# Plymouth Sound and Estuaries European marine site: Case History

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

## A General description and features of conservation importance

- A.1 Plymouth Sound and Estuaries European marine site is a candidate Special Area of Conservation for the following Annex I habitats as listed in the EU Habitats Directive:
  - Large shallow inlets and bays
  - Estuaries
  - Sandbanks which are slightly covered by seawater all the time

Of the twelve rias in England, Plymouth Sound and Estuaries is the larger of only two sites being proposed as candidate SACs for large shallow inlets and bays. The ria systems entering Plymouth Sound (St John's Lake and parts of the Tavy, Tamar and Lynher), the large bay of the Sound itself, Wembury Bay, and the ria of the River Yealm are of international marine conservation importance because of their wide variety of salinity conditions, sedimentary and reef habitats. The high diversity of habitats and conditions gives rise to communities both representative of ria systems and some very unusual features, including abundant southern Mediterranean-Atlantic species rarely found in Britain. Examples of species at the site rarely recorded or near the limit of their distribution are the gold and scarlet star coral *Balanophyllia regia*, the crevice dwelling brittlestar *Ophiopsila aranea*, the nationally rare sea-slug *Okenia elegans*, the soft coral *Parerythropodium coralloides* and the pink sea fan *Eunicella verrucosa*.

A wide variety of estuarine habitats are represented in the rias, from large expanses of mudflats, saltmarsh and reedbed on the largest rivers of the Tamar and Lynher to the large sand bar at the mouth of the Yealm. The upper part of the Tamar and Lynher estuaries also include a very well developed estuarine gradient which has not been modified by the construction of locks or weirs. Consequently, they exhibit one of the finest examples of salinity graded communities in the UK. Rocky reefs in low salinity estuarine conditions far inland on the Tamar are very unusual, supporting rarities such as the hydroid *Cordylophora caspia*. The Yealm is almost entirely natural with a wide diversity of habitats, communities and species and in contrast to the Tamar, is characteristic of low freshwater input. Natural beds of the native oyster *Ostrea edulis* also occur on these estuaries, a species now rare in the UK.

Within the Plymouth Sound and Estuaries area, a full range of sublittoral sediments is found, from rich muddy sediments in lower ria areas to fine clean sands and shell gravels in the outer bay.

A.2 The Tamar Estuaries Complex qualifies as a SPA for the following nationally important populations of the regularly occurring species listed on Annex 1 of the Birds Directive:

- Avocets Recurvirostra avosetta
- Little egrets Egretta garzetta

The Tamar Estuaries Complex SPA comprises several estuaries bordering Devon and Cornwall and, in addition to little egrets *Egretta garzetta* and avocets *Recurvirostra avosetta*, the intertidal sandflats, mudflats, areas of saltmarsh and brackish marsh also support nationally important numbers of wintering and passage waterfowl, which are below those necessary for qualification under the SPA. These include shelduck (four year peak mean for 1990/91 to 1993/94 was 842 birds, representing 1.1% of the British population) and black-tailed godwit *Limosa limosa* (four year peak mean for 1990/91 to 1993/94 was 95 birds, representing 1.3% of the British population). Nationally important numbers of whimbrel *Numenius phaeopus* also occur in autumn (four year peak mean was 74 birds, representing 1.5% of the British passage population). In addition the site supports wintering dunlin *Calidris alpina*, curlew *Numenius arquata*, and redshank *Tringa totanus* in numbers that approach, and, in some years exceed levels of national importance (SPA citation January 1996).



### B. Socio-economic characteristics

The Tamar Valley is the largest estuarine system in the Southwest of England, supporting approximately 400 000 people within the catchment, plus a large number of visiting tourists and recreationalists. Waterborne activities include commercial shipping, ferry services, fishing (commercial and recreational) and a full range of recreational activities. There are 24 boatyards, 5 marinas, a Royal Naval Dockyard with a nuclear capacity, 3 commercial harbour authorities and the military port, 4 local and 2 county authorities. The site is thus relatively complicated, compared to other LIFE sites in the UK, with a broad spectrum of stakeholders.

In recent years, recreational pressures have been shown to be increasing dramatically. There has been a 200% increase in the numbers of moorings since 1975. A new marina development has recently been completed along with a new watersports centre facility. The National Sports Council identify the area as being of national importance, with many major events being held each year.

# C. Relevant and Competent Authorities

Cornwall County Council **Devon County Council Devon Sea Fisheries Committee** Environment Agency **English Nature** Ministry of Defence (Queen's Harbour Master) South West Water **Cattewater Harbour Commissioners** Associated British Ports Sutton Harbour **River Yealm Harbour Authority** Plymouth City Council Caradon District Council West Devon Borough Council South Hams District Council **Trinity Lighthouse** Ministry of Agriculture Fisheries and Food\* Countryside Agency\* The Kittly Estate\*

\* Competent authorities and landowners that have had a close involvement in the development of the scheme.

## D. Management structures

Local government plans published in 1992 for the administration and management of the Tamar estuary in the wake of the Ministry of Defence retrenchment created great controversy and bitter public opposition. When an Estuary Management Plan project officer was appointed in 1994, the relevant authorities were embroiled in a confrontational political process, where relations had deteriorated significantly. The challenge of building some

consensus about the need to balance economic, social, landscape and nature conservation objectives was met by the project officer and colleagues who were able to re-forge a management grouping into the Tamar Estuaries Consultative Forum (TECF). This was primarily achieved through an intensive programme of one-to-one meetings and discussions to improve relations and foster a partnership approach amongst the many relevant authorities. When the SAC proposals were first raised in 1995 TECF and its associated advisory panel the Port of Plymouth Marine Liaison Committee (PPMLC) were well placed to take the management scheme process forward.

These two existing structures were employed to deliver the EMS management scheme, along with the establishment of another Estuary Management plan and forum for an estuary not previously covered, the Yealm. The EMP's were thus invaluable in promoting a consensusbased partnership approach to management, preparing the ground for the EMS designation and providing the necessary management structures.

The single scheme of management for the Plymouth Sound and Estuaries European marine site is the result of an extensive consultation process initiated in March 1995 when the site was first proposed. Development of the single scheme of management has been supported and made possible through the work of the existing management structures of the:

- Lead Management Group Tamar Estuaries Consultative Forum: 16 Relevant Authorities (Queen's Harbour Master lead) Advisory Group - Port of Plymouth Marine Liaison Committee: 24 members with a hierarchical representation of 130 organisations
- Secondary Management Group Yealm Estuary Management Forum: 5 Relevant Authorities and a major landowner
- Advisory Group Informal network of stakeholders plus the Wembury Voluntary Marine Conservation Area Advisory Committee

## E. Key events

#### **Spring 1995 – Autumn 1996**

Consultations on the proposed SAC were initiated by EN in spring 1995. The site was confirmed as a candidate SAC in October 1996.

### July 1996

English Nature run workshop on the reasons for cSAC status and implications for relevant authorities. Presentation and workshop sessions attended by all relevant authorities, including brainstorming sessions regarding site usage, current management measures and possible damaging operations.

#### October 1996

Identification of Plymouth Sound and Estuaries cSAC as a LIFE Project site. Appointment of a project officer to manage the LIFE task 4.12 to develop a management plan for the Plymouth Sound and Estuaries cSAC.

#### November 1996

Adoption of the role of cSAC management and advisory groups, and responsibility for delivery

of the LIFE Project, by the existing forums of Tamar Estuaries Consultative Forum (TECF) and Port of Plymouth Marine Liaison Committee (PPMLC).

#### December 1996 to date

Presentations, by the project officer, to TECF, PPMLC and a wide variety of user groups to raise awareness of the cSAC, its interest features and implications.

### January 1997 to Jan 1998

Establishing a partnership of the relevant authorities and landowners involved in managing the Yealm Estuary and subsequently appointing a Yealm Estuary Management Plan Project Officer. Delivery of the Yealm Estuary Management Plan.

#### 1997 to 1998

Delivery of a contract to provide the Plymouth Sound and Estuaries Nature Conservation Review. The review draws together all known biological data for the area, highlights key interest features and is available in a written and digital format. The review formed the first step in the development of the GIS as a management tool.

### 1997 to date

The development of the GIS system, providing digital datasets on:

- Habitats and species
- Conservation designations
- Activities and site usage: recreational; dredging; moorings; fisheries; commercial etc.
- Aerial photography
- Land ownership
- Political boundaries
- Current management
- Local & structure plan policies

#### 1998

Series of one to one meetings with all relevant authorities and specific user groups, utilising the GIS system, to discuss:

- extent and location of interest features
- extent and location of activities and operations
- existing management measures and jurisdiction
- gaps in existing management
- possible areas of conflict between current usage and interest features
- possible management actions required

#### July 1999

Presentations to the management and advisory groups about the structure and content of EN's Regulation 33 advice package. Purpose to make them aware of the thinking behind the package and to ensure that a culture of 'no surprises' and openness was developed.

#### October 1999

Formal consultation on EN's Regulation 33 advice on conservation objectives and operations.

#### January 2000

Formal Regulation 33 advice provided.

#### February to July 2000

The existing Tamar, Yealm and Wembury management plans were revised to incorporate additional actions required for the cSAC. These plans were then used and drawn together to form the basis of the draft cSAC management scheme.

#### September 2000

Public consultation over the draft cSAC management plan

#### May 2001

Publication of finalised cSAC management plan. Web site/information gateway on-line.

### **F.** Budget and Resources

The costs associated with developing the management scheme are as follows:

Category	£k
Information collation	65.9
Project Officer – salary & T&S	46.8
Project Officer – overheads (accommodation,	Met by EN staff
training)	
Publicity and interpretation	4
Publication of management scheme	6
IT equipment	6.9
Total	129.6

### G. List of key documents

- Broadscale biological mapping of Plymouth Sound & Estuaries (1997)
- Tamar Estuaries Management Plan (1997)
- Yealm Estuary Management Plan (1998)
- The Plymouth Sound and Estuaries Nature Conservation Review (1998)
- Development of a monitoring programme and methods in Plymouth Sound cSAC: application of diver and ROV techniques (1999)
- Geographic Information System developed (1999)
- EN Regulation 33 advice (2000)
- Plymouth Admiralty Chart Environmental information & symbols (June 2000)
- Management scheme (May 2001)
- Website <u>www.tamar-estuaries.org</u> (May 2001)

# H REVIEW OF LEARNING

#### 1. Information to support management schemes

The Plymouth Sound and Estuaries cSAC is arguably one of the most studied areas in the UK, in terms of its marine biological interest. Which is at least partly because of the long established link between Plymouth and the Marine Biological Association (founded in 1884). However, there are gaps in the data and where information did exist it was widely scattered.

At the start of the LIFE Project it was decided that the most important task was to draw the available data together, identify gaps and where possible fill them. To do this a 'Nature Conservation Review' was commissioned. The quantity of information involved also identified the need to consider methods of managing it, and a decision was taken to develop and establish a Geographic Information System. The first couple of years of the project very much focused on gathering, interpreting and presenting both biological and contextual datasets.

Time invested in this data gathering exercise is considered well spent. It provided a sound basis from which to go on to discuss management measures, potential conflicts and not least to justify the sites nature conservation importance. It is hard to argue with accurate, well-presented scientific data. It also meant that while the focus was on developing a powerful management tool, there was no need to get bogged down in debates over the scope and content of 'conservation objectives' until EN policy had been more fully developed.

EN's advice on conservation objectives and operations was based firmly on the results of the Nature Conservation Review and the UK Marine SACs sensitivity reports. By the time, the advice package was written this information was readily available and facilitated the process.

Prior to formal consultation over the Regulation 33 advice, package one-to-one discussions were held with all relevant authorities. In addition, formal presentations were given to the management and advisory groups to explain the structure and content of the package prior to its distribution. It is thought that this approach helped develop trust and openness – honest open discussion prior to seeing anything in writing creating a 'no surprises' culture.

#### 2. Relevant authority and stakeholder structures

The management structures for the Plymouth cSAC were established primarily to meet local needs and aspirations. In short, the relevant authorities and stakeholders wanted to use their existing forums and stay within their existing area of interest/jurisdiction. This led to the division of the SAC into three, discrete, management units, as described below.

The adoption of Plymouth Sound and Estuaries as a candidate Special Area of Conservation (SAC) in 1996 saw the well-established management structure of TECF and PPMLC as being best placed to deliver the requirements of the Habitats Directive, and it was formally agreed that they would act as the management and advisory group of the European marine site. Locally this was seen as the best solution, to avoid the need to establish another forum, to avoid more meetings and reduce bureaucracy. It was also felt that the necessary knowledge and consultative mechanisms were already in place, particularly in light of the extensive consultations over the Tamar Estuary Management Plan.

Adopting the existing management structure had many benefits, but also resulted in an unusual, perhaps innovative approach to developing the management scheme. This involved using the Estuary Management Plan as the basis of the European marine site management scheme. This allowed for the use of all the data that had already been collated about activities, usage and users aspirations for the Tamar and Plymouth Sound. However, it also needed to incorporate the Yealm Estuary and Wembury Bay, that weren't included within the existing management structure. As discrete management units, and again in an attempt to deliver a management structure that was wanted by local users, it was decided that an Estuary Management Plan would be developed for the Yealm, to bring it in line with the rest of the site in terms of knowledge base and public involvement. A management plan already existed for the Wembury Voluntary Marine Conservation Area and it was agreed that it would be revised in light of the requirements of the SAC.

The benefit of this approach is the support it generates from relevant authorities and stakeholders. The downside being that it generates more work for the project officer coordinating the process and creates a slightly over complicated management plan. In hindsight, no other approach would have worked in Plymouth, but the project officer wonders if a more 'fit for purpose' structure wouldn't prove more beneficial in the longer term.

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

The Estuary Management Plan (EMP) had prepared the ground for the SAC proposals, through its consultations, meetings and discussions during development. As a result, the consultation over the SAC met with only three objections. One from Associated British Ports and followed a national level objection. The others were from two of the 350 private landowners within the catchment of the SAC. Considering the size of the site, this demonstrates well the benefits of the processes undertaken through the EMP.

*Relevant authority partnership-building approaches.* In addition to an intensive programme of one-to-one meetings, two workshops were held to support partnership building.

RA responsibilities workshop: held early in the SAC process to explain the responsibilities to the RAs. This was well received for two reasons. First, because of considerable efforts by the Estuary Officer to prepare the ground through face-to-face meetings had generated support, and second, because good communication with the EN head office that organised the workshop ensure that the presentation was sensitive to the audience ie. not overly legalistic in tone.

Participatory workshop: RAs participated in a successful workshop to identify Operations at an early stage in the SAC process, during which they were forthcoming about operations in the area and their potential impacts.

More recently, RAs contributed to and attended the second UK Marine SACs LIFE conference. This direct participation proved very beneficial.

*Stakeholder participation-building approaches*. The Advisory Group was adapted from a preexisting liaison group that had been established by the Queen's Harbour Master to discuss proposals concerning the Port of Plymouth. The liaison group was reformed with wider representation of all the interests in the area – each of the 24 representatives being responsible for providing a link to a broader range of users in a hierarchical manner. The main purpose of the AG is to provide feedback concerning the management scheme.

A variety of Participatory Rural Appraisal techniques were employed by the project officer with a broad range of recreation interest groups to determine how they used the area; what their concerns were; what they wanted from the area; and any possible conflicts with the SAC they might anticipate. The project officer also carried out a questionnaire survey to assess the opinion of 140 organisations with a variety of interest in the estuary.

General lesson from participatory processes for the site: The project officers stress the importance of promoting a political culture of openness without hidden agendas that could damage the process of partnership building, and stakeholder engagement.

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

As previously outlined, the Regulation 33 advice was developed after the 'operations and their impacts' were examined by the stakeholders and authorities (via workshops, one-to-one discussion). EN built on this information to develop their advice, which was generally well accepted by many of the stakeholders as their perceptions of the issues and impacts of the various listed operations were incorporated.

Five key management issues were identified through discussion with RAs and within the Regulation 33 advice:

- Anchoring within eelgrass beds
- Bait collection
- Contaminated sediments/TBT
- Dredging
- Diffuse nutrient inputs

It is of interest to note that one of these activities, dredging, became evident as a significant management issue because of a specific 'plan or project' during the development of the management plan.

The process of utilising existing management structures and plans meant that the above SAC management issues had to be adequately incorporated within them. The plans also had to identify which actions were as a specific requirement of the Habitats Regulations and which were for wider estuarine management, which has been achieved by the use of colour coding.

A benefit of using the existing estuary management plans in this way is that many wider conservation issues remain on the agenda, rather that the RA's focusing on just their statutory responsibilities towards the SAC.

#### 5. Interpretation and publicity

Press releases have been issued at all the key stages of the management scheme process. Press interest was particularly high when the LIFE funding announced and the launch of the Yealm Estuary Management Plan attracted a lot of publicity.

The Natura 2000, European Marine Sites booklet and other UK Marine SACs LIFE products

have proved very useful and have been widely distributed through PPMLC and TECF.

Existing and new information concerning the SAC, including the distribution of conservation features and of operations have been put on to the GIS. The outputs were effectively used to demonstrate management issues and the rationale behind the objectives and operations advice to RAs and other stakeholders.

Numerous talks and presentations have been given to user/interest groups, local authorities, students etc. In the early stages of the process, this method proved very useful particularly with local groups such as RYA and BMIF, to actively involve them in the process and make them feel that there is an open line of communication.

The annual 'Plymouth Water Events Diary' has been used to disseminate the progress and aims of the management scheme. Ongoing and new interpretation initiatives have also been used to inform and promote the SAC, for example: New interpretation centre in the old Coast Guard building at Rame Head; Waterfront Walkway Project which included new access signage throughout the whole site; information boards in the National Marine Aquarium; revised interpretation facilities at the Wembury Marine Interpretation Centre.

A pilot project involving the Hydrographic Office culminated in the production of a new Admiralty chart of Plymouth Sound that included information and symbols to inform mariners about the SAC and its nature conservation interests. This work should provide valuable information to water users for several years to come.

For the future, the web site will continue to develop and provide more and better information to an increasingly large potential audience.