

# **Sector analysis: Sea Fisheries**

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# 1. Summary

This sector analysis describes the characteristics and scale of the sea fisheries sector in the UK, its impact upon the delivery of nature conservation objectives in England, English Nature's objectives for the sector and priority actions for the period 2004-2007.

It examines the key socio-economic and political factors that shape the sea fisheries sector - the fleet and the fishermen, the market, the public's perception, European and national fisheries policy.

It describes the roles of the key players within the sector - fishermen's organisations, Sea Fisheries Committees (SFCs), the Department for the Environment, Food and Rural Affairs (Defra), Directorate General (DG) Fisheries and the Environment.

The paper analyses the nature conservation impacts of the sea fisheries sector, both positive and negative - the removal of target and non target species (including cetaceans, sea birds and non-target fish species), alteration of seabed habitats and changes in predator/prey relationships.

From this analysis are derived our objectives for the sector and we list the three priority actions for the period 2004-2007:

- S1. Work in partnership with the Joint Nature Conservation Committee (JNCC), Scottish Natural Heritage (SNH), Countryside Council for Wales (CCW), Defra and the fishing industry to secure the delivery of the environmental aspects of the reformed Common Fisheries Policy, in particular, through the implementation of a regional and an ecosystem approach to sustainable fisheries management.
- S2. Work with others to ensure that a representative and ecologically coherent network of Marine Protected Areas (MPAs), to be set up by 2012, includes a core of No Take Zones (NTZs) for fisheries as well as other extractive uses, to protect key nature conservation interests and assist the recovery of the marine ecosystem.
- S3. Advocate ways to integrate environmental considerations within inshore fisheries management.

To deliver these actions we identify the key organisations and the actions needed to achieve effective influence over policy and delivery - the International Council for the Exploration of the Sea (ICES), DG Fisheries, DG Environment, Defra, SFCs, and representative organisations of the fishing industry.

## 2. Characteristics and scope of the sector

### 2.1 The fishing industry

The UK fishing fleet has evolved from one which comprised predominantly large, distant and middle water trawlers working from a relatively few large ports (e.g. Grimsby, Fleetwood, Hull, Lowestoft) to a fleet of smaller vessels able to operate a wider range of fishing gear in shallower water close to their home ports. This followed the reduction in distant water fishing opportunities in the late 1970s due to countries establishing 200 mile fishery limits. This has resulted in increased pressure on fish stocks within European Community waters and on inshore areas which contain the highest biodiversity. The UK fleet also operates outside of European waters and it is important that the reduction in European fishing opportunities do not simply displace effort to the waters of other countries. Fishing agreements with third countries need to ensure that fishing is carried out responsibly and does not threaten the future of fish stocks and fosters the sustainability of economic and social development of developing countries.

Of an estimated £69 billion contributed to the UK economy by marine-related industries, the UK sea fishing industry contributes £0.55 billion<sup>1</sup>. Comparatively, in a preliminary study, it was estimated that sea angling has a value of £1 billion<sup>2</sup>. The largest of the sectors are the oil and gas industry (£23 billion), 'seaside' tourism (£17 billion), the Royal Navy (£6.7 billion) and ports and shipping (£1.7 billion). Only six travel to work area (TTWAs) in England have been identified where fishing and fishing related activities contribute more than 1% of employment or gross domestic product<sup>3</sup>. However several individual ports, particularly in the South West and North East, have a high dependence on fishing for employment.

There are approximately 6766 full and part time fishermen in England and approximately 3500 fishing vessels. Overall the number of fishermen and vessels has continued to decrease. The fleet, for administrative purposes, is split between vessels under and over 10 metres in length. This division can also be used as a general indication of vessels that work in the inshore area and those that work further offshore. The English fleet is made up of approximately 670 vessels over 10 m and 2990 under 10 m. For every fisherman it is estimated that 3-5 people are employed in ancillary industries.

The table below provides a summary of the main methods of fishing used in England. As the target species dictates the main method of fishing, different parts of the country will favour particular methods, e.g. beam trawling is associated more with the south west than the north east.

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<sup>1</sup> Pugh and Skinner (2002). A new analysis of marine-related activities in the UK economy with supporting science and technology. IACMST Information Document No 10 August 2002.

<sup>2</sup> Prime Ministers Strategy Unit (2003).

<sup>3</sup> Scottish Agricultural College (2004). *Regional socio-economic studies on employment and the level of dependency on fishing. Lot No 19 : England and Wales*. DGXIV European Commission.

**Table 1: Fishing methods in England**

Category	Sub-category	Species	Fishing gear
Whitefish	Roundfish	Cod, whiting, haddock, saithe, pollock and dogfish	Demersal otter trawl, pair trawl, seine net, gill net, trammel net, longline and handline.
	Flatfish	Dover sole, plaice, flounder, turbot, monkfish and rays	Beam trawl, demersal otter trawl, seine net, tangle net, trammel net and longline.
Pelagic fish	Small pelagic	Mackerel, herring and sprat	Gill net, pelagic trawl and handline (mackerel)
	Large pelagic	Bass and mullet	Gill net, pelagic trawl, beach seine, trolling (bass) and handline (bass)
Shellfish	Crustacea	Lobsters, crabs, crawfish, <i>Nephrops</i> , and shrimp	Pot, tangle net, beam trawl (shrimp) and demersal otter trawl ( <i>Nephrops</i> )
	Molluscs	Cockles, mussels, scallops, oysters, clams, whelks, periwinkles, cuttlefish and squid	Dredge (bivalves), suction dredge (cockles), trawl (cuttlefish and squid), pot (whelks) and hand-gathering (bivalves and gastropods).

## 2.2 Management of the fishing industry

The Common Fisheries Policy (CFP) provides an overall structure within which all European fisheries are managed. Consequently the sea fisheries policy of the UK government is almost totally determined within the context of the CFP, although there is increased national control in the inshore waters.

The past implementation of the CFP resulted in many stocks of commercial fish falling to historically low levels and was not effective enough in protecting the marine environment leading to adverse impacts on non-target fish species, seabirds, cetaceans and marine benthos. A planned review of the CFP in 2002 was therefore used by the European Commission as an opportunity for a wide ranging reform and a new framework for the common fisheries policy came into effect on the 1<sup>st</sup> January 2003 (EC 2371/2002).

The primary objective of the reformed CFP is to ensure exploitation of living aquatic resources that provides sustainable economic, environmental and social conditions.

The reformed CFP consists of 5 main policy areas:

- conservation and sustainability
- adjustment of fishing capacity
- rules on access to waters and resources
- community control and enforcement system
- decision-making and consultation

For English Nature the most significant area is that relating to conservation and sustainability, which provides measures to limit fishing mortality and the wider impacts of fishing activities on the natural environment. This includes the introduction of recovery plans for fish stocks outside of safe biological limits and multi-annual management plans for stocks within safe biological limits. However, many of these measures are in the process of being implemented and the system of allocating yearly Total Allowable Catches (TACs) is currently still in place for most stocks. To reduce the impact of fishing activities on marine ecosystems and non-target species,

measures for adopting specific technical measures are also included in the reformed CFP together with emergency measures to protect the marine ecosystem from fishing activities.

Member States have exclusive access within their 6 mile fishery limit. There is limited access within the 6-12 mile fishery limits to other member states that have historic fishing rights. Community waters extend beyond 12 miles and are open to all Member States with historic fishing rights.

Coastal states have the authority to adopt conservation and management measures within their Territorial Seas (12 nautical miles from baselines), provided that they are non-discriminatory, prior consultation has taken place, and that the Community has not adopted measures specifically addressing conservation and management in this area. This responsibility is undertaken by the Department for Environment, Food and Rural Affairs (Defra).

Within the 6 mile fishery limit in England and Wales there are 12 Sea Fisheries Committees (SFCs). Their function is to manage the interests of the local (inshore) fishing industry and safeguard the marine environment from the adverse effects of fishing activities. SFCs are permitted to draft and enforce byelaws that allow improved management of local fisheries. These byelaws are confirmed by Defra.

The Environment Agency (EA) exercises the authority of an SFC in some river estuaries, e.g. the Severn Estuary. Its main responsibilities, however, relate to conservation and management of migratory species - salmon, sea trout and eels.

### **3. Key players**

#### **3.1 The shapers**

##### **DGXIV (DG Fisheries)**

DG Fisheries is the Directorate-General responsible for the CFP at the European Commission. It represents the Community on the international scene, prepares legislation, implements management policy and monitors compliance with Community law in this field. The DG is also responsible for running a scientific research programme for fisheries as part of the Community's framework research programme. The DG performs its duties in collaboration with the other Directorates-General and departments of the European Commission, and with the other Community institutions and bodies. It also performs the budgetary and financial management tasks and administrative operations necessary for the implementation of the CFP.

##### **International Council for the Exploration of the Sea (ICES)**

ICES is an inter-governmental organisation involved in all aspects of marine research including fisheries related subjects. ICES uses biological data collected by national research institutes from vessel surveys and landing records to assess the state of the main commercial stocks. It provides advice to the Commission, in particular, to the committees and groups established by DG Fisheries. The Commission's Science, Technical and Economic Committee for Fisheries (STECF) and its working groups

consider ICES fish stock and environmental advice and provide opinion, advice and assistance to the Commission.

### **DGXI (DG Environment)**

DG Environment's main role is to initiate and define new environmental legislation and to ensure that measures, which have been agreed, are actually put into practice in the Member States. In 2001 an integration strategy for the environment and fisheries was developed by the Environment and Fisheries DGs detailing key objectives and actions, and has since been adopted by the Fisheries Council. A Biodiversity Action Plan for Fisheries was also adopted in 2001. The Commission is developing a set of indicators to measure the implementation of the strategy and will report to the Council on the environmental performance of the CFP by 2005.

### **Department for the Environment, Food and Rural Affairs (Defra)**

Defra's fisheries department is divided into 4 fisheries divisions :

- I. Structures and Markets
- II. Aquaculture, salmon, and freshwater fisheries.
- III. Sea Fisheries Conservation
- IV. Management and control.

Defra's scientific support, research and advice on fisheries and environmental management comes from their executive agency, the Centre for Environment, Fisheries and Aquaculture Science (CEFAS), with laboratories at Lowestoft, Burnham-on-Crouch and Weymouth.

Defra's European and Wildlife Division (EWD) also become involved with inshore fishing activities, particularly where then they take place in European Marine Sites. EWD has responsibility for policy towards the conservation and enhancement of wildlife in England and a coordinating role within the UK with respect to relevant European Directives and international conventions.

### **Sea Fisheries Committees (SFCs)**

There are 12 SFCs in England and Wales all of which subscribe to the Association of Sea Fisheries Committees whose Chief Executive represents their interests nationally. SFCs regulate almost the entire coast of England and Wales out to 6 miles with local byelaws. SFCs were established in the last century and are empowered to make byelaws for the management and conservation of their districts' fisheries and their effects on the marine environment.

## **3.2 Sectoral interests**

### **Fishing Industry**

As a result of the diverse range of fishing activities undertaken in English waters the fishing industry can be very disparate with wide ranging views. This therefore provides a challenge when liaising with the fishing sector as fishermen may have very different views on various policy or management measures according to the specific fishery or gear type that they are involved with.

## **National Federation of Fishermen's Organisations (NFFO)**

This national body provides the biggest constituent of fishermen's organisations in England and Wales. The NFFO together with their Scottish and Northern Irish counterparts (Scottish Fishermen's Federation and the Northern Ireland Fishermen's Organisations) are in regular contact and negotiations with the Fisheries Departments.

## **Producer Organisations (POs)**

POs are established under the CFP to enable groups of fishermen to market the fish they catch; in effect they are fishermen's co-operatives. POs have been given management responsibilities which enable them to plan their uptake of quota allocations to optimise the benefit to their members. In recent years they have found 'their own voice' on certain issues beyond that offered by the NFFO. There are 20 POs in the UK. Their views with respect to the effects of fishing are generally similar to those of the NFFO.

### **3.3 Influencing and pressure groups**

#### **Markets**

The consumer is a very influential element within the fisheries sector. Traditionally the consumption of white fish, in particular cod, plaice and haddock, has been a mainstay of the UK fishing industry, but as different species are being targeted tastes have become more adventurous. Exports to the rest of Europe and beyond have provided new markets and opportunities.

The use of 'consumer power' has been recognised by Unilever and WWF. In 1997 they launched the Marine Stewardship Council (MSC). This organisation has established a broad set of principles for sustainable fishing and set standards for individual fisheries. Fisheries that meet these standards are awarded an 'eco-label' e.g. Thames Herring. Although few fisheries have qualified for this standard, other fisheries are moving towards more sustainable practises in order to obtain premium prices. Increasing awareness of depleted fish stocks, particularly cod, may also alter demand.

#### **Representative Organisations**

Fishermen's organisations and POs represent their members at formal meetings with government and the Commission. Fisheries policy generates strong feelings among fishermen and coastal communities in the UK and the rest of Europe. Various campaigns and protests have highlighted and attempted to influence fisheries policy.

#### **Politicians**

A number of politicians with coastal constituencies 'champion' the cause of the fishing industry: e.g. Austin Mitchell (Grimsby) and Andrew George (St Ives). Fishing is often used in political debate to epitomise the failure of European policy and removal of Member State authority. There is an increasing call from some ministers, particularly within the Conservative Party, for national control of fisheries and withdrawal from the CFP.

## **Sea Fisheries Committees (SFCs)**

SFCs have a role to play in developing and managing inshore fisheries and their effects on the marine environment. SFCs are relevant and competent authorities within the context of the Habitats Directive. All of the SFCs in England and Wales are involved in the management process for at least one European marine site. There are no SFCs in Scotland.

## **Statutory Nature Conservation Agencies**

English Nature and the Countryside Council for Wales are statutory consultees in the SFC environmental byelaw-making process and also have a key role in providing advice that could influence fisheries management in European marine sites.

## **Non Governmental Organisations (NGOs)**

The Royal Society for the Protection of Birds (RSPB), World Wildlife Fund-UK, the Wildlife Trust and the Marine Conservation Society (MCS) are leading the NGOs in exerting influence both nationally and in Europe. More recently Greenpeace has launched an Oceans Campaign and is likely to figure more prominently in future.

### **3.4 Opinion formers**

All of the above influencers may be considered opinion formers. The main difference is that statutory organisations are generally required to follow particular protocol, whereas, non-statutory organisations are able to short circuit the process. Defra, as the competent government department, has the final say at a national level.

## **4. Socio-economic and political factors**

### **4.1 The fleet and the fishermen**

There are approximately 6766 full and part-time fishermen in England. This figure is very small with respect to the total working population, and few areas have more than 1% employed in the fishing or fishing related activities. Nonetheless the social and economic importance of fishing and ancillary industries is particularly significant in some coastal areas of England, notably the north east and the south west. For every fisherman it is estimated that 3-5 people are also employed in ancillary industries.

The UK makes up 8% of the EU fishing fleet. Greece, Italy and Spain have the largest fleets which account for a further 56% of the total EU fishing fleet. In common with most other national fleets its contribution to the domestic economy is relatively small compared to other commercial activities. The total value of fish landed into the UK by UK vessels is approximately £415 million, which is less than 1% of the total economic contribution of marine-related industries. Assessing the precise economic position of fishermen, and therefore the communities in which they live, is hampered by inadequate structural and economic data.

The cost of enforcing the Common Fisheries Policy by the United Kingdom is high at approximately £87 million, of which £28 million was spent in England and Wales.



## **4.2 The market**

There is a strong market demand for fish. The UK imports large quantities of fish to the value of £1423 million and exported fish and fish products of a further £759 million. The UK also has a substantial fish processing industry employing some 22,500 people.

An essential element in the imbalance between demand and dwindling supply is that stocks of economic importance are seriously depleted and are not being exploited in the responsible manner that would allow larger and more sustainable catches to be obtained in the long term.

## **4.3 The public's perception**

Many people now recognise that over-fishing is a problem. However, few are aware of the wider effects of fishing other than the accidental catching of cetaceans in the South West and few will know that this issue occurs in other Community waters such as the North Sea.

## **4.4 Current issues**

Following the production of the framework for the reformed common fisheries policy (EC 2371/2002) at the beginning of 2003 a number of regulations, Action Plans and Communications have been produced by the Commission in order to implement the reform of the CFP.

Of particular importance is the Community Action Plan to integrate environmental protection requirements into the Common Fisheries Policy (COM (2002) 186). This provides management measures, targets and associated timetables. This plan is in the process of being implemented and as a result there are few regulations in place. Regulations of note are:

- Council Regulation (EC) No 1185/2003 of 26 June 2003 on the removal of fins of sharks on board vessels.
- Council Regulation (EC) No 812/2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98 (23/07/2003).

The European Council proposal on the formation of Regional Advisory Councils (RACs) is also of major importance (COM (2003) 607). These bodies are being established to enable stakeholders, particularly the fishing industry, to become more closely involved with the development of the CFP. They will offer advice on fisheries management for certain areas or fishing zones. The RACs will be composed of a two thirds majority of representatives from the fishing sector with representatives of other groups with an interest in the CFP, including the environment, making up the other third. The environmental component is to be represented by non-governmental organisations and it will be essential that the Country Agencies develop close links to provide environmental input and support. The North Sea RAC is currently the most developed and is expected to hold its first official meeting in November 2004. The North Western Waters RAC (covering the West of Scotland, Irish Sea, English Channel, the Western Approaches, West of Ireland and the Celtic Sea) is also being formed and should be functioning by the start of 2005.

The first recovery plan, for cod, was adopted at the Fisheries Council in December 2003 and there was political agreement for a recovery plan for Northern hake stocks. These plans include total allowable catches, closed areas, restriction on fishing effort and enforcement measures. Long term recovery plans for sole, Southern hake and Norway lobster were proposed in January 2004.

The first permanent measure to protect a habitat from fishing impacts came into effect on 1<sup>st</sup> August 2004 through amendment of Council Regulation (EC) No 850/98 as regards the protection of deep-water coral reefs from the effects of trawling in an area north-west of Scotland ("Darwin Mounds").

Future funding for fisheries is currently being reviewed for the period 2007-2013. The European Commission has now proposed a new 'European Fisheries Fund' which is to be established in order to facilitate the implementation of measures adopted under the reformed CFP. One of the four priorities of the fund has been identified as 'reduction of fishing pressure and better protection for the marine environment'. This appears to be a clear intent by DG Fisheries to increase allocations of funds to more environmentally friendly fishing management. A communication (COM (2004) 438 final) from the Commission to the Council and European Parliament on 'promoting environmentally friendly fishing methods: the role of technical conservation methods' was also produced in June 2004.

The Biodiversity Action Plan (BAP) for Fisheries has been reviewed, together with the EU Biodiversity Strategy and other BAPs, towards delivering the EU commitment to halt biodiversity loss by 2010. An Action Plan with priority objectives and targets for 2010 was developed from the Malahide Conference in May 2004 and the fisheries objectives show a clear shift towards greater environmental integration.

At a national level the Prime Minister's Strategy Unit produced a report (March 2004) on the medium to long term issues facing the UK fishing industry entitled 'Net Benefits: A Sustainable and profitable future for UK fishing'. A key recommendation is for the removal of 13% of the whitefish fleet as part of a package of management reforms and the tying up of a further 30% of the whitefish fleet for four years to accelerate stock recovery. Dan Laffoley (EN Head of Marine Conservation) and Mark Tasker (JNCC Marine Advisor) were seconded to this unit to provide marine conservation advice. This report is likely to determine the future policies adopted by the government concerning the fishing industry and Defra is currently producing an Action Plan to take the report forwards. The Action Plan is due to be completed by the end of 2004 and is to be developed with stakeholder consultation.

Defra have conducted a review into marine fisheries and environmental enforcement. A report was produced in July 2004 for a 3 month consultation. The review covers the organisation, legislation and funding of these activities and in particular has the potential to dramatically alter the current inshore fisheries management arrangements under the Sea Fisheries Committees. The European Commission issued the UK (November 2003) with a letter of formal notice with regard to serious failings in their obligations to ensure the enforcement of certain rules under the CFP. This includes misreporting of species caught, areas fished, and failure to take appropriate action against parties who do not comply with the rules.

Cetacean bycatch has remained a high profile issue. In March 2003 Defra released a consultation paper 'UK Small cetacean bycatch response strategy', detailing proposals to mitigate levels of cetacean by-catch. The House of Commons Environment, Food and Rural Affairs Committee have now produced (January 2004) a response to the strategy and consider that it does not go far enough, and recommend Government to take further action. This has been partly fulfilled by the adoption of the Council regulation (EC) No 812/2004. Ben Bradshaw MP has also recently announced (22/07/04) that he will be requesting the European Commission to put in place emergency measures to close the SW bass pair-trawl fishery for the forthcoming season. This follows high recorded levels of dolphin bycatch and the disappointing results of the trial 'escape hatch mechanism' meaning that there is currently no suitable mitigation measure to reduce the bycatch to a level that is viewed as acceptable and not a risk to the Common dolphin population.

## **5. Nature conservation impacts**

**5.1** Within our Territorial Seas many fishing methods are used. Aspects of these fishing practices can have significant direct effects on and within key nature conservation sites such as Marine Nature Reserves (MNRs), European Marine Sites, Sites of Special Scientific Interest and sensitive marine areas:

**5.1.1 The removal of target (commercially valuable) species.** Many of these species spend at least part of their lives within territorial waters forming nationally and internationally important spawning and nursery areas. A number of these stocks are now at historically low levels. Assessment has shown that cod, Irish Sea whiting and Northern Hake stocks are in danger of collapse and nearly all the remaining commercial species require a significant reduction in the level of exploitation to avoid a similar fate. As target fish stocks become reduced commercial exploitation has moved to other species that are generally lower down the food chain and this is known as 'fishing down the food chain'. In addition there has been a reduction in the average size (and age) of fish in the sea, which reduces the reproductive contribution of the population, diminishes the resilience of populations (due to the loss of age class structure) and may interrupt important behavioural characteristics.

**5.1.2 The mortality of non-target species through their incidental catch in fishing gear.** This includes cetacean, seabirds, non-target fish species, juvenile target species and some benthic species protected by national and international wildlife legislation e.g. deepsea coral *Lophelia pertusa*;

**5.1.3 Physical disturbance of the sea bed by fishing gear.** This includes seabed features, protected by European wildlife legislation, which provide suitable substrates for diverse benthic communities;

**5.1.4 'Fishing litter' and other associated debris.** Accidentally lost and deliberately dumped fishing gear can continue to fish, catching target and non target species for long periods, before eventually deteriorating.

**5.2** There are also complex indirect effects associated with these changes, such as structural changes in habitats affecting species assemblages, modification of predator-

prey relationships and changes in nutrient cycling. These alter biodiversity values and are likely to reduce the resilience of ecosystems to environmental change.

- 5.3** Of the 12 marine Habitat Action Plans (HAPs) 11 may be affected by fisheries activities. Of the 16 marine Species Action Plans (SAPs) 14 may be affected by fisheries activities. In general, habitats are subject to modification due to the physical impact of fishing gear and species are either targeted or accidentally caught during fishing operations.

## **6. Sectoral objectives**

Our objectives for this sector are aimed at a European (i.e. the CFP) and national level:

### **6.1 Fishing management that:**

- **Integrates environmental objectives within fisheries policy by implementation of an ecosystem approach to fisheries management.**

The objectives of the reformed CFP include the progressive implementation of an ecosystem-based approach to fisheries management, and the use of a precautionary approach. However, as new regulations are developed to implement the reformed CFP it will be essential to ensure that these principles remain at the core of new policies. Achieving this objective will allow biodiversity targets to be explicitly linked to changes in fishing policy and practice, and corresponds with the 2002 World Summit on Sustainable Development (WSSD) target of encouraging the ecosystem approach in the marine management by 2010.

- **Brings overall fishing mortality in line with stock availability and allows for the restoration of depleted fish stocks.**

The arrangements for controlling fishing mortality, by setting limits on the landing of fish, have not been successful. Control needs to focus on fishing capacity and effort directly, with multi-annual management plans. This objective directly underpins achieving the 2002 WSSD target to restore depleted fish stocks to maximum sustainable yield by 2015.

- **Has a decentralised management framework which involves relevant stakeholders.**

The development of Regional Advisory Councils would be able to guide an ecosystem approach to fisheries management at a regional scale but will need to use biologically meaningful units and operate on a scale that stakeholders can relate to.

- **Includes reliable information from the fishermen themselves to provide an improved knowledge base for decision making.**

The inclusion of information from fishermen would provide considerably more data on fish catches, biology and environmental effects that could lead to better management.

### **6.2 The effective use of suitable management methods and tools including the establishment of closed or partially closed areas to (a) protect key nature conservation interests and; (b) assist the recovery of the marine ecosystem.**

The likely outcome for marine wildlife will be the protection of habitats and species from detrimental effects of fishing and could be a significant contribution to the

development of sustainable fisheries if on an appropriate scale and provide for improved understanding of recovery capability of the ecosystem. Identification of areas that could aid fisheries management should be determined in conjunction with the fishing industry. This will form part of a broader approach we will take to develop networks of marine protected areas within Territorial Waters to underpin the 2002 WSSD target to establish networks by 2012.

**6.3 Further research to significantly improve knowledge of the interactions of fisheries and the environment.**

Fisheries scientists, the fishing industry and nature conservation bodies all agree that environmental impact assessment of fisheries interactions is an imprecise science. Although information is available which, with the adoption of a more precautionary approach to management, should be acted upon now, there is a requirement for further research so fisheries and the marine environment can be managed more effectively. Existing and new information needs to be made available to interested parties so they gain a greater awareness and appreciation of the effects of fishing.

**6.4 Further research to develop technical measures that are more selective, and reduce bycatch and impact on the seabed.**

Such measures will aid in the development of sustainable fisheries that have improved environmental performance. In particular the advancement of measures to reduce cetacean bycatch will assist in the protection of these nationally and internationally important species.

**6.5 Development of appropriate fisheries management plans for European marine sites.**

Fisheries play an important role within many of our candidate European marine sites. Their potential effects on the features of interest will require monitoring and management by the relevant authority if deemed necessary.

**6.6 The development of an inshore fisheries management framework in which environmental considerations are made a central element.**

Defra are currently reviewing marine fisheries and environmental enforcement. This is likely to alter the current inshore fisheries management framework and it will be essential to ensure that environmental considerations are a central element.

**6.7 Environmental assessments for fisheries.**

Fishing activities that take place within European Marine Sites should be assessed (under the Habitats Directive) and dealt with using a precautionary approach. Strategic Environmental Assessments should be introduced to define the current scale of fisheries impacts at a regional level.

**6.8 Adoption of marine HAPs and BAPs targets.**

Many of the marine habitats and species are affected by fishing activities. This is reflected in the objectives, actions and targets of the (draft) plans. Where appropriate we will encourage their adoption by the appropriate organisations.

## 7. Priority actions 2004 - 2007 and supporting key messages

### Priority actions

**Priority Action S1: Work in partnership with Joint Nature Conservation Committee (JNCC), Scottish Natural Heritage (SNH), Countryside Council for Wales (CCW), Defra and the fishing industry to secure the delivery of the environmental aspects of the reformed Common Fisheries Policy, in particular, through the implementation of a regional and an ecosystem approach to sustainable fisheries management.**

**Expected Nature conservation gain:** England's marine environment assets effectively protected through enhanced action at a regional, UK and European Community level to secure more sustainable exploitation of fish stocks and associated fisheries with explicit links between UK BAP targets and changes in European fisheries policy and practice.

**Action:** English Nature will support the development of Regional Advisory Councils that include all of the relevant stakeholders, including nature conservation interests, to ensure an improved ecosystem approach to fisheries management. We will also seek to establish pilot sustainable fisheries projects around the English coast with partner organisations. We will work to support Defra and the European Commission in transforming reforms on the Common Fisheries Policy into practical action around our coasts. In conjunction with this we will provide advice through consultation responses and also targeted meetings to help deliver these actions.

**Priority Action S2: Work with others to ensure that a representative and ecologically coherent network of Marine Protected Areas (MPAs), to be set up by 2012, includes a core of No Take Zones (NTZs) for fisheries as well as other extractive uses, to protect key nature conservation interests and assist the recovery of the marine ecosystem.**

**Expected Nature conservation gain:** Protection of the natural diversity and abundance of marine life and the structure, function and integrity of marine ecosystems from unsustainable fishing and marine industrial practices. Restoration of degraded ecosystems and a greater understanding of 'naturalness'.

**Action:** We will work in partnership with key stakeholders, especially the fishing industry and other regional agencies to develop a trial project in the SW to start to implement a network of national MPAs including those that are highly protected (i.e. NTZs) in conjunction with local communities. This will form part of a broader approach we will take to develop networks of marine protected areas within Territorial Waters to underpin the 2002 World Summit on Sustainable Development target to establish networks by 2012. We will also work with JNCC, through OSPAR, to develop a common approach to determine the success of management of our existing marine protected areas, including Natura 2000, Marine Nature reserves and highly protected areas.

**Priority Action S3: Advocate ways to integrate environmental considerations within inshore fisheries management.**

**Expected Nature conservation gain:** UK BAP targets and condition of designated sites explicitly linked to national fisheries policy and practice.

**Action:** English Nature will promote their commissioned report on Inshore Fisheries Management in England and Wales, and work strategically with the Sea Fisheries Committees and through their Association to influence the imminent changes in inshore fisheries management. We will target our actions but will work to achieve this at all levels, including responding to and offering advice to the Association as well as through practical actions at individual sites, which we may then highlight to promote best practice amongst the Committees. Through the Review of Marine Nature Conservation, and other appropriate routes, we will work with Sea Fisheries Committees to seek solutions to legislative problems that hinder their abilities to implementing their environmental obligations, including addressing legislative gaps in management coverage of their responsibilities, and reducing the long-term requirements to seek legislation through Ministerial Orders.