

Irish Sea Pilot

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A Trial of Regional Sea Management
for Nature Conservation

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Irish Sea Pilot Web Site

This holds the pilot specification, progress with the work programme, outputs, reports, steering group membership, papers and links to related initiatives. Go to:

<http://www.jncc.gov.uk/irishseapilot>

A Whole Ecosystem Approach to Regional Sea Management

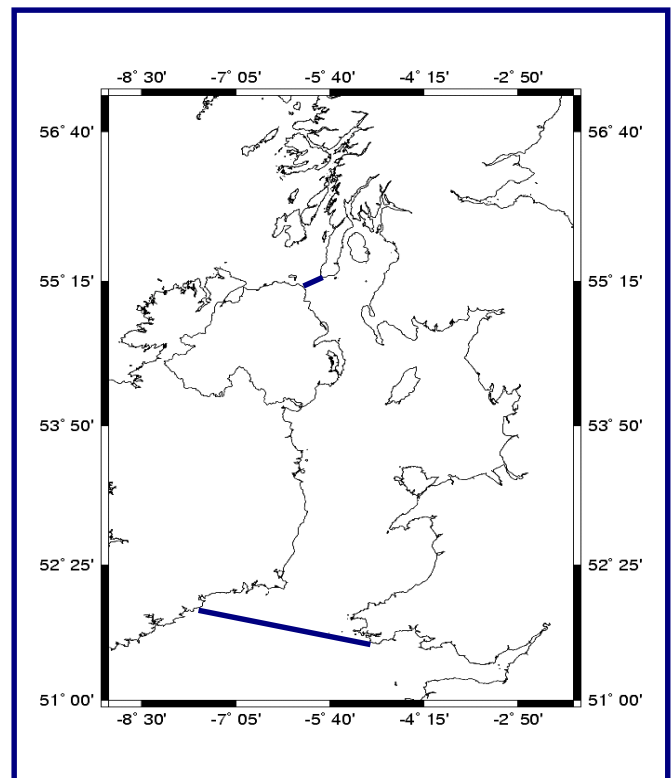
The Pilot is funded by DEFRA until March 2004 to 'pilot test' a new 'marine nature conservation framework' (see page 2) developed by the UK statutory nature conservation agencies for the Review of Marine Nature Conservation (RMNC). The framework is designed to apply the 2 principles of using a whole ecosystem approach and managing the sea at a regional scale. As far as possible, the pilot will cover the whole Irish Sea so the advice and involvement of the Government of Ireland, the Isle of Man and all the devolved administrations of the UK will be very important. The Pilot aims to deliver one of the main recommended actions in the Interim Report of the RMNC (March 2001).

Sustainable development: The pilot will seek ways of improving the integration of nature conservation with the activities of other sectors. It aims to determine the potential of existing legislative, governance and enforcement systems for delivering marine nature conservation effectively. Gaps and inconsistencies will be identified and the pilot will make recommendations on how to adapt and simplify the existing framework thus making a contribution to our understanding of how to manage regional seas more sustainably using a whole ecosystem based approach.

Pilot Boundaries Agreed

Following a stakeholder consultation in September, working geographical boundaries of the Irish Sea pilot have been recommended and endorsed by the Steering group, as shown here. They are drawn as follows:

1. to the south, through the St. Georges Channel from Linney Head, Wales to Mine Head, Ireland
2. and to the north, through the North Channel from Mull of Kintyre in Scotland to Fair Head in Northern Ireland.



Recommended boundaries for the Irish Sea Pilot following stakeholder consultation.

Governments of Ireland and the Isle of Man to supply data for the Pilot

At meetings in the Isle of Man and Ireland, the pilot project team found common ground on the need for improved nature conservation in the Irish Sea and for regional sea management of the marine environment using a whole ecosystem approach. Staff from Dúchas the Heritage service of the Department of the Environment and Local Government, The Department of Communications, Marine and Natural Resources and the Marine Institute in Ireland, and in the Isle of Man, from the Departments of Agriculture, Fisheries and Forestry, Local Government and Environment, Transport, Trade and Industry, Manx National Heritage, Marine Administration, Tourism and the Port Erin Marine Laboratory all expressed their interest in the Irish Sea Pilot. There was broad agreement to review data holdings and consider how information could be exchanged and made available to the pilot.

The Governments of Ireland and the Isle of Man have agreed to contribute their advice to the pilot through representation on the steering group and to consider how the pilot could consult Irish Sea stakeholders in these countries on issues thrown up by the pilot and on its outputs and recommendations.

A nature conservation rationale for the chosen boundaries

Why the Irish Sea? The Irish Sea with its semi-enclosed geography is one of the more recognisable and ecologically distinct regional seas around the UK. It has a wide range of stakeholders and activities and management requires the involvement and agreement of all the devolved administrations of the UK and Ireland as well as the Isle of Man. Taking account of the interests of all these administrations will be especially challenging.

The Irish Sea contains habitats, and species populations that would benefit from improved regional scale conservation such as inter-nationally important populations of sea birds, fish and cetaceans, particularly the bottlenose dolphin. The Irish Sea is a summer feeding area and ecological corridor for species such as basking shark and leatherback turtle.

A number of commercial fish stocks in the Irish Sea such as cod, whiting and sole are over exploited and now considered by scientists to be outside safe biological limits. The Dublin Bay prawn (*Nephrops*) is the most valuable fishery in the Irish Sea but it is being harvested to capacity. There are increasing development pressures from industries such as oil and gas, transport, renewable energy, pollution (especially nutrient enrichment), shipping and tourism. The 'whole ecosystem' theme of the pilot is about promoting the maximum sustainable development of all these activities in tandem with effective protection for the unique wildlife of the area.

The boundaries of the pilot need to reflect, as far as possible:

- ecosystem-based, ecologically meaningful subdivisions of the wider sea
- The distribution of natural resources and the way wildlife uses the sea area
- The socio-economic uses made of the area by the people living on the Irish Sea

In practice the boundaries of the pilot will be 'fuzzy'. The 20 or so responses received showed that wherever the boundary is placed, ecological processes, species movements and human activities will cross the lines. The main purpose of identifying boundaries is to define the geographical area for data gathering and mapping and to examine the issues associated with defining the boundary of a regional sea. For our purposes the priority issue of nature conservation was an important factor leading to the inclusion of much of the Pembrokeshire SACs and the Firth of Clyde. The distribution and movements of some significant nature conservation interests such as basking shark, leatherback turtle and sea bird species seem to indicate that this is a fairly continuous ecosystem.

Irish Sea data acquisition gathering pace: The compilation of data and information about the Irish Sea is a main task, which must be undertaken with the help of partners and stakeholders. The information gathered will be analysed on a dedicated GIS now being set up. Preliminary studies have identified broad information requirements with details of data ownership, availability and format.

Data task: the pilot will:

- Collate and map existing essential information on the physical and biological character of the Irish Sea,
- Collate essential information on the use of natural marine resources by human communities dependent on the Irish Sea for food, employment, energy, transport, minerals, recreation and enjoyment, etc.

The data will be used to:

- Classify and divide the Irish Sea into ecological units (marine landforms) using a classification system which is being developed for the Convention for the protection of the marine environment of the NE Atlantic (OSPAR) for the North East Atlantic;
- Map the key marine protected areas and the nationally important habitats and species.

The data review has to be done urgently so we can complete the identification and mapping of ecological units and then select the nature conservation features (sites, habitats, species etc) of national importance. We are making significant progress with acquiring the highest priority biological, hydrographical and protected areas data. By the end of October, we have seabed sediment and bathymetry data, as well as other physical parameters such as fronts and salinity. We are discussing the fisheries data requirements with Centre for Environment, Fisheries and Aquaculture Science (CEFAS) and the most appropriate format for transfer. A short contract will capture available benthic data.

Marine nature conservation information held by JNCC includes biodiversity habitats, images from the Irish Sea Seabed image archive (ISSIA), Northern Ireland data captured by Marlin and MNCR records currently being transferred to the marine recorder database.

Most designated area data for UK Ramsar, Natura, SSSI and National Nature Reserves in the marine environment are already held in JNCC. CCW and SNH will help fill any gaps. JNCC also has protected area data for Northern Ireland and Natura, Nature Reserves and National Parks for Ireland. These data, currently in a variety of different formats, with different projections and with different attributes attached will be converted to a common format, and Irish Sea specific datasets will be created.

Human activities data is being gathered separately and information is largely complete for much of the Irish Sea for fisheries over-flight (fishing intensity indicator) information, fisheries stock/catch/landing statistics, oil & gas structures and licences and pipelines.

The next priorities include development consents, Crown Estate licence areas, Marine inputs (pollution etc), shipping, Military areas and activities, mariculture and offshore wind energy generation. We aim to complete the collation phase of high priority human activities data for UK waters by 22 November, with data for Irish and Isle of Man waters following later. Considerable processing of some data obtained in non-GIS form may be needed such as for much of the fisheries statistics. All data will be subjected to a quality assurance exercise to ensure it accords with the records of stakeholders and users.

We are conscious that some data for activities which are likely to have less significant impacts on the nature conservation interests might also be useful for example recreational activities such as water sports and sub-aqua diving sites. If time and resources permit we will consider how to acquire these data later.

A Nature Conservation Framework for the UK's Marine Environment

The new framework' which the pilot is testing was developed by the UK Conservation Agencies for the Review of Marine Nature Conservation (RMNC). The framework is designed to apply the 2 principles of using a whole ecosystem approach to managing the sea at a regional scale. The framework considers the sea at four scales:

- i. **The whole sea** from high watermark to the limits of UK jurisdiction, should be maintained in a healthy state;
- ii. Ecologically distinct '**regional seas**'. The Irish Sea would be one such Regional Sea. The map shows possible regional seas around the UK
- iii. **Ecological units/Seascapes** within regional seas should be identified in terms of areas of discrete seabed, landform, substrate type or water column feature;
- iv. **Specific areas of national importance** for the maintenance of marine biodiversity within regional seas and ecological units will be identified; in particular areas necessary to sustain populations of nationally-important habitats or species.

For each of the four component scales, the framework proposes that objectives will be set with the agreement of stakeholders. The sectoral authorities responsible for regulating marine activities will endeavour to achieve these objectives as they carry out their functions.



Regional seas in UK waters: a suggested division derived from ICES and OSPAR areas by JNCC for discussion.

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The proposed marine nature conservation framework is set within the wider context of the Government's policies on sustainable development, and, in particular, the Marine Stewardship Report launched in May 2002. In consequence, objectives set under the framework should be compatible with meeting the needs of people, (for food, employment, energy, minerals, transport, recreation and enjoyment, as well as for wildlife), both now and in the future. This means having due regard to the needs of a range of national stakeholders and local communities.

In its later stages the Pilot project will assess whether the current mechanisms of regulation, regulatory responsibility and enforcement in the marine environment are adequate to deliver these objectives and, if not, what measures could be taken to achieve this. It will then make recommendations about whether the proposed marine nature conservation framework needs to be modified or refined before being adopted for future use in other Regional Seas, and on other changes that may be needed to ensure the framework can be implemented effectively.

The full description of the framework is set out in an English Nature research report available on the web site.

Events	Linked projects
<p>There will be progress reports on the Irish Sea pilot at a number of conferences in coming months:</p> <p>October 31: Scottish Marine Group in Stirling</p> <p>Nov 14: Marine Stewardship and ICZM, London. The purpose of this event is to discuss how the Marine Stewardship process is developed and how the EU recommendation on ICZM will be implemented in the UK.</p> <p>Jan 23: Coastal Futures London</p> <p>The next meeting of the RMNC is on Wednesday 13 November in London for Working Group members.</p> <p>The next meeting of the pilot steering group is Wednesday 11 December in Edinburgh to be followed by a stakeholder workshop on 12 December.</p>	<p>Scottish Sustainable Marine environment Project</p> <p>A major new study into Scotland's marine environment was announced on 17 October 2002. The Project will be financed by £250,000 from the Scottish Executive, using funding from the Scottish share of the Aggregates Levy.</p> <p>It aims to produce recommendations to ensure the sustainable use of marine resources, including fisheries and renewable power generation, and will also develop a framework to involve local communities in piloting new approaches to sustainable management.</p>

Contacts

The pilot team want to build 2 way contact with stakeholders at local, regional, national and international levels. We see the main 'customers' of this project as organisations that have an economic, policy or environmental interest in the Irish Sea. A database of mainly national and regional level Irish Sea stakeholders has been created and new entries are welcome. This will be used as the contact list for consultations, newsletters and other communications. We would like to use e-mail as the main means for circulating information but please let us know if you would be excluded by this medium.

The Pilot started in May 2002, and aims to finish in March 2004. The project Director is Dr. Malcolm Vincent from JNCC in Peterborough, a team of 3 JNCC staff is based in the English Nature, Kendal office.

<p>Steve Atkins (Team Leader) from Scottish Natural Heritage has a background of marine ecology and helping to set up regional scale ICZM programmes for the firths and estuaries of Scotland.</p> <p>01539 792832 steve.atkins@jncc.gov.uk</p>	<p>Chris Lumb (Senior Officer) is a marine biologist with long experience as an English Nature conservation advisor specialising in marine issues.</p> <p>01539 792818 chris.lumb@jncc.gov.uk</p>	<p>Karen Birleson (Administrator) a database designer with a biology background.</p> <p>01539 792800 karen.birleson@jncc.gov.uk</p>
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Specialist support with data and information management and GIS is provided at JNCC HQ, Peterborough by:

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