Bay. The emphasis was on the collation of existing data and collection of new key scientific data and entry into a GIS in order to provide a good foundation of knowledge on which to base the Conservation Objectives and the management scheme. Partnership working has helped the EMS. Specific survey contracts were funded in partnership with RAs and other organisations, such as British Gas. The expertise of users such as fishermen, wildfowlers and bird watchers has been acknowledged and used throughout the process.

**Objectives and operations advice issues:-** The decision was taken to employ CCW's Management Planning approach to develop the management scheme; the approach was considered to be more structured and proactive. Interestingly, the suggestion came from an RA (Sea Fisheries Committee) with experience with this approach as their jurisdiction includes N.Wales.

A Working Group was organised and met several times to discuss the development of the objectives and operations advice, particularly the sensitivity of the EMS conservation features. RAs were concerned that the local EN team might lose the power, through the national quality assurance process, to tailor the objectives and operations advice to local needs and context. A representative from English Nature's national team addressed this anxiety through a presentation that increased RAs understanding as to why a quality assurance process had been introduced.



Working Group and Management Group interest has been sustained by a variety of EMS publicity and interpretation initiatives. For example, the Management Group attended a screening of a commissioned video of the EMS features. The introduction of the objectives and operations quality assurance guidance resulted in extra workloads through having to repeat previous tasks, and this strained the project officer's relationships with the RAs. But the objectives and operations consultation did not lead to any major objections.

## **2. Relevant Authority and stakeholder structures**

The relationships forged by the Morecambe Bay Partnership between English Nature, relevant authorities and user groups around the Bay have played a fundamental role in taking forward the development of the European marine site Management Scheme. English Nature had previously developed good working relationships with partners and these continued during the LIFE project. The relationships have been built on by the LIFE Project Officers both through formal and informal meetings and also through the project officer's role as secretariat to the management group. The importance of a good working relationship between these parties was vital to resolving concerns and problems that arose during the production of the scheme, and promoted confidence in the decisions that were made.

Alongside the more formalised structure of the Management Group it was felt to be important that the element of public involvement was retained and so the Standing Conference of the Morecambe Bay Partnership was employed as the European marine site Advisory group. This meets twice a year and attracts around 100 people. The conference can be used to tap the local expertise of users such as fishermen, wildfowlers and bird watchers on the distribution of conservation features and of different activities. This has been valuable in developing participation by users, including potential opponents of the EMS, demonstrating that their knowledge is valuable to the process. These meetings have also provided a good opportunity to discuss concerns over the EMS. An informal Advisory Group network has helped in creating open and honest communication amongst the stakeholders. A number of smaller, local advisory meetings with users and RAs have been broken down into topic workshops to discuss specific issues.

Wider efforts to keep the users of the Bay up to date with developments, gain support for the management scheme and encourage public involvement took the form of press releases in local papers, informative newsletters that included questionnaires and fact sheets about the European marine site, that were compiled from the sort of questions that the user groups had said they would like answering. These were distributed widely through the Morecambe Bay Partnership mailing list and local libraries.

The Morecambe Bay European marine site Management Group is a constituted body of 16 representatives of 13 relevant authorities. They have agreed to maintain this structure and review the management action plan for the EMS on an annual basis and report back on progress to the Standing Conference.

## **3. Methods of relevant authority and stakeholder participation**

***RA partnership-building approaches*** : Survey and monitoring initiatives have been developed on a partnership basis between EN and the RAs. For example, in partnership with the Environment Agency, aerial surveys have been carried out to monitor channel and saltmarsh extent changes, and trials of their Compact Airborne Spectrographic Imager (CASI) have been undertaken to investigate their value in mapping changes in distribution of saltmarsh and other vegetation over large areas. There has been development of a GIS system and sharing of data in partnership with RAs; and a Side Scan Sonar survey of seabed communities has been conducted in partnership with the Sea Fisheries Committee. Lancaster City Council used EN/EA photographs to map changes over time in the Kent Estuary,

providing valuable scientific data and creating wide public interest.

***Working with Morecambe Bay Partnership*** : A good working relationship between the LIFE Project Officer and the Morecambe Bay Partnership Project Officer benefited the development of the management scheme as close collaboration on several projects brought together different ideas, knowledge and experience.

***Relevant Authority contributions***: Each relevant authority writing their own annexes meant that from the beginning of the process they were focused on their activities and made to consider the impacts that they might be having. Gaps in knowledge and management were also identified. This direct involvement produced the feeling of ownership of the scheme, which has proved to be important in continuing their commitment.

The disadvantage of individual contributions was that although a proforma for creating the reviews was issued the individual writing styles of the representatives meant that it was difficult to achieve a level of consistency between the levels of detail that was provided. Consequently, the project officer undertook subsequent text writing. The level of relevant authority involvement was maintained through direct consultation on the wording and content of individual sections of the scheme.

***Individual meetings with RA's***: These were held particularly during consultation periods and proved to be extremely beneficial. They allowed for detailed discussion of comments, which ensured that all parties gained a full understanding of the points being made. The meetings were essential to gain agreement on points that involved multiple authorities e.g. actions that had to be agreed by both NWW and the Environment Agency. Such meetings promoted confidence in the scheme as the relevant authorities could see where their concerns were being taken on board.

***Newsletters and questionnaires***: These have played an important role in promoting the site, engaging the public and enabling interested parties to input their perspectives into the development of the scheme. Reaching a wide audience and keeping the public informed with progress proved to be a worthwhile exercise as it raised support and enthusiasm for the scheme and brought the importance of the Bay to the attention of a wide diversity of people.

Utilising the mailing lists developed by the Morecambe Bay Partnership and using their newsletter "Baywatch" as the vehicle for the public consultation of the scheme was very successful as it reached over 3000 people and achieved wide distribution of information.

***Informal networks***: Liaison between the LIFE project officer with colleagues on other European marine sites and contacts in external organisations and user groups worked well as a means of sharing ideas, giving advice and support and maintaining an overall perspective on how the management scheme was developing.

#### **4. Process and content of the management scheme document**

Morecambe Bay is used and managed by a wide range of organisations and user groups. There are various plans and strategies in place to manage activities within and around Morecambe Bay and these directly or indirectly include measures that will safeguard nature conservation interests. It was considered important that the management scheme should not duplicate effort or attempt to supercede existing plans and so where appropriate it makes reference to such strategies and takes account of timetabled actions from agreed programmes.

The relevant authorities and stakeholders have had a significant input to the development of the scheme from the beginning by taking part in the extensive consultations that were held to produce the

Morecambe Bay Strategy and in the discussions that were used to produce the conservation objectives and operations advice (Regulation 33). The relevant authorities writing the first reviews of their activities enabled them to consider the effectiveness of the existing management measures and see clearly where they fitted into the management scheme process. Close working between the project officer and the representatives from the relevant authorities has meant that they have all maintained a significant level of involvement through out the development of the scheme and have been instrumental in deciding on its content and presentation.

The coverage of activities, existing management and possible effects is comprehensive within the scheme. Information is displayed in tables that are easy to use and clearly set out what issues are associated with each activity and what the management solutions are. The action plan gives a detailed explanation of how the management solutions will be carried out and the timescale over which they will be implemented. An individual listing of the actions against each relevant authority has been produced so that they can easily focus on the actions they are responsible for completing, and to assist with the monitoring and reporting of the progress being made.

The management scheme seeks to effect the statutory and regulatory obligations, which flow from the European marine site status of the Bay in ways that as far as possible build upon the aims and objectives of the Morecambe Bay Strategy and Partnership. Through working closely with the Morecambe Bay Partnership during the development, consultation, launch and implementation of the management scheme it has been the intention to take account of users' views as fully as possible and develop wide support for the scheme and its action plan.

To date the scheme has been well received by the relevant authorities and users of the Bay and this is thanks in part to promoting nature conservation as a key element of sustainable development and quality of life and through a strong partnership process. There is a strong sense of local ownership of the European marine site that is being used to promote the region nationally and internationally.

## **5. Interpretation and publicity**

The GIS system developed in partnership with the Environment Agency and the Sea Fisheries Committee was a means of not only integrating and presenting data, but also an effective mechanism in promoting data sharing amongst RAs and stakeholders. A web site building on the GIS has also been developed, initially employing consultants, to promote stakeholder and wider public awareness. The map outputs from the GIS were also presented to the Management Group and the Advisory Group (MBP Standing Conference) to raise awareness generally.

Maps, sea life/aerial/archive photos, and artists drawings have been used to produce a high quality 36 page EMS Booklet: Secrets of the Sands, which was produced in consultation with a number of local users and for which a text writer was employed. The booklet gives a holistic view of the Bay and recognises the importance of social, economic and environmental sectors within the area. Eleven thousand copies were produced and distributed under partnership funding with the LA and a local industry.

An EMS Fact Sheet was also produced after consulting a wide range of users about what questions they would like answering. The Fact Sheet was produced in simple (folded A3, photocopyable ) format to promote network distribution.

Aerial photos of the whole site were digitised and sent out on CD to RAs and stakeholder groups. This was very well received and increased goodwill towards the EMS and EN.

The project officers have pursued several initiatives to raise interest and 'bring the sea floor to life'. A

local artist was commissioned to produce line drawings of subtidal and intertidal marine life which are found within the EMS. An underwater video was commissioned which included 15 minutes of footage collected by local divers, and narrated by one of them. Fifty copies of the video were produced to distribute to schools and user groups. A marine wildlife photographer was commissioned to take pictures of the Bay's wildlife interests for use in future projects.

Newsletters have been a simple but effective technique to promote the EMS and keep stakeholders in touch with progress. The use of a special edition of the Morecambe Bay Partnership newsletter "Baywatch" to publicise the development of the management scheme and gain the views of people around the Bay proved extremely popular and prompted a good response to the public consultation.

Presentations at two of the Morecambe Bay Partnership Standing Conferences by the project officer and representatives from the relevant authorities were a very effective way of communicating the importance of the management scheme, explaining the process and encouraging public participation. It was at one of these conferences that the management scheme was launched (see previous description). The launch was well attended and publicity for the event included press releases in the local newspapers and several interviews with the LIFE project officer on local radio stations.

There was a need for a popular summary version of the management scheme that would capture the imagination of the public and explain the management issues around the Bay in an exciting and attractive way and so a 12 page glossy document was produced – "Caring for Morecambe Bay". This was distributed using the Morecambe Bay Partnership mailing list and local libraries. The response from the public has been excellent with many people requesting further copies.

The projects website ([www.morecambebay.com](http://www.morecambebay.com)) includes a satellite image that allows you to zoom in to areas of the Bay, a wildlife map that reveals views of species and locations, a video room showing underwater footage from the Walney Channel and interesting facts and images of the Bay's bird and wildlife. The site has been updated since the production of the management scheme and the full and glossy summary documents can now be downloaded directly.