Integrated Management of Strangford Lough, Co. Down - UK

1. Policy Objective & Theme

- ADAPTATION TO RISK: Preventing and managing natural hazards and technological (human-made) hazards
- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space
- SUSTAINABLE ECONOMIC GROWTH: Balancing economic, social, cultural development whilst enhancing environment

2. Key Approaches

- Integration
- Participation
- Knowledge-based
- · Ecosystems based approach
- Socio-economic
- Technical

3. Experiences that can be exchanged

Building good working relationships between regulators and users to avoid conflict amongst all relevant stakeholders. Given the high conservation value of the site and its importance to the local economy in terms of tourism, recreation, fisheries and aquaculture it was necessary to develop a management strategy which integrated both environmental interests with appropriate economic and recreational development.

4. Overview of the case

The development and operation of Strangford Lough Management Advisory Committee (SLMAC), an independent advisory committee appointed by Government to advise on the strategic management of Strangford Lough, represents an innovative and inclusionary management approach to one of the most heavily designated marine conservation sites in Europe. The Committee represents local and specialist interests in the development, interpretation and adaptation of legislation. It promotes strategic, co-ordinated management designed to protect the environmental resource while encouraging appropriate economic and recreational activity.

5. Context and Objectives

a) Context

Strangford Lough is a large (150km2) marine inlet on the east coast of County Down, Northern Ireland. Its northern end lies some 15km east of Central Belfast (6km from the outskirts). Downpatrick lies 5km west of the south west corner. This sea inlet is made up of a drowned drumlin field which is for the most part less than 10m. in depth and a deeper channel which is up to 66m. deep. Strangford Lough supports an impressive range of marine habitats and communities with over 2,000 recorded species. It is important for marine invertebrates, algae and salt marsh plants, for wintering and breeding wetland birds, and for marine mammals. It has numerous international, European and national designations attached to it including Ramsar wetland site of international importance, SPA, SAC, Area of Special Scientific Interest (ASSI), Area of Outstanding Natural Beauty (AONB), Marine Nature Reserve as well as a number of National Nature Reserves surrounding its shores. Given the Lough's importance for fisheries and aquaculture there are also a number of legislative requirements relating to this (e.g. designated

shellfish waters, bivalve mollusc production area). It is an important archaeological site with settlements dating back over 9000 years. Today the area is used for recreation (including water sports, shooting, angling, riding, walking and wildlife watching), for shellfish culture and commercial fishing, for effluent disposal and for field studies and scientific research. About 60,000 people live around its shores and about one million people live within one hour's drive.

b) Objectives

In 1998, the Strangford Lough Sustainable Development Strategy was commissioned. It highlights the need to monitor and regulate some activities to maintain the balance between the desire for economic growth and the need to conserve the Lough's natural resources. In order to ensure that the relevant authorities and Lough users were aware of the Conservation Features designated, under the Special Area of Conservation and Special Protection Area, and the need to protect them, the Department of the Environment (DOE) with the assistance of the SLMAC's Office in Portaferry developed the Strangford Lough SAC / SPA Management Scheme, which was formally launched in October 2001.

6. Implementation of the ICZM Approach (i.e. management, tools, resources)

a) Management

The Strangford Lough Management Committee was established in 1992 to provide advice to Government at a strategic level. While the Committee has no executive role in the management of the Lough it works with bodies that have such responsibilities e.g. the National Trust. The Committee has members from approximately twenty organisations at government, NGO and stakeholder level. In 2001, this was changed to the "Strangford Lough Management Advisory Committee" to emphasise its non-executive advisory role. The full Committee meets once every two months. Much work is carried out between these meetings through smaller Working Groups that may also involve people from outside of the Committee who have specialist knowledge or expertise. During the period 2001-2004, for example, there were separate working groups on planning, environmental monitoring, emergency pollution incident response and aquaculture / fisheries. The DOE also set up a Liaison Group for the relevant authorities involved in the Lough's management which also meets once every two months.

b) ICZM tools

Given the variety of conservation and development interests around the Lough it was necessary to develop a management approach which was all encompassing - incorporating planning and development issues, biodiversity conservation and existing legal designation and policy obligations. Widespread participation in all three management initiatives (the Strangford Lough Management Scheme, the Liaison Group of Statutory Authorities and the Strangford Lough Management Committee) has resulted in an integrated and participatory approach to management of the Lough. Specifically in relation to conservation interests, the Management Scheme sets the framework through which activities are managed, either voluntarily or through regulation, so as to achieve the conservation objectives of the European Marine site. The management scheme has been developed to identify the conservation features that have to be protected, set the standards to which the features should be maintained and clarify where statutory responsibilities lie for different aspects of the Lough's management. An essential part of this scheme focuses on monitoring wildlife and identifying where further information is needed and / or action is required to manage activities in consultation with local interests.

A key tool in this regard has been the development of a dedicated Strangford Lough GIS system. Data available includes physical features, climate, biology and human structures and activities. Work is on-going to develop the system and the intention is that the various authorities and key stakeholder organisations will be able to use information from many different sources in their decision-making and consideration of issues regarding the Lough's management. These include aquaculture, coastal defences, coastal recreation and spread of invasive species, pollution, and commercial developments. The Strangford Lough (SLMAC) Office has also produced a guide to legislation and regulation relevant to the Lough for use by key authorities and stakeholders and the intention is to produce a publicly accessible summary.

7. Cost and resources

No information is available.

8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

The Committee has had input to the drafting of legislation and regulations concerning, for example, notification procedures relating to Areas of Special Scientific Interest and the prohibition of mechanical methods of harvesting shellfish. The Committee has made a number of submissions on proposed development plans raising awareness of both potential positive and negative impacts. The Committee also progressed proposals to improve aids to navigation in the Lough.

9. Success and Fail factors

A comprehensive monitoring programme was one of the commitments undertaken by Government in the Strangford Lough Management Scheme. Routine monitoring was already being carried out by the Department of Agriculture and Rural Development (DARD) to assess the impact of commercial fishing on seabed communities. This did not detect any changes in horse mussel (Modiolus modiolus) beds, which form bio-genic reefs and represent a major feature of scientific interest in the Strangford Lough SAC. Techniques used in the DARD surveys could not distinguish between dead shells and living organisms. Concerns arose locally as to the status of these mussels and dives were undertaken on behalf of Environment and Heritage Service (EHS) [now Northern Ireland Environment Agency – NIEA]. These confirmed that there had been a collapse in the populations at several sites in the Lough. The Government then introduced a temporary ban on fishing with mobile gear as part of its efforts to conserve remaining beds. While it is not known whether the decline could have been reversed or slowed down, the reality is that even the most basic environmental information was not available to guide the management of the fishery and / or other relevant activities. Current concerns include the decline of common seals and the lack of control of shore-based shellfish collection around the Lough.

Despite the efforts that have been made to improve integration and the implementation of management the SLMAC and the statutory authorities have concluded that improvements could be made to the management structure. Recommendations arising from a Chance to Change report prepared by Europarc consultants, commissioned by the SLMAC and with financial assistance from the NIEA, local councils and the National Trust, are currently under consideration. In particular it is hoped that a Management Plan which integrates socio-economic objectives with conservation objectives and which has clearly defined achievable objectives to which authorities and key stakeholders are committed through a Memorandum of Understanding will be an improvement upon the current system.

10. Unforeseen outcomes

The Strangford Lough Information Network (initiated by the Strangford Lough Management Advisory Committee) won both the education category and the overall prize in the Web Awards Northern Ireland 2001 for the design and content of its website about the Lough. This website is currently being re-developed to make it more user friendly and to introduce new features. An interactive CD about the Lough was launched at the 2003 Spring-Clean Event, and has proved very popular among teachers and school children. This high level of environmental awareness should bode well for future sustainable management of the Lough and its environs.

More recently the SLMAC has embarked on a £0.5m programme to engage the general public with their heritage. This is to address feedback from surveys which indicated that while some people are very engaged and knowledgeable many are surprisingly ambivalent about the Lough's heritage and its future. The work includes: getting young people from towns and villages around the Lough to try out water based recreation, developing an archaeology trail, a literary trail, contributing to community based activities etc. Following destruction to approximately 15 acres of National Trust-owned intertidal lands along the shore of Strangford Lough, the Environment and Heritage Service (EHS) recognised that the current management arrangements were not suited to incidents which occurred outside normal working hours. In this instance, the damage had occurred over a bank holiday period when no staff were on duty. In order to address this problem the EHS launched a 24 hour phone line for reporting environmental incidents. This was accompanied by better and more environmental signage/information explaining the value of the site.

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13. Sources

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- Scott Wilson Resource Consultants. 1998. Strangford Lough Sustainable Development Strategy. Prepared November 1998 on behalf of Ards Borough Council, Down District Council, Environment & Heritage Service, Northern Ireland Tourist Board, Planning Service, and the Sports Council for Northern Ireland, with advice from the Strangford Lough Management Committee and consultation with local interests.
- www.strangfordlough.org



Strangford (247.16 KB)



Strangford Info Booklet (602 KB)



Strangford Report(4) (1.31 MB)



sustainable development strategy (29.4 KB)