

13. LEGISLATION - ASSESSMENT OF CURRENT STATE AND FUTURE NEEDS

359. Following the trial of the draft framework for marine conservation, the Pilot was required to consider the extent to which the framework could be delivered in the UK through existing systems of regulation, and what additional measures might be needed.

Methods

360. The Pilot employed three methods to assess the effectiveness of existing legislation in meeting the needs identified in the draft framework for marine nature conservation, namely:

- i. a review of existing legal mechanisms that apply in the Irish Sea was commissioned from the Institute of Estuarine and Coastal Studies at the University of Hull;
- ii. consultations were undertaken with Irish Sea stakeholders;
- iii. the Pilot's conservation objectives for the Irish Sea, and the management actions developed from them, were tested against existing legal mechanisms.

The Pilot also participated in the work of the subgroup on legislative mechanisms established by the Review of Marine Nature Conservation.

361. The Institute of Estuarine and Coastal Studies review produced 2 reports which summarised the relevant current legislation (Boyes *et al.*, 2003a) and the current governance and enforcement regimes (Boyes *et al.*, 2003b). The Institute also drew attention to what, in its view, were existing gaps and shortcomings in the legislation.

362. The Pilot undertook a similar review of the Isle of Man governance framework, through a contract jointly funded by the Isle of Man Government, with the Centre for Marine and Coastal Studies, University of Liverpool. The reports of this work are available from the Isle of Man Government, but the Pilot is not making recommendations in relation to legislation in the Isle of Man.

363. Sectoral interests were consulted to identify their main concerns and possible solutions. Responses to the two reports were invited from Irish Sea stakeholders, Government Departments and other bodies. The views received have been used to inform the development of recommendations.

Conclusions

364. The main issues identified during the course of the above work were the need for:

- i. effective legislation for the establishment and conservation of a network of nationally-important marine areas;
- ii. effective species protection legislation;
- iii. effective means of controlling the introduction and spread of (potentially) invasive non-native species;
- iv. the need for effective means of ensuring that the human use of the marine landscapes enabled them to maintain their characteristic biological communities and wildlife populations.

365. The existing legislation relating to marine nature conservation in the United Kingdom is summarised on www.jncc.gov.uk to which reference may be made. This information is repeated

below only insofar as is required to provide the necessary context. The Pilot has followed a number of principles in developing its conclusions and recommendations, these are:

- i. recommendations should address a real need and have the potential to deliver a significant nature conservation benefit;
- ii. measures taken should be effective and, to the extent practicable, easy to understand and straightforward to operate;
- iii. overlapping legislation should be avoided where possible;
- iv. measures taken should be in the public interest and have a large measure of public support;
- v. measures should comply with international obligations.

366. In this chapter, nature conservation legislation is considered first, followed by issues relevant to the regulation of development and other sectoral activities which have an impact on marine nature conservation.

Nature conservation legislation

Protection of marine areas

367. The need for an ecologically-coherent network of important marine areas is considered in Chapters 9 and 10, and the measures required to support the conservation of that network in Chapter 12. Of the available existing legislative provisions, three require specific attention; these are i) Sites of Special Scientific Interest/Areas of Special Scientific Interest, ii) Marine Nature Reserves, and iii) European Marine Sites (Special Areas of Conservation and Special Protection Areas). Of these, only the last two can be applied with any certainty below low water mark.

Sites of Special Scientific Interest/Areas of Special Scientific Interest

368. These designations can be applied down to low water mark. Beyond low water mark there is a large measure of uncertainty about the circumstances under which it may be possible to apply them. In England, Wales and Northern Ireland, the protection afforded by these designations has been strengthened, and prospective legislation to accomplish similar improvement is underway in Scotland. The legislation is based on legal obligations placed on owners and occupiers of land (including land covered by water), on planning authorities and on other public bodies. There are also provisions regulating the activities of other persons. In general, these provisions are likely to achieve the conservation needs of nationally-important marine areas in the intertidal zone. However, the lack of legal clarity about the area over which they can be applied is unsatisfactory for such an important conservation mechanism, and it is in the public interest that this uncertainty be resolved through a legal clarification. Options would include specifying the limit as being low water mark (mean low water springs in Scotland), or down to 6 metres depth at mean low water to help overcome the problems associated with dynamic intertidal landforms, and to assist compliance with the Ramsar Convention.

Marine Nature Reserves

369. The Marine Nature Reserve legislation has been in place in Great Britain since 1981, but, to date, only two reserves have been established and only for one of these has full protection been achieved. Comparable legislation in Northern Ireland has resulted in the establishment of one reserve, and only partial protection has been achieved for that reserve. As a mechanism for achieving marine site conservation, this legislation has failed. The reasons for this failure have

been reviewed in a number of accounts (e.g. Jones, 1999), but in the opinion of the Pilot, the fundamental weakness in the legislation was that neither the establishment of a network of reserves, nor the use of the available powers to protect and conserve them, was obligatory. Sectoral resistance to their establishment overcame what, in practice, was simply an enabling power. The lessons from this experience need to be learned.

European Marine Sites

370. The Conservation (Natural Habitats, &c) Regulations 1994, and the prospective Regulations for implementing the Birds and Habitats Directives out to 200n miles, are expected to meet the majority of the site-related requirements of the Directives. However, the Habitats Directive currently only lists 7 marine habitats types on Annex 1 as requiring designation as Special Areas of Conservation, while the Pilot has identified 18 marine landscapes for the Irish Sea, and the number of marine landscapes for the UK and adjacent sea areas is likely to be in the order of 20-30. The current Regulations can only, therefore, contribute to the establishment of a network of nationally-important areas, not deliver its entirety. A marine expert group of the EU Habitats and Ornis Committees is currently reviewing the Annexes to the Directive. While it is theoretically possible that all the coastal and seabed marine landscapes could be added to Annex I of the Habitats Directive, the Pilot considers this to be highly unlikely given that the previous approach to listing habitats on Annex I has been selective. Furthermore, the approach to the selection of representative habitat areas outlined in paragraph 347, is rather at variance with the highly prescriptive site selection criteria set out in the Habitats Directive. One possibility is that the UK could propose, for addition to Annex I, those marine landscapes which meet the criteria for nationally-important features. However, such additions to the Annex would be dependent on EU agreement. The relationship between the Birds and Habitats Directives and the implementation of the marine protected areas programme under OSPAR will be the subject of future discussion and negotiation.

Regulation of human use and activity on marine areas

371. The Pilot's data on human use of the Irish Sea show that virtually all areas are potentially subject to some form of use or development. The 1994 Regulations do not define when management schemes for European marine sites are required nor how relevant authorities should use the Regulation 33 advice provided by the nature conservation agencies. In practice, separate arrangements are made for each European marine site and different standards of protection could be applied at different sites. To date, the Pilot is unaware of any instance where there has not been a need for a management scheme for a European marine site and it is difficult to envisage any situation where such a scheme would not contribute to effective site conservation. The Pilot concludes that a management scheme should be obligatory on nationally-important and European marine sites, and the organisation responsible for co-ordinating the development of the management schemes should be defined. Management schemes should be required to include certain components, e.g. (i) assessment of the sensitivity of features of interest to human impacts, (ii) planning to avoid deterioration and (iii) measures to restore features that are not in a favourable condition. Management schemes need not be complicated; indeed clarity and simplicity are greatly to be preferred.

372. In seeking to regulate activities that might damage a European marine site, lack of clarity over what is included in the term 'plan or project' leaves the 1994 Regulations ambiguous as to whether the term has general applicability, or whether it is limited to certain consenting regimes as listed in Part IV. This problem could be carried forward also into future offshore regulations. The issue has conservation importance since a plan or project attracts a more precautionary measure of control than do most other activities. In the short term, the compass of the term 'plan or project' should be clarified, but a longer term solution requires a single system to be established in which all types of activity are subject to assessment to ensure the site features are not damaged.

373. The uncertainty over whether sea fisheries operations are plans or projects in relation to European marine sites, is critical, since fishing has an impact on many sites. For example, failure to regulate damaging towed gear could limit the achievement of conservation objectives, and result in legal proceedings against the UK. Some Sea Fisheries Committees in England and Wales regulate fisheries within their powers of jurisdiction (6n miles) by means of a fishing management plan within the overall management scheme. This approach effectively treats a fishing activity as a plan or project subject to Article 6(3) of the Directive requiring consent. Such an approach has enabled rapid action to be taken to address damaging fishing activities.
374. The conservation of a marine area network will depend to a great extent on how the impacts of fishing activities can be assessed and regulated. Within territorial waters between 6-12n miles, the means available to Member States to manage fisheries have been potentially increased by the new Common Fisheries Policy regulation (Council Reg. 2371/2002). Measures are subject to CFP conditions; for example, they must be non-discriminatory and agreed to by other Member States with historic access rights through the mechanism of a Regional Advisory Council, or through a defined process of negotiation. New UK legislation would be required to achieve the potential benefits provided for in Regulation 2371/2002.
375. Beyond 12n miles, the means available to Member States to manage fishing are limited since legislation in this zone is reserved to the European Union. Consequently, Member States are not currently in a position to manage fisheries on nationally-important areas in this zone. The protection given to the Darwin Mounds demonstrates that there are arrangements through the CFP that can be used, albeit on a temporary 'emergency' basis. The Pilot expects that the Commission will in due course establish general means for long term protection for nationally-important marine areas including European marine sites.
376. The Pilot concludes that existing legislation is only capable of delivering an ecologically-coherent network of nationally-important areas in part, namely intertidally and for the subset of features covered by the EC Birds and Habitats Directives. Current legislation is not adequate to implement the UK's commitments to WSSD or OSPAR, nor of delivering an ecologically-coherent network of nationally-important marine areas. There are also gaps in the arrangements for regulating potentially-damaging human activities. While the Pilot concludes that additional national legislation will be needed, it does not necessarily recommend extension of the existing mechanisms. Instead, the opportunity should be taken to consider the development of a tailor-made solution to meet the needs identified. This solution could encompass recreational, historic, scientific and educational needs as well as nature conservation needs, and could provide support to sustainable fisheries.

Recommendations

R30 The seaward limit of Sites of Special Scientific Interest and Areas of Special Scientific Interest should be defined in law.

R31 Additional legislation is needed to ensure that an ecologically-coherent network of nationally-important areas can be established and conserved. This legislation should require that such a network be established and should set out the procedures for doing so. These should be as simple and straightforward as practicable and seek to replace or complement, rather than overlap, existing legislation.

R32 The legislation referred to in R31 should include provision for the preparation of a single management scheme for each area to ensure the conservation objectives for the area are met. The legislation should identify the organisation responsible for co-ordinating the development of the scheme, and a duty should be placed on the relevant regulatory authorities to carry out their functions in accordance with the scheme. Where a site crosses jurisdictions, a management scheme should be developed jointly by the relevant countries.

R33 The legislation referred to in R31 should provide for the effective regulation of potentially damaging activities which could affect the area adversely.

R34 The European Commission should clarify the means of achieving the effective regulation of fishing in nationally-important areas, including European marine sites, beyond 6n miles, and address the need for the appropriate assessment of CFP decisions and compliance with management schemes.

Protecting vulnerable marine species

377. The conservation needs of nationally-important features, including species, have been summarised in Chapter 8. The Pilot has identified a number of aspects where existing species protection measures fall short of what is required to meet conservation needs. These are i) additional measures that need to be taken in relation to species which are particularly vulnerable to 'incidental' harm, ii) a lack of a strategic framework to aid the recovery of certain nationally-important species, habitats or communities, iii) weaknesses in the controls relating to the introduction of non-native species, and iv) gaps in the transposition of the Habitats Directive requirements into national legislation. These issues are discussed further below.

Species vulnerable to incidental harm

378. The Wildlife and Countryside Act, 1981 provides for the protection of wild birds and for certain other animals and plants threatened within Great Britain and territorial waters. This protection makes it an offence intentionally to kill, injure, take, sell or disturb certain areas used by the protected species, among other provisions. This protection extends out to 12n miles. Supporting this, protection is also afforded to the fauna and flora of the marine environment through a variety of regulations applying to various sectors such as construction, disposal, and oil and gas extraction which require construction and disposal operations out to 200n miles to be carefully controlled under licence.

379. In the Wildlife and Countryside Act, offences against species are limited to actions of 'intent', the meaning of which is unclear in the legislation. In practice, most killing, injuring, taking and disturbance of protected marine animals and plants are the side effects of other activities such as fishing, seismic activity or pollution. Given the requirement to demonstrate 'intent', the existing defence relating to actions which are otherwise lawful and which have the incidental result of killing, injuring etc, appears superfluous. The Countryside and Rights of Way Act (2000) sought to address the problem of needing to demonstrate intent in relation to the offence of disturbance of cetaceans and basking sharks by adding the term 'recklessly' to 'intentionally', but no such amendment was made to the, potentially, more serious offences of killing, injuring or taking of protected species. Similar weaknesses apply to the wording of the 1994 Regulations, though there the word 'deliberately' is used rather than 'intentionally'.

380. There are a group of nationally-important species, including small cetaceans, large fishes such as sharks and, potentially, other species, for which an amendment to the legislation is necessary to give sufficient protection from 'incidental' acts which are adversely impacting their populations. As an alternative to amending the general species protection measures contained in existing legislation, it may be preferable to make specific provision for selected species, or groups of species, for which incidental killing, injury or capture constitutes a major conservation problem. The effect of such an amendment would be to make the killing, injury, taking or disturbance of such species an offence (i.e. remove the need to show intent). A defence should be provided in relation to acts which are incidental to otherwise lawful operations, but this defence would not be available if existing technical measures to reduce such incidental impacts are not taken.

Recovery of certain nationally-important species and biological communities

381. Threatened or declining nationally-important species or habitat communities may require recovery programmes to be instituted. Species or Habitat Action Plans (see paragraph 186) provide recovery programmes for some marine features but a more strategic legislative framework is needed for marine features. Extension of current species protection legislation to cover all UK waters may partly provide this framework but some additional measures will be necessary. For example, legal provisions similar to those in Section 74 of the Countryside and Rights of Way Act 2000, which require the Secretary of State and the National Assembly for Wales to publish lists of species and habitats requiring action to ensure their survival and recovery, and to promote such action, should be extended to the whole marine environment under national jurisdiction. A duty should be placed on public bodies to work towards the agreed targets and status of the features concerned, and emergency powers provided to regulate activities likely to damage such features.

Control of non-native species

382. The Wildlife and Countryside Act, 1981 also regulates the introduction and release of non-native animals and certain plant species. This is supported by other legislation relating to fisheries and shell-fisheries. However, the problem of containment and prevention of escapes (as in fish farms) is not adequately covered in the Wildlife and Countryside Act, 1981 where no offence is committed until the animal has actually escaped. Measures are required to provide for the adequate containment of non-native species and to require the taking of appropriate control or eradication measures when a potentially-invasive non-native species has escaped or been released unlawfully. In 2001, Government commissioned a Review of Non-native Species Policy which reported in 2003. Government has responded to the report with initial views on how it proposes to tackle the issues raised (www.defra.gov.uk/corporate/consult/nnspecies-policy/index.htm).

Transposition of requirements of the Habitats Directive

383. The draft Offshore Regulations will, when they come in to force, address the main gap in transposing the Habitats and Birds Directives into national law, which is to apply their provisions to the 12-200n mile zone. However, there are two issues that the Pilot considers necessary to draw attention to in particular:
- i. Article 11 of the Habitats Directive states that Member States shall undertake surveillance of the conservation status of habitats and species of Community importance. This is of particular relevance for the marine environment as a lack of knowledge continues to hinder conservation efforts greatly. The 1994 Regulations do not make provision for such surveillance. Defra are currently consulting on proposals to amend the 1994 Regulations, and to include a provision in the proposed Offshore Regulations, with respect to this;
 - ii. the provision of Article 14(1) of the Habitats Directive which relates to the protection of some commercial species from over-exploitation (Annex V species, which include some important migratory fishes), have not yet been transposed into national legislation and is not included in the current proposals to amend the 1994 Regulations nor in the draft Offshore Regulations. The Pilot considers that this needs to be rectified.

Recommendations

R35 National legislation should make it an offence to kill, injure or take any species listed for such protection without the need to show intent. A defence should be provided in relation to acts incidental to otherwise lawful operations but this defence should be removed if available technical measures to reduce such incidental impacts are not taken.

R36 The requirement for the Secretary of State and other relevant Ministers to list species and habitats requiring recovery measures to be taken for their conservation, and to promote such measures, should be applied to all national waters.

R37 Controls over the introduction of marine non-native species should include measures to provide for adequate containment, enforcement and the eradication of problem non-native species.

R38 The provisions in the Habitats Directive relating to surveillance of habitats and species of Community importance, and in relation to regulating the exploitation of Annex V species, should be transposed into national legislation.

Protection for marine landscapes

384. The main value of the marine landscape classification is that it provides a visual picture of marine ecosystems that will be useful in developing marine strategic planning and setting conservation policies for habitats and species characteristic of the various marine landscapes. The principal means of achieving the necessary level of protection will be i) through spatial planning (see **R29**), ii) protected marine areas and iii) the range of cross-sectoral measures considered below.

The Regulation of development and sectoral activities which have an impact on marine nature conservation

Strategic Environmental Assessment

385. The EU Directive on Strategic Environmental Assessment (2001/42/EC) will apply to plans and programmes within its scope (fisheries, energy, industry, transport, tourism, waste disposal, including disposal of dredgings, and water management), which set the framework for future development consent of projects listed in Annexes I and II of the Environmental Impact Assessment Directive prepared after 21 July 2004. The UK Government (Office of the Deputy Prime Minister) and devolved administrations are preparing regulations to implement the Directive. Relevant projects include: intensive fish farming, extraction of petroleum and gas, windfarms, power stations, pipelines, extraction of minerals, construction of harbours and ports, coastal work, marinas and holiday villages. Strategic Environmental Assessment is also required on plans and programmes that require an assessment under the Habitats Directive and to those that set the framework for future development consent of projects and are likely to have significant environmental effects.

386. Ahead of the Directive, the Department of Trade and Industry has been undertaking, since 1999, a rolling programme of Strategic Environmental Assessment on the UK Continental Shelf prior to the release of blocks for oil and gas licensing. These Assessments have already resulted in better protection for the marine environment through a more integrated approach to decision-making and are used as demonstrations of good practice. They have also generated a large resource of valuable data about the marine environment.

387. The Office of the Deputy Prime Minister has published guidance on the application of the Directive to land-use plans and is currently preparing generic guidelines for all plans and programmes subject to the Directive. The European Commission has produced a more general guide to the Directive, focussing on its basic concepts and requirements.

388. The Directive applies to proposals or activities that can be defined as plans or programmes and for which there is a consenting or licensing regulatory framework at the project level. This may result in existing fisheries, (the human activity having the greatest impact at sea) falling outside the scope of Strategic Environmental Assessment. Fisheries could, and should, be assessed as plans or programmes in various ways. For example, fishing could be assessed spatially at the ICES area

or regional sea scale, and/or temporarily on an annual basis by species fished or by gear types for mixed fisheries. If fisheries were classified in plans and programmes, then subject to the other tests (i.e. setting the framework for development consent, and consents required by legislative, regulatory or administrative provision) in the Directive, Strategic Environmental Assessment could then be applied to all fisheries activities.

389. In the Regional Sea context, the transboundary requirements on consultation in the Strategic Environmental Assessment Directive are important. Where the implementation of a plan or programme prepared in one Member State is likely to have a significant effect on the environment of other Member States, provision has to be made for the Member States to enter into consultations and for the relevant authorities and the public to be informed and enabled to express their opinion.
390. The Directive requires monitoring of plans or programmes assessed to ensure that impacts do not exceed predicted levels and that unforeseen impacts do not occur. There should be the facility to amend the assessments and review decisions if impacts are not as expected. A requirement to monitor is particularly important in the marine environment where impacts may occur unnoticed. Marine monitoring is expensive, and adequate provision should be included in development costs. It is not clear if monitoring will become a duty in the regulations arising from statutory Strategic Environmental Assessment or if decisions will be left to regulatory bodies responsible for administering Strategic Environmental Assessment.

Recommendations

- R39 The application of the Strategic Environmental Assessment Directive to fisheries and marine transboundary issues should be clarified. The publication of detailed guidance designed for marine plans or programmes is required.**
- R40 Agreement with the fishing industry should be sought on how fisheries activities should be defined in plan or programme terms and on the adoption of a policy to undertake Strategic Environmental Assessment of fisheries.**
- R41 Monitoring of the implementation of plans or programmes should be made a duty in the Strategic Environmental Assessment regulations to assess the accuracy of environmental changes predicted by the Strategic Environmental Assessment process and to ensure that unexpected impacts have not occurred.**

Water quality

391. The EU Water Framework Directive provides an integrated legislative framework for the delivery of conservation objectives for water bodies. A key purpose of the Directive is to achieve/maintain surface waters in good ecological status, including transitional and coastal waters out to 1n mile from baseline. The Directive's provisions will be implemented to 3n miles in Scotland; other Member States are pressing the Commission for this boundary Europe-wide, and Defra are undertaking a regulatory impact assessment for England and Wales. In general, offshore water quality can be expected to be high and developments of a scale that would impact water quality are not anticipated at present. However, a statutory framework for the protection of marine water quality would ensure any future impacts could be regulated. One approach could be to apply the principles of the Directive across the whole marine area under national jurisdiction.
392. Such an extension of the Directive, could require an extension of the environmental agencies' remits beyond 3n miles, but a large amount of additional monitoring would not be required unless extensive developments took place posing a threat to offshore water quality.

Recommendation

R42 A statutory approach to surface water quality should be applied to the whole marine environment. A framework could be based on extension of aspects of the approach required by the Water Framework Directive such as measures of ecological quality, the status and quality of water bodies, and the use of objectives.

Sea fisheries

393. The success of the new CFP regulation (2371/2002) will depend upon its implementation. The Pilot is not confident that continued reliance on technical measures, quotas and means of reducing fishing effort will be sufficient to protect and recover fish stocks. These measures may damage the industry without achieving benefits for stocks. To date, the CFP has not sufficiently considered the potential benefits of other approaches to fisheries management such as the use of long-term protected areas. Although there are a number of marine protected areas already in place under fisheries legislation, such as the Wee Bankie sandeel closure, the mackerel, Shetland and plaice boxes, and the Irish Sea closure, these are not adequate to test fully the marine protected areas approach. This is a complex issue, as the different fish species and stocks will certainly respond to protected area measures in different, and not necessarily foreseeable, ways. In the Pilot's view the use of long term protected areas at the Regional Sea level should be tested in carefully designed, time-limited, area-based trials set up with the support and participation of the fishing industry. A network designed to protect the spawning, nursery and important feeding areas of commercial species could help to create a long-term sustainable yield from some of the most reduced stocks.
394. Compensation to the fishing industry and adequate enforcement may be required to ensure trials are carried through to completion. However, there is a strong possibility that protected areas can be managed more efficiently and cheaply, with less complex regulation, than many existing fisheries management mechanisms. Trials should accompany the setting up of an ecologically-coherent network of representative nature conservation areas to ensure the maximum multiple benefits of each site.
395. The new CFP regulation enables increased stakeholder involvement through the establishment of Regional Advisory Councils. However, the areas currently proposed for Regional Advisory Councils are much larger than the Regional Sea scale and this could preclude effective stakeholder participation at the regional level. For example, the Pilot considers that the Irish Sea appears to be the right scale to establish a Regional Advisory Council because it has relatively discrete fisheries within the area and it requires tailored policies at the Regional Sea scale. At present, there does not appear to be adequate resource provision for running the Councils, nor sufficient commitment that the Commission will implement their recommendations. The Pilot considers that Regional Advisory Councils should have a balanced fisheries management and environmental protection remit; it is important that they are not dominated by the fishing industry. Environmental interests should be strongly represented with environmental concerns being reflected in the advice provided.
396. Most of the Irish Sea fisheries are managed on the basis of 7 pressure stocks, but other non-quota species are caught and landed (e.g. skates, rays, seabass and most shellfish) The CFP uses conservation measures such as mesh sizes, catch composition targets and minimum landing sizes to manage non-quota commercial species (Council regulation 850/98). In the UK, there are measures to protect seabass and shellfish such as licensing schemes for crabs, lobster, crawfish and scallops. The Pilot is concerned that the CFP and national conservation measures are not adequate for the species that can be the subject of diversification when other fisheries are restricted. The use of fisheries management protected areas would bring benefits for stocks of these species.

397. The new CFP regulation does not address sufficiently the need for a reduction in by-catch of quota and non-quota commercial species, and also non-target species including cetaceans. The UK intends, in 2004, to introduce measures outlined in the UK small cetacean bycatch response strategy, including legislation to require the use of technology (pingers) on gill nets to reduce bycatch. There are also European Commission proposals currently under discussion for a similar measure through a CFP regulation.
398. The discarding of unwanted fish at sea damages fish populations, and the addition of excess food material to surface waters has an unbalancing impact on bird and mammal populations. A Community action plan on discards was proposed in a Commission communication in 2003, including modifications to the range of technical conservation and other measures. The potential benefits of a ban on discards will be examined for possible implementation in 2006.
399. Inshore fisheries in Scotland are managed centrally by the Scottish Executive who are currently reviewing how the industry is regulated. An increase in local involvement in inshore fisheries management, such as by the establishment of industry-based local fisheries committees, is likely to be recommended.
400. The arrangements for inshore fisheries management in England and Wales are being examined in the Defra review of Marine Fisheries and Environment Enforcement Arrangements. Increased national level management of fisheries within the 6-12n mile zone is now permitted under the Common Fisheries Policy although this would require new legislation. The benefit of such increased national management would be that it would facilitate the management of fisheries at the local and regional level. It would increase the opportunity for developing innovative schemes of fishery management, including measures to test the benefits of no-take zones, and would enable fisheries management to be more responsive to local and regional needs. The Pilot would encourage the Defra review to consider this issue and how best it could be implemented having regard to the existing role of the Sea Fisheries Committees in the 0-6n mile zone and of Defra in the 6-12n mile zone.
401. Pending the outcome of these reviews, the Pilot considers that, at the least, there should be good co-ordination in relation to fisheries management throughout UK territorial waters, with a view, particularly, to developing shared objectives for such management between countries at the Regional Sea scale.

Recommendations

- R43 Closer integration of fishing industry and nature conservation objectives should be developed, including by using an ecologically-coherent network of protected areas to support fisheries management.**
- R44 Small scale, funded, trials of protected areas including no-take zones should be set up at the Regional Sea scale with the involvement of the fishing industry. The results of trials established on fish numbers and population health should be monitored to assess the costs and potential benefits of protected areas and no-take zone management mechanisms.**
- R45 Regional Advisory Councils should be established, at the appropriate scale to enable effective stakeholder involvement. The Councils should have a combined fisheries management and environmental remit and should be empowered to test Regional Sea scale fisheries management options developed through cross-sectoral partnership working. A Regional Advisory Council should be established for the Irish Sea.**

- R46 Adequate conservation measures for non-quota commercial species should be prepared at national and European levels, including the identification of protected areas and the setting of safe biological limits to maintain an ecologically-sustainable fishery for each stock.**
- R47 Proposals for national legislation and a CFP regulation requiring the use of pingers to protect cetaceans from bycatch should be enacted, monitored and enforced. Further measures to limit by-catch of undersize target species and non-target species should be developed and resources for enforcement should be increased to ensure the regulations are effective.**
- R48 The Community action plan to reduce discarding should be implemented in full, including within the Irish Sea, to promote the restoration of damaged stocks.**
- R49 The national management of fisheries within the 6-12n mile zone should be strengthened under new legislation, as is now permitted by the Common Fisheries Policy, to provide enhanced national control of such fisheries to address local and regional needs. Additional powers and resources to implement new management approaches and improve the enforcement of regulations should be provided. International co-ordination to develop shared objectives for such management should be carried out at the Regional Sea scale.**

Aquaculture

402. The recently published 'Strategic Framework for Scottish Aquaculture' and the new 'Location Guidelines' have gone some way towards more holistic regulation of aquaculture in Scotland, although the framework may need further integration with water quality and fisheries. The extension of the planning powers of Local Authorities in inshore waters for aquaculture in the Water Environment & Water Services Act 2002 is a significant move towards spatial planning in coastal waters. The Welsh Assembly Government also has a strategic plan for aquaculture. There is no strategic approach to mariculture in England but there is a Community initiative to prepare a strategy for the sustainable development of European aquaculture.
403. The Pilot considers that mariculture developments should be subject to Strategic Environmental Assessment and Environmental Impact Assessment as part of the wider spatial planning of inshore waters. Assessment should be based on nutrient modelling and water body carrying-capacity estimates, to determine the positive and negative impacts that shellfish may have. The consenting and licensing assessment should cover and include environmental conditions.

Recommendation

- R50 Integrated planning and management strategies for mariculture should be prepared throughout the UK which take account of all global impacts such as on fisheries, nature conservation and water quality.**

Shipping and navigation

404. The shipping industry is regulated to a large extent by the International Maritime Organisation (IMO) which implements global conventions such as MARPOL. This international dimension to shipping means that the greatest progress is made when the UK acts in consort with other nations to develop and implement environmental measures. The ongoing implementation of MARPOL annexes and other new initiatives, such as the International Convention for the Control and Management of Ships' Ballast Water and Sediments (set for adoption with regulations to prevent the transfer of harmful aquatic organisms in ballast water in February 2004), the 2000 Port Waste Facilities Directive implemented by UK regulations in 2003, and the International Convention on

the Control of Harmful Anti-fouling Systems on Ships (adopted in 2001 and implemented in 2003) are improving the overall regulatory framework. In addition, UK Government departments and the shipping industry are working together to draft a UK environmental strategy for shipping. The strategy is intended to assist the industry in being more proactive in addressing environmental issues such as ballast water, vessel regulation (including fishing vessels), anti-fouling, sewage and other discharges, and the need to strengthen enforcement.

405. In 1994, the report 'Safer Ships Cleaner Seas' (the Donaldson Report) recommended that Marine Environment High Risk Areas (MEHRAs) of high environmental sensitivity and at risk from shipping should be identified around the UK coastline. A set of possible MEHRAs, with associated measures, was identified in May 2002. However, UNCLOS limits restrictions to freedom of navigation and there are also concerns as to how mariners would be alerted to MEHRAs, the measures that would be implemented and how these measures would be reviewed for effectiveness. Overall, progress in implementing MEHRAs has been slow.
406. An IMO proposal to establish a major Particularly Sensitive Sea Area (PSSA) under MARPOL for western Europe stretching from southern Portugal to north of Shetland was agreed by the Marine Environment Protection Committee and has now moved on to further consideration within IMO. If this PSSA is adopted, it will put MEHRAs (within the PSSA) in a suitable wider environment context and it will be easier to introduce appropriate protective measures in relation to shipping. The Pilot supports all these initiatives to improve the environmental regulation of shipping.
407. Control over the introduction of non-native species to the UK seas via ship's ballast water should be addressed by the IMO Ballast water regulations. However, there is currently no control to minimise the transfer of non-native species by other ships vectors (e.g. hull fouling). These vectors may contribute significantly towards the transport of non-native species, particularly with the phasing out of TBT as a highly effective anti-fouling agent.

Recommendations

R51 Measures to implement Marine Environment High Risk Areas should be brought to a rapid conclusion, and incorporated within the wider MARPOL Particularly Sensitive Sea Area for Western Europe.

R52 The accidental introduction of non-native species by ships, such as via hull fouling, should be researched and options for control developed.

Renewable energy developments

408. The Department of Trade and Industry proposals to make oil and gas developments subject to the same regulations as other activities, and to improve the Electricity Act so that it applies to the whole marine environment and is used routinely, will help to build consistency. The Review of Development in Coastal and Marine Waters is expected to report in early 2004 and should provide solutions to many consent issues.
409. The current consenting procedure for renewable energy generation in the marine environment is complex, with alternative consenting routes via the Electricity Act or the Transport and Works Act as well as multiple planning and regulatory authorities. New licensing regulations for developments outside of territorial waters could add to this complexity rather than providing an integrated solution. Concerns have been expressed that landscape issues may be overlooked in the decision-making process for renewable energy developments because they cannot be included in licence conditions under the Food and Environment Protection Act or the Electricity Act. Developments taking place adjacent to the coast are covered by the planning system but this is not the case further offshore, and this issue needs to be addressed.

Sand and gravel extraction, dredging and spoil disposal

410. In the UK, the dredging of marine sand and gravel from the seabed below mean high water is regulated under a number of different regimes depending on location and purpose. The Office of the Deputy Prime Minister administers the commercial dredging of marine aggregates by the non-statutory Government view procedure. This will be replaced by the Environmental Impact Assessment and Habitats (extraction of minerals by marine dredging) Regulations which will apply in England, Wales and Northern Ireland from 2004. Where the proposed dredging area falls within the jurisdiction of a local planning authority, the activity is regulated by the Department for Transport.
411. Dredging by a harbour authority, whether for maintenance or capital (new excavation) purposes, will normally be authorised under the relevant harbour legislation. A dumping licence will, however, need to be obtained for the disposal (or placement) of the dredged material in the maritime area.
412. The lack of integration between legislation regulating dredging and the disposal of dredge spoil, is an accepted weakness in the current regime. The formation of the Marine Environment and Consents Unit in Defra (including Coastal Protection Act regulation from 2004) has started to address this issue, and the Pilot expects that the Review of Development in Coastal and Marine Waters will bring further rationalisation.

Tourism and Recreation

413. The use of fast motorised craft is increasing and there are calls for activities using these craft to be better regulated. Conservation impacts are generally small, but they may cause disturbance to cetaceans and birds or damage to fragile habitats in estuaries such as salt marsh or sea grass beds. A practical constraint on the effective use of bylaws regulating the use of small boats and personal watercraft is the lack of capacity for enforcement.
414. A national boat registration scheme to support enforcement of legislation and regulations has been proposed. However, this would be expensive to set up, operate and enforce, and is probably more than is required to solve the problem. Many prefer the use of local schemes run by estuary or coastal groups using bylaws, environmental codes for users and based on voluntary enforcement. However, if these do not prove adequate, a national scheme may still be the only option.

Recommendations

R53 Voluntary partnership, or local bylaw, approaches to regulation of small motorised craft should be developed with users. A national, consolidated code of conduct should be established to prevent disturbance of marine wildlife from noise generated by motorised craft.