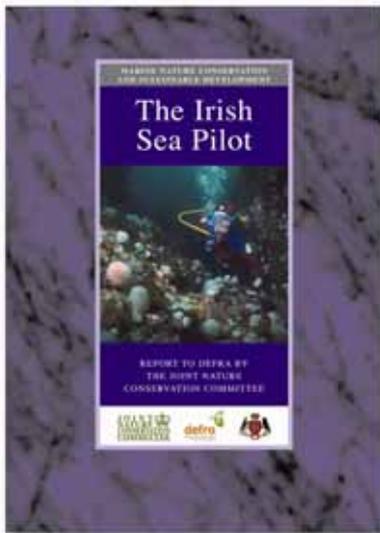


Irish Sea Pilot

A Trial of Regional Sea Management
For Nature Conservation

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www.jncc.co.uk/irishseapilot



Marine nature conservation and sustainable development'

The Pilot's report to Defra, published in April 2004 makes 64 recommendations to provide a better framework for marine nature conservation in UK waters. It proposes a new governance regime to improve the planning, regulation and enforcement of activities that impact marine nature conservation. New legislation to protect nationally important marine areas, habitats and species is recommended.

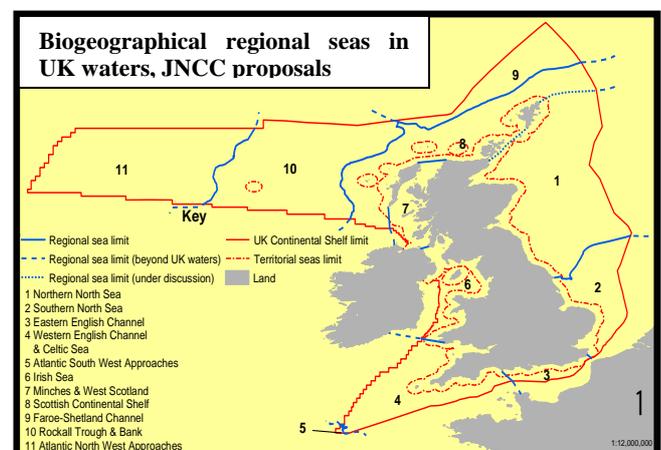
Some highlights from the Pilot's report

Marine spatial planning: A comprehensive cross sectoral system of marine strategic and spatial planning would protect the sea from inappropriate development in the way that the terrestrial planning system was designed to do for the land more than half a century ago. It would also provide a framework for improved management of human activities and enforcement of regulations.

New legislation would be required to implement a marine spatial planning system in UK waters. Detailed proposals for how this could be done commencing with a trial which would build on the Pilot's work so far, are described in a separate report. (Tyldesley, 2004).

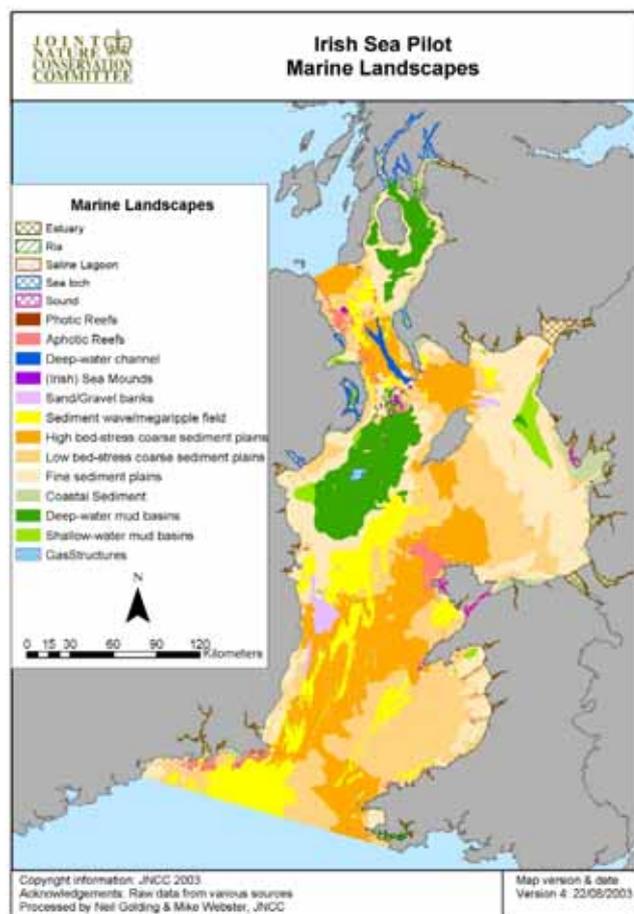
Regional Seas and Marine Landscapes: JNCC has demonstrated that UK seas can be divided regionally using biogeographical data as shown below. The Pilot's experience indicates that regional seas are the right order of scale at which to plan and manage the sea. There is an international dimension to most regional seas in

UK waters so further development of management schemes requires agreements with other countries on a regional sea structure and action needed. A policy framework at the European level to support regional sea management would provide much of the impetus needed.



The Pilot would like to see regional sea proposals developed as part of the European marine strategy. Management could be based on

cross-sectoral management fora using an ICZM model. The Pilot's work offers a springboard for this type of development in the Irish Sea.



Regional seas can be further classified into 'marine landscapes' using mainly geophysical and hydrographical data. This classification provides an overview of how the main ecosystems in the sea are distributed; a sort of *countryside map* of the marine environment. 18 seabed landscape types and 4 water column types are defined for the Irish Sea.

Marine landscapes offer a backdrop of broad habitat types within the regional sea for spatial planning and a guide for setting zoning policies and nature conservation objectives. We found that there are a number of seabed landscapes that are rare in the Irish Sea with 7 types including reefs, sea mounds, deep water channels and gas structures each covering less than 0.5% of the total area. These landscapes are vulnerable to damage, particularly from towed fishing gear. Specially targeted conservation measures are likely to be required for their long term protection.

Marine landscapes offer a potentially useful backdrop for regional scale spatial planning to

guide nature conservation policies and help set objectives. The classification could be extended to other UK regional seas.

Biodiversity and conservation objectives:

Nationally important biodiversity of the Irish Sea was identified from ecological data. Criteria for the selection of features were prepared by a JNCC led expert group and these criteria were tested using 25 habitats, species and landscapes. There are about 8000 species of macro fauna and flora in the seas of the UK and of these we estimate that around 170 species in the Irish Sea are nationally important. This list would probably extend to approximately 300 nationally important features (species, habitats, landscapes) throughout all UK waters. The pilot recommends that Ministerial duties should be created to maintain lists of nationally important marine features and promote measures for their protection and recovery.

The Government set strategic goals for the marine environment in its Marine Stewardship report in 2002. From these, the Pilot has created a framework of conservation objectives for integration with social and economic objectives to achieve sustainable development. The objectives focus on actions needed to ensure recovery of the sea and its components, to a healthy ecological state.

Protective measures for important marine nature conservation areas:

A new strategic and spatial planning system for the sea, together with improved environmental governance made up of statutory regulations and voluntary agreements will help protect the ecosystem structure and function of UK seas. In addition sites protected under the EU Natura Directives and OSPAR will contribute to recovering and sustaining some (but not most) nationally important landscapes, habitats and species. However, protection from damaging activities may also be inadequate for some features.

Ecological coherence is important

The Natura 2000 site series in itself is unlikely to create an 'ecologically coherent' site network covering all nationally important features. This would require an area and distribution of sites that is sufficient in total to sustain species and habitats in perpetuity and ensure natural ecological function throughout the regional sea. Ecological coherence requires that sites are large

enough to incorporate the full spectrum of biological diversity, not just rare or endangered species; and spaced so that they are mutually supporting; that is they are within the dispersal range of the constituent species. As far as possible, replication of habitats in separate areas is essential as insurance against loss and to maintain ecological function.

New legislation and duties on public agencies are needed to cover the selection and proper management of an ecologically coherent network of marine protected areas. This legislation would enable the UK Government to deliver international commitments under OSPAR and the World Summit on Sustainable Development (WSSD).

In order to set conservation objectives and measure progress towards them, we must be able to understand the natural characteristics of undisturbed populations and ecosystems. Acquiring this knowledge depends on direct measurement of near-natural populations in relatively un-impacted areas. The extent of damaging fishing activities impacting the Irish Seabed, means that we are unable to identify areas which are free from periodic damage. Thus, we cannot assess what the marine environment could be like in the absence of exploitation. National protected marine sites will be needed, both to represent important features in conditions which are as near natural as possible and to ensure comprehensive protection of biodiversity interests in the foreseeable future. Protected areas would enable controlled impact tests to be undertaken, under research conditions, and the benefits of management approaches to be scientifically and quantitatively assessed.

However the level of protection for protected areas and sites should not be unnecessarily restrictive. Regulations should be designed specifically to achieve the conservation objectives and any wider purposes of the site.

The Irish Sea Pilot published report is available from:

**Defra Publications, Admail 6000
London, SW1A 2XX.
T: 08459 556000**

And online at: www.jncc.gov.uk/irishseapilot

Implementation of recommendations: Some priorities for action.

The Review of Marine Nature Conservation (RMNC) commenced in 1999 and will report in 2004. It has been the first comprehensive review of UK marine nature conservation and is unlikely to be repeated for many years.

It has made valuable progress. Marine responsibilities, jurisdictions and boundaries are more widely understood, and marine nature conservation legislation, enforcement and governance are better documented. Sea users can now have a good understanding of issues that must be addressed and how the planning and management of the sea needs to be developed.

At a strategic level the Pilot identified the legislation and governance it considered would

The Pilot's priorities for action

- 1. A trial of marine strategic and spatial planning;**
- 2. The establishment with appropriate management of an ecologically coherent network of protected areas in all UK seas;**
- 3. Environmental appraisal and effective control of fishing with reductions in bycatch and discards;**
- 4. Maintenance and improvement in the ecological status of inshore waters, with reduced incidence of pollution;**
- 5. Systematic, effective surveillance and monitoring of the state of the marine environment and the impacts of human activities;**
- 6. Better arrangements for the collection, management and public availability of data;**
- 7. More effective enforcement of marine legislation.**

be required to implement improved measures for marine nature conservation. Further work is needed in key areas such as to further test the potential of international partnerships between governments for regional sea management. The Pilot recommends that a trial of marine spatial planning should be undertaken which could build on the experience and networks created by using the Irish Sea as a test area. The development of robust methods for selecting and protecting an ecologically coherent network of special areas that are in harmony with sustainable development is also needed. Policy advice is required at both the EU and national level urgently in these areas of work so progress in the short term is highly desirable.

The Pilot draws conclusions and makes recommendations in relation to a wide range of matters which are highly relevant to the future conduct of marine nature conservation within the overall context of the Government's policy on Sustainable Development. The Pilot report is, first and foremost, a report to the Government's current Review of Marine Nature Conservation (RMNC), although we hope that its findings will also contribute to current discussions on the management of the marine environment within Europe and more widely.

The RMNC is currently drawing up its final report to Government. The Pilot's recommendations to the RMNC are intended to address the marine nature conservation needs of the United Kingdom in both the medium and longer term. Implementation of its recommendations by extending or developing existing measures and mechanisms may be possible in some cases, but the option of taking a more radical approach, which would consolidate, clarify and simplify existing legislation and management systems, and make them more effective, could prove attractive. The RMNC Report is likely to give further consideration of these important issues in the wider context of the other current reviews relevant to the marine environment which have been undertaken or are about to report.

A library of outputs

The Irish Sea Pilot report is available on line through the Pilot's website and as a published report from the Defra publications address above. A great deal of new research was undertaken in support of the Pilot, both by staff of the JNCC and through external consultants. The table lists the separate published reports, all of which are available from the Pilot website.

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Reports from the Irish Sea Pilot
➤ Boyes, S, Warren, L & Elliott, M, 2003. <i>Summary of current legislation relevant to nature conservation in the marine environment in the United Kingdom</i> . Report of the Institute of Estuarine and Coastal Studies, University of Hull for JNCC.
➤ Boyes, W, Warren, L & Elliott, M, 2003. <i>Regulatory responsibilities and enforcement mechanisms relevant to marine nature conservation in the United Kingdom</i> . Report of the Institute of Estuarine and Coastal Studies, University of Hull for JNCC.
➤ Boyes, S & Elliott, M, 2003. <i>Effectiveness and weakness of enforcement in the UK Marine Environment: Responses to Questionnaire</i> . Institute of Estuarine and Coastal Studies, University of Hull for JNCC.
➤ Dryden, C, Holt T J, & Davies S, (2003). <i>Summary of current legislation relevant to nature conservation in the marine environment in the Isle of Man</i> . Centre for Marine & Coastal Studies The University of Liverpool Marine Laboratory, Port Erin, Isle of Man, IM9 6JA. Report for JNCC and Isle of Man Government.
➤ Dryden, C, Holt T J, & Davies S, (2003). <i>Regulatory responsibilities & enforcement mechanisms relevant to nature conservation in the marine environment in the Isle of Man</i> . Centre for Marine & Coastal Studies University of Liverpool Marine Laboratory, Port Erin, Isle of Man, IM9 6JA. For JNCC & Isle of Man Government.
➤ Furze, M, 2003. <i>The Conservation of Nationally Important Marine Geoscience Sites: a feasibility study</i> ; Centre for Applied Marine Science, School of Ocean Sciences, University of Wales, Bangor, for JNCC
➤ Golding, N, Vincent, MA and Connor, DW, 2004. <i>Irish Sea Pilot - A Marine Landscape classification for the Irish Sea</i> . JNCC, Peterborough.
➤ Lieberknecht, LM, Carwardine, J, Connor, DW Vincent, MA, Atkins, SM & Lumb, CM, 2004. <i>The Irish Sea Pilot, Report on the identification of nationally important marine areas in the Irish Sea</i> . JNCC Report 347, Peterborough.
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➤ Lumb, CM, Webster, M, Golding N, Atkins, SM and Vincent, MA, 2004. <i>Irish Sea Pilot, Report on the collation and mapping of data</i> . JNCC, Peterborough.
➤ Lumb, CM, Fowler, SL, Atkins, SM, Gilliland, PM & Vincent, MA., 2004. <i>The Irish Sea Pilot, A framework of conservation objectives for nationally important nature conservation features of the Irish Sea</i> . JNCC, Peterborough.
➤ Roberts, CM, Gell, FR & Hawkins, JP, 2003. <i>Establishing a network of nationally important marine protected areas in the Irish Sea Pilot Project Region</i> . York University for JNCC.
➤ Vincent, MA, Atkins, SM, Lumb, CM, Golding, N, Lieberknecht, LM & Webster, M, 2004. <i>Marine Nature Conservation and Sustainable Development: the Irish Sea Pilot</i> . JNCC, Peterborough.
➤ Vincent MA, Atkins, SM, & Lumb CM, 2004. <i>The Irish Sea Pilot: Report on the communications strategy</i> . JNCC, Peterborough.
➤ Tyldesley, D, 2004. <i>Coastal and Marine Spatial Planning Framework for the Irish Sea Pilot Project</i> . David Tyldesley and Associates for JNCC.