



Working for marine wildlife

Guidance for public authorities on conserving marine, coastal, and estuarine biodiversity in South West England



Working together for wildlife

Working for marine wildlife. Guidance for public authorities on conserving marine, coastal and estuarine biodiversity in South West England. Biodiversity South West and Natural England 2008

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CONTENTS

Sı	ımmaı	y	1
1.	Backg	ground	3
2.		ne and Coastal Biodiversity in the South Westiodiversity and People	
3.		g action for biodiversity and the NERC Act That is the NERC Act and the 'Biodiversity Duty'?	
	3.2 V	Why is the Biodiversity Duty needed? Tho does the Biodiversity Duty apply to?	6
4.	Oppo	rtunities for implementing the Biodiversity Duty in the marine	
er	ivironi	ment	
	4.1	Development and delivery of strategies and policies	10
	4.2	Planning, licensing, infrastructure and development	
	4.3	Management of land, seabed and property	13
	4.4	Education, advice, awareness and monitoring	15
	4.5	Partnership working	16
	4.6	Other organisations	17
5.	Where next?		
6	Further information 20		

Summary

The South West of England has around 1,020km of coast extending from the Bristol Channel to Land's End and along the English Channel coast to Christchurch, and includes the Isles of Scilly and the island of Lundy. The region is reliant on a high quality maritime environment. It underpins the economy, the identity and the quality of life in the region. At a time when the maritime environment is coming under increasing pressure from a range of activities it is imperative that collective action is taken to deliver environmental improvements.

This booklet describes the provisions for the conservation of biodiversity in the Natural Environment & Rural Communities Act 2006 from a marine perspective. The aim is to help public authorities fulfil the Biodiversity Duty set out in this Act, in order to help conserve the maritime environment in South West England.

The guidance has been developed with the support of Natural England for 'Biodiversity South West', a regional partnership which aims to "promote and enable the delivery of the UK Biodiversity Action Plan through regional and local biodiversity action in line with the England Biodiversity Strategy". The output has also been guided by participants of a workshop held in Exeter in April 2008.

Ways in which the NERC Biodiversity Duty should be taken forward include the following;

- Integrating coastal and marine biodiversity in existing and new strategies and policies;
- Having specific biodiversity policies and objectives;
- Considering incidental opportunities to protect and enhance biodiversity;
- Integrating biodiversity within corporate priorities and internal policy.
- Integrating coastal and marine biodiversity considerations into planning, licensing, infrastructure and development decisions;
- Having specific plans, policies and objectives for biodiversity action;
- Taking opportunities to enhance biodiversity as well as protect it both directly and indirectly through design considerations;
- Effective monitoring to ensure measures are successful.
- Being aware of the biodiversity resource within and around land and seabed holdings and property;
- Managing land, seabed and property in a way which;
- reduces environmental impacts that affect biodiversity,
- has regard to designated sites as well as biodiversity in general,
- explores options to enhance the biodiversity interest.
- Incorporating biodiversity considerations into general education, advice and awareness raising work;
- Have specific coastal and marine biodiversity projects;
- Supporting coastal and marine research and monitoring;
- Gathering and using coastal and marine biodiversity data and information:
- Using local, regional and national expertise on marine biodiversity matters to inform decision making.
- Supporting and building on the many existing coastal & marine partnerships;
- Exchanging information and pooling expertise on how biodiversity benefits might be achieved through partnership working;
- Encouraging organisations that do not have environmental management as a primary function to participate in coastal and maritime partnerships.

1. Background

Biodiversity is the variety of life on earth. It describes all species of plants and animals as well as the natural systems that support them. In the coastal and marine environment this covers a vast spectrum from conspicuous animals such as seals and shorebirds to the microscopic plankton, and from natural systems as diverse as intertidal mudflats, and submerged rocky reefs to seawater itself.

Biodiversity is not only important in its own right but it is also essential to human life and describes our natural wealth. This can be seen as the "goods and services" it provides, such as food, raw materials and storm protection, as well as more intangible benefits. Indeed government has recognised that "a diverse and thriving natural environment is essential to the economic, social and spiritual health and well being of this and future generations".

The UK is party to numerous obligations, initiatives and actions supporting the conservation of biodiversity. One of the most recent, relevant to England and Wales, is the Natural Environment & Rural Communities (NERC) Act, 2006. The Department for Environment, Food & Rural Affairs (Defra) has published guidance on the implementation of the "Biodiversity Duty" set out in this Act². The general principles set out in that guidance apply to the marine environment however this booklet is specifically focussed on how the requirements might be delivered in the marine environment.

This booklet is intended to fill that gap for public authorities in the geographic area covered by Biodiversity South West (the coastal counties of the Isles of Scilly, Cornwall, Devon, Dorset, Somerset, Gloucestershire and Avon) and other organisations that can support them in their work. Both coastal and marine biodiversity is considered but the focus is on the latter because it has had the least attention to date.

Our aim has been to make the guidance practical and positive by answering key questions and by using case studies to illustrate the best examples of action which can be taken and what is already being done.

² http://www.defra.gov.uk/wildlife-countryside/biodiversity/index.htm

¹ Defra (2003) Working with the grain of nature. A biodiversity strategy for England

2. Marine and Coastal Biodiversity in the South West

The British Isles lies in a transition zone between two biologically different areas. In the South West the marine climate favours southern species some of which are not found elsewhere in England. There are also a huge range of habitats from sheltered estuarine mud and rock to extremely wave exposed granite outcrops, solid cliffs, eroding slopes, submerged rocky reefs and kelp forests. These and other habitats support a wealth of coastal and marine wildlife.

The relatively warm waters and rich supply of plankton in the South West sustain some of the most diverse fish fauna in British waters. Some of the estuaries are important bass nursery areas and sandeels are common in shallow harbours and bays providing an important food source for other marine wildlife.

Out at sea there are fertile and barren areas, fast flowing currents, and dense cold waters. Common dolphin, harbour porpoise, and bottlenose dolphin occur in the region while fulmar, gannet, and Manx shearwater are some of the seabirds that feed over the deeper offshore waters.

The South West is the most maritime of all English regions making up 31% of England's coastline. The area of sea, around 41,000 km², is more than 3 times the land area. There are more than 20 coastal and marine European protected sites in the region and around 8,000 marine species. Ninety percent of rias and 37% of the UK's saline lagoons are found in this region

2.1 Biodiversity and People

The 1992 Convention on Biological Diversity (CBD) was a landmark international agreement for biodiversity conservation. The UK was one of 150 original signatories to the Convention and published its Biodiversity Action Plan in 1994. This sets out why it is so important to conserve biodiversity and plan action to deliver biodiversity improvement. Many of these reasons are relevant to the coastal and marine environment.

The oceans are key regulator of climate and therefore have an important role in tackling climate change. Coastal and marine environments also provide other vital services. Healthy saltmarsh, for example, can help prevent and alleviate damage

caused by flooding and storm events. Coastal and marine biodiversity helps sustain local economies by creating jobs and generating income such as in the marine leisure and recreation sectors. Commercial fisheries rely on a healthy and productive marine environment and are one of a number of marine industries supplying essential products and materials.

Seashores, coastal and offshore waters can enhance and encourage outdoor recreation and, through this, contribute to our health and well-being. These environments are an important part of our heritage and identity as well as stimulating community engagement and voluntary activity. There are also strong ethical reasons for conserving biodiversity and these are no less relevant to marine biodiversity as to biodiversity anywhere else on Earth.

Some economic benefits which can be linked to coastal & marine environmental assets from 'The South West Coast Prospectus for the Future'

- 40 million visitors each year (worth £3.5 billion to GDP)
- 42% of England's commercial fishing activity, supporting around 9,000 jobs
- Significant recreational angling >3000 jobs
- Approximately 1400 marine businesses
- The South West coast path which is valued at £300 million per year to the local economy.

The benefits of biodiversity conservation described above are interconnected and hence reliant on the overall health of the coastal and marine environment rather than any one part in isolation. They also illustrate that marine biodiversity conservation is a key element of sustainability.

3. Taking action for biodiversity and the NERC Act

3.1 What is the NERC Act and the 'Biodiversity Duty'?

The NERC Act 2006 includes provisions concerned with the natural environment and rural communities. One of these, set out in Section 40 of the Act, is a duty to conserve biodiversity.

The duty to conserve biodiversity as set out in the NERC Act

- 40 (1) Every public authority, must in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- 40 (2) In complying with subsection (1), a Minister of the Crown, government department or the National Assembly for Wales must in particular have regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992.
- 40 (3) Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

The duty is intended as an enabling measure formalising and bringing together existing commitments by helping public authorities to prioritise biodiversity and carry out existing statutory requirements properly. While the duty does not introduce new functions for public authorities it is clear, given the reference to the Biodiversity Convention, that there are many actions which should be taken. In a similar vein, the definition of conservation makes it clear that the duty is not limited to what might be considered traditional areas of work such as "protection of species and habitats", but also to restoration and enhancement. Case law will undoubtedly provide interpretations of what constitutes 'having regard' as set out in the Act. Although this is likely to depend on the particular constraints and functions of the relevant public authority.

Defra will be conducting a review of the duty in 2009. The format and structure of the review are currently under consideration.

Government has introduced this Biodiversity Duty in recognition of the fact that if we are to achieve our biodiversity aims under the Convention then responsibility for biodiversity crosses sectors and government departments and beyond, and should not just be the sole responsibility of those whose primary function it is.

3.2 Why is the Biodiversity Duty needed?

Our marine and coastal biodiversity is under threat and declining, resulting in a varying, and at present, unpredictable, change in our natural wealth. This will result in severe impacts on society and the economy, including reduced resilience and resistance to change, declining marine environmental health and water quality, reduced fisheries potential, loss of recreational opportunities, decreased employment and reduced carbon uptake.

Climate change has been identified as one of the most important pressures on the South West's environment. In terms of biodiversity this will lead to shifts in species distribution and indeed studies in the western English Channel have shown an increase in sea temperatures and abundance of many warm water species such as southern sea breams since the 1980s. Other associated changes include the potential mismatch between breeding times and the availability of food resources and the loss of coastal habitat where it is unable to shift inland. Damage to seabed habitats such as subtidal reefs in Lyme Bay caused by fishing gears, the loss of foreshore due to development as in the Tamar and the Fal, and the decline in sightings of bottlenose dolphin off the South West coast are some of the many other issues of concern in relation to biodiversity. Consideration of biodiversity may have benefits in terms of climate change mitigation and planning actions should be flexible in light of emerging knowledge of impacts and should include thoughts on allowing biodiversity to adapt.

There are many drivers for biodiversity conservation from international to local levels. The Biodiversity Action Plan (BAP) process which is perhaps the best known driver has led to the preparation of plans for a range of habitats and species including some marine and coastal examples. The focus however has been on conserving rare and threatened species and habitats. The NERC Biodiversity Duty encompasses BAPs as well as existing commitments such as those under the Countryside & Rights of Way Act 2000 and the EU Habitats Directive but it goes further because it is about UK biodiversity as a whole and the need for continuing and further action. This is why the NERC duty is so relevant and important in the coastal and marine environment.

3.3 Who does the Biodiversity Duty apply to?

The Biodiversity Duty set out in the NERC Act applies to <u>all public authorities</u> in England and Wales. These are defined in Section 40(4) & 40(5). Similar duties already apply to Government, Ministers and local authorities (under the Countryside & Rights of Way Act 2000), which is particularly relevant in coastal Areas of Outstanding Natural Beauty, and to public authorities in Scotland under the Nature Conservation (Scotland) Act 2004.

A list of public bodies is available from the Cabinet Office ³ and examples relevant to South West England are given in Table 1.

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³http://www.civilservice.gov.uk/documents/pdf/public_bodies/public_bodies_2007.pdf

Section 40(4) definition of "Public authority" is any of the following

- (a) a Minister of the Crown;
- (b) the National Assembly for Wales;
- (c) a public body (including a government department, a local authority and a local planning authority);
- (d) a person holding an office –under the Crown; created or continued in existence by a public general Act; or the remuneration in respect of which is paid out of money provided by Parliament,
- (e) a statutory undertaker

Section 40 (5) definition of "local authority"

- (a) in relation to England, a county council, a district council, a parish council, a London borough council, the Common Council of the City of London or the Council of the Isles of Scilly;
- (b) in relation to Wales, a country council, a county borough council or a community council;

"local planning authority" has the same meaning as in the Town and Country Planning Act 1990 (c.8);

"Minister of the Crown" has the same meaning as in the Ministers of the Crown Act 1975 (c.26);

"statutory undertaker" means a person who is or is deemed to be a statutory undertaker for the purposes of any provision of Part 11 of the Town and Country Planning Act 1990.

The role of other organisations should also be considered as many help to deliver action on the ground. Biodiversity South West falls into this category as do environmental NGOs, Local BAP Partnerships, research institutes and coastal landowners amongst others. Their potential role is discussed in Sections 4.5 & 4.6...

4. Opportunities for implementing the Biodiversity Duty in the marine environment.

Public authorities have a varied and vital role in conserving biodiversity in the marine environment. This is reflected in their many functions and activities from statutory obligations to voluntary initiatives. The key functions and services of relevance to biodiversity have been described in the Defra guidance. This section highlights coastal and marine aspects and illustrates them with case studies.

TABLE 1 Examples of public authorities who should further the Biodiversity Duty in the coastal and marine environment around South West England

PUBLIC AUTHORITY	EXAMPLE ORGANISATIONS
Local authorities	County councils, district councils, unitary
(410 in UK)	authorities and parish councils in Gloucestershire,
	Avon, Somerset, Devon, Cornwall, Isles of Scilly,
	Dorset.
Central Government	Department for Business, Enterprise and Regulatory
Departments	Reform
(21 for England and	Department for Culture, Media and Sport
Wales)	Department for Environment, Food &Rural Affairs
	Ministry of Defence
Departmental	Centre for Environment, Fisheries & Aquaculture
Executive Agencies	Science
(approx 80 in England	Maritime & Coastguard Agency
& Wales	Marine & Fisheries Agency
	UK Hydrographic Office
	Planning Inspectorate
Government Offices	Government Office South West
Non-Ministerial	The Crown Estate
Government Depts (20)	Water Services Regulation Authority
Non-Departmental	Advisory Committee on Historic Wreck Sites
Public Body (750 in	Culture South West
England & Wales)	Environment Agency
	Joint Nature Conservation Committee
	Natural England
	Sea Fish Industry Authority
	Trinity House Lighthouse Service
	South West England RDA
NHS Trust (259 in Eng)	South West Strategic Health Authority
Regional Assemblies	South West Regional Assembly
Utilities	Water companies
Statutory undertakers	Devon Sea Fisheries Committee
	Southern Sea Fisheries Committee
	Poole Harbour Commissioners
	Portland Harbour Authority
	Water companies
	Internal Drainage Boards

4.1 Development and delivery of strategies and policies

A wide range of strategies and policies apply to the coastal and marine environment in the South West. While the primary focus of many of these may be terrestrial there is a gradual shift towards considering maritime issues within them as well as marine biodiversity.

Sector specific strategies and policies may be more directly related to maritime matters, for example those on fisheries or biodiversity conservation. Organisations with significant marine interests such as port and harbour authorities and the Crown Estate may also have corporate strategies and policies which recognise the need to further marine biodiversity conservation and support its delivery through projects.

Ways in which the NERC Biodiversity Duty should be taken forward include:

- Integrating coastal and marine biodiversity into existing and new strategies and policies;
- Having specific biodiversity policies and objectives;
- Considering incidental opportunities to protect and enhance biodiversity;
- Integrating biodiversity within corporate priorities and internal policy.

Examples of regional/local strategies for the South West where maritime biodiversity considerations should be incorporated or enhanced include:

- SWRDA (2006) Regional Economic Strategy for the SW 2006-2015
- South West RDA (2006) Towards 2015 Shaping Tomorrow's Tourism
- Regional Spatial Strategy for the South West of England
- Regional Sustainable Development Framework
- South West Climate Change Action Plan (currently being drafted)
- AONB Management Plans.

Good examples of regional and local strategies and policies for the South West are:

- The Dorset Coast Strategy
- Severn Estuary Strategy.

Forthcoming strategies where incorporation of biodiversity is essential include:

- Shoreline Management Plans
- Strategic Plan for Water Related Recreation in the South West Region
- 'blue space' planning guidance for local planning authorities in England to help assess the suitability for water-based sport and recreation for coastal and inland waters.

These are ideal vehicles to advance the NERC Biodiversity Duty.

Delivery of these strategies occurs in many ways. For example, in their Local Development Framework Plymouth City Council are proposing the introduction of a tariff to support the management of the Plymouth Sound and Estuaries marine SAC. The Crown Estate run a Marine Stewardship Programme which provides funding for biodiversity related projects.

The Dorset Coast Strategy

The Dorset Coast Strategy sets out a consensus view on the way in which the members of the Dorset Coast Forum will work together to improve the planning and management of the Dorset Coast. There are nine priorities which cover conserving the quality of the Dorset coast, developing Dorset's coastal economy, promoting enjoyment of the Dorset coast and taking more responsibility for the future of the Dorset coast. Examples include;

- The need for long-term conservation of the coast;
- The need for equivalent recognition for the land and sea, within realistic limits;
- The need to support sustainable use of coastal resources.

4.2 Planning, licensing, infrastructure and development

The planning system is the key mechanism to determine the location, scale and nature of development on land and for ensuring that biodiversity considerations are fully taken into account in development proposals. While primarily a terrestrial measure it has both direct and indirect implications for marine biodiversity conservation

Ways in which the NERC Biodiversity Duty should be taken forward include:

- Integrating coastal and marine biodiversity considerations into planning, licensing, infrastructure and development decisions;
- Having specific plans, policies and objectives for biodiversity action;
- Taking opportunities to enhance biodiversity as well as protect it both directly and indirectly through design considerations;
- Effective monitoring to ensure measures are successful.

In general coastal local authorities have planning jurisdiction over areas adjacent to the coast and in some cases, also the foreshore and across bays, estuaries and inlets. They administer the statutory planning system however non-statutory plans also influence biodiversity conservation, especially in the marine environment. There are many examples in the South West such as those covering the estuaries of the

Severn, Camel, Dart, Exe, Fal/Helford, Fowey, Hayle, Poole Harbour, Salcombe/Kingsbridge, Tamar, Taw/Torridge, Teign and Yealm. Sector specific plans such as Shoreline Management Plans, recreation plans and Biodiversity Action Plans are also important vehicles for taking forward the Biodiversity Duty.

The Poole Harbour Aquatic Management Plan

The overall aim of the Poole Harbour Aquatic Management Plan is "to promote the safe and sustainable use of Poole Harbour, balancing the demands on its natural resources, minimising risk and resolving conflicts of interest." The non-statutory plan contains guidelines, principles and objectives designed to inform, advise and guide current and future management of the harbour. As Poole Harbour has been designated a Special Protection Area under the EU Birds Directive, the Aquatic Management Plan also serves as a Management Scheme to achieve the conservation objectives for the designation.

There are ten themes covered by the plan; nature conservation, water quality & pollution, managing the shoreline, fisheries, conservancy & marine safety, recreation, commerce, transport, emergency planning, and archaeology.

The licensing, byelaw making powers and enforcement duties of Sea Fisheries Committees (SFCs) are examples of specific tools which can help achieve benefits for marine biodiversity especially following the Environment Act 1995 which gave SFCs power to make byelaws for marine environmental purposes. In some cases these may be preventing impacts and in others there may be an enhancement role.

Devon Sea Fisheries Committee

In 1998 Devon Sea Fisheries Committee (DSFC) introduced a byelaw relating to the dredging of Scallops in Salcombe Estuary. The fishery is highly restricted and operates under a permit scheme which limits dredging for scallops to a small area of the estuary. The fishery is only open for 3 months each year and is limited to two hand hauled dredges per fishing vessel, to be used at any one time. Toothed dredges, which can cause more damage to the environment, are not permitted. The permits issued to fishermen also require fishermen to keep clear of the areas of eel grass within the Salcombe Estuary and to this end a map has been prepared to assist fishermen in this task.

In 2001 the DSFC introduced a Regulating Order covering shellfisheries within an area of the Dart Estuary (the Waddeton Fishery Order). Fishing activity is managed under licence with the aim of avoiding impacts on biodiversity at the same time as achieving a sustainable fishery. One of the benefits has been the increase in biodiversity, including bird populations, associated with the shellfish beds, particularly in areas of where anaerobic mudflats previously predominated.

4.3 Management of land, seabed and property

The foreshore and seabed is a mix of private land, land in public ownership and land held by the Crown. The Biodiversity Duty applies directly in the latter two cases and in such circumstances is most likely to fall to coastal local authorities, harbour authorities, and The Crown Estate.

Ways in which the NERC Biodiversity Duty should be taken forward include:

- Being aware of the biodiversity resource within and around land and seabed holdings and property;
- Managing land, seabed and property in a way which;
- reduces environmental impacts that affect biodiversity;
- has regard to designated sites as well as biodiversity in general;
- explores options to enhance the biodiversity interest.

Many coastal local authorities own and manage land adjacent to the coast and some also lease part of the foreshore and seabed below low water mark, such as around piers or jetties, or across inlets and bays. The foreshore of the Saltern Cove Local Nature Reserve (LNR), for example is owned by Torbay Council and managed by the Council and the Torbay Coast & Countryside Trust, while the Kingsbridge and Salcombe LNR is managed by South Hams District Council, as is Salcombe Harbour through the Salcombe Harbour Authority.

Salcombe Harbour

The Salcombe Harbour Authorities Harbour Moorings and Zoning Policy aims to bring in moorings from more sensitive areas and to condense negative environmental impacts to less sensitive areas, leaving more sensitive areas pristine or at least less disturbed. This is being carried out in tandem with monitoring developments in moorings which are less likely to damage seabed habitats. Although this has still to be achieved some progress has been made towards this objective and it demonstrates an awareness of marine biodiversity conservation issues.

Harbours in the South West range from large commercial facilities to those designed for smaller vessels. They are owned by local authorities, trustees, private companies or, in the case of naval dockyard ports, by the MOD, all of whom take on the role of harbour authority. Harbour works such as dredging and construction may be covered by general powers or authorities, or by a specific order.

The Crown Estate own around 55% of the foreshore and approximately half of the beds of estuaries and tidal rivers in the UK. They also own most of the seabed out to the limit of territorial waters. In the South West the Duchy of Cornwall also has significant foreshore holdings. These include the tidal parts of the Dart, Salcombe & Kingsbridge, Avon, Looe, Helford and Camel estuaries, as well as coastal foreshore around Cornwall and the Isles of Scilly.

Royal Portbury and Avonmouth Docks, Bristol

The Bristol Port Company's environmental projects illustrate how biodiversity interests can be integrated into port operations. The port has a regularly updated masterplan for Royal Portbury Dock to safeguard rich wildlife habitats without compromising the ability of the port to grow commercially. A key concept is the establishment of 'wildlife corridors' where the aim is not only to maintain habitats such as wetlands, saltmarsh and, hedgerows but also to create green links to allow the free and safe movement of mobile species between them.

Conservation schemes include the construction of a nesting cliff for sand martins and kingfishers and the provision of suitable nesting habitat for ringed plover and oystercatcher in operational areas adjacent to the estuary. All UK species of owl are now resident or wintering within the port estate, with barn owls and little owls nesting in the port. Following mink control and a water vole release programme in conjunction with Bristol Zoo, monitoring data show that this nationally scarce species is breeding successfully within the port area.

Enhancement projects in Avonmouth docks include designing and planting the earth bunds which form part of the new sea defence to create foreshore wildlife-rich areas. Three wind turbines are part of a programme to reduce the carbon footprint of the port and currently generate 75% of the ports energy requirements, with two more turbines planned. These will be monitored for any impact on birds and will provide all the port's needs.

Some coastal and marine holdings lie within marine Special Areas of Conservation (SACs) and there is a considerable amount of work underway to ensure the favourable conservation status of features for which these sites have been designated, both within and around the SACs. Such actions are a requirement under the EC Habitats and Species Directives but they can also be scoped to derive wider benefits, for example for species and habitats beyond those for which the site has been designed, in helping to fulfil the Biodiversity Duty.

4.4 Education, advice, awareness and monitoring

Education, advice, awareness raising and monitoring underpin biodiversity conservation. This is critically important in relation to the marine environment where there are fewer opportunities to explore and appreciate marine wildlife at first hand compared to land. Formal education through the national curriculum is one avenue but there are also numerous informal opportunities through engagement in the wider community. Initiatives at the Helford Voluntary Marine Conservation Area in Cornwall illustrate how this can be done for example with activities for local school and community projects through to providing data for the Environmental Records Centre for Cornwall and the Isles of Scilly.

Awareness raising and education needs to be underpinned by information. The South West is fortunate in hosting internationally renowned marine science establishments such as the Marine Biological Association and Plymouth Marine Laboratory. Local Records Centres, along with universities and colleges undertake monitoring, research and data collection to improve understanding about the marine environment.

Ways in which the NERC Biodiversity Duty should be taken forward include;

- Incorporating biodiversity considerations into general education, advice and awareness raising work;
- Have specific coastal and marine biodiversity projects;
- Supporting coastal and marine research and monitoring;
- Gathering and using coastal and marine biodiversity data and information;
- Using local, regional and national expertise on marine biodiversity matters to inform decision making.

Information gathering -Coastal Habitat Mapping

The Environment Agency have commissioned a study to build GIS maps showing the location and extent of coastal habitats in South West England. Using air photo interpretation, GIS maps are being prepared for each habitat type, as defined in the Integrated Habitat classification system. They include mudflats, eel grass beds and *Sabellaria* reefs. The habitat maps will be ground truthed by experienced field surveyors.

This baseline habitat resource will not only identify sites and habitats vulnerable to climate change but also potential sites for managed realignment. It will be used to monitor changes in the type and extent of coastal habitats around the South West peninsula. The maps will be available to inform and influence Regional Spatial Strategies, local development frameworks and shoreline management plans amongst others. The habitat mapping project should be completed by December 2009 and will be crucial to enable the Agency and local authorities to meet their obligations to safeguard the regions wildlife.

4.5 Partnership working

Partnership working makes a vital contribution to marine biodiversity conservation in the South West by supporting and enhancing some of the functions carried out by public authorities described above. For example, in the absence of a statutory framework for marine planning, partnership working has developed and driven the agenda for sustainable management of activities in many coastal inlets as well as for some stretches of open coast. Partnerships of statutory authorities, voluntary bodies NGOs and private companies have agreed joint strategies that include biodiversity conservation and partnership projects have enabled practical works to be carried out that benefit coastal and marine biodiversity.

Ways in which the NERC Biodiversity Duty should be taken forward include:

- Supporting and building on the many existing coastal & marine partnerships;
- Exchanging information and pooling expertise on how biodiversity benefits might be achieved through partnership working;
- Encouraging organisations that do not have environmental management as a primary function to participate in coastal and maritime partnerships

Public body support for partnerships such as Local Biological Record Centres and Estuary Partnerships are an ideal way of delivering the Biodiversity Duty

effectively 'contracting out' some of the work. This could include financial or officer support as well as potentially requiring EIA data to be provided to Local Records Centres.

Torbay Local Biodiversity Action Plan (LBAP) and seagrass project

In 2000 Torbay Council together with the newly-formed Torbay Coast and Countryside Trust, brought together a wide range of interest groups, organisations and agencies with an interest in the coastal zone of the Bay, to identify the main coastal management issues and agree a vision and action plan for the future. The Tor Bay Coastal Forum was established and through a number of working groups looked in detail at water recreational use, infrastructure, nature conservation, tourism and fisheries. A key finding was the need for more data on Tor Bay's marine nature conservation resource so that action could be planned in future on a stronger scientific base. As a result several nature conservation organisations joined forces in 2001 to carry out further survey work and to produce a LBAP.

The Torbay Seagrass Project was a 1 year project funded from the SITA Trust, through the Landfill Tax Credit Scheme. The project directly related to the actions of the LBAP and was a partnership project with Torbay Harbour Authority, Devon Sea Fisheries Committee and Natural England. The project resulted in approximately 80ha of seagrass being recorded and protected through a voluntary code of conduct. Waterproof maps were printed so that boat operators and fisherman could use them at sea.

4.6 Other organisations

There are a wide range of organisations that are very willing and able to provide support and advice to public authorities in taking forward the Biodiversity Duty even though they are not public authorities themselves. They include private landowners, non-governmental organisations and private companies, and their roles range from advocacy for biodiversity policy to practical action on the ground. Their support comes through national initiatives as well as local projects. For example:

 The National Marine Aquarium is a centre for marine and coastal biodiversity education and outreach in the South West. It has visitors from far afield but also supports local marine education projects such as monitoring marine wildlife on the 'Scylla' an artificial reef in Whitsand Bay, Devon;

- The Marine Conservation Society's Marine Local Biodiversity Action
 Plan Manual provides information on threatened and declining marine
 habitats and species and actions which can help improve their status. This
 includes regional sections one of which focuses on the South West;
- The Wildlife Trusts' and MCS Basking Shark Project has collected valuable data on the occurrence of this endangered species in the South West:
- The National Trust own 36% of the coastline of Cornwall and are engaged in numerous sustainable management projects. One example was its work with Cornwall County Council at St.Gothian Sands, Gwithian and the previous owners of the site, Hanson Quarry Products and the Hockin Trust. Following restoration work the former mineral extraction site is now a Local Nature Reserve:
- The Royal Yachting Association/British Marine Federation run 'Green Blue' project is an environmental awareness initiative that includes identifying ways of preventing and mitigating negative impacts, educating and raising awareness amongst members and wider boating public about what they can do and working with partners to increase knowledge and promote responsible behaviour.

While the agenda for these organisations is not tied to the Biodiversity Duty their actions, together with those of public authorities who are bound by this duty, can combine to achieve the good marine ecosystem health and condition which underpins the conservation of marine biodiversity.

5. Where next?

The Biodiversity Duty applies to many organisations working in the marine environment, who can influence biodiversity issues and trends in the South West. Public bodies such as Sea Fisheries Committees, port and harbour authorities, Water Companies, Natural England, the Environment Agency, and the Crown Estate as well as all levels of local government including coastal county councils, district councils, borough councils, unitary authorities and parish councils are particularly well placed to directly influence the marine and coastal environment. However, all public bodies have a role to play in taking positive steps to have regard to biodiversity through their activities.

The Biodiversity Duty asks public and statutory bodies to include biodiversity issues in their decision making and operational procedures. It is about encouraging people to do things differently rather than take specific actions that would cost more. No additional funding is being made available and there should be no

assumption that doing something differently must cost more. In some instances changes may even be more cost effective.

Defra will be conducting a review of the duty in 2009 and the Defra guidance describes some key activities which many public authorities will be able to demonstrate how they have met the Biodiversity Duty. All of these are relevant to public authorities working in the coastal and marine environment. For example;

- Examining opportunities to integrate biodiversity considerations into all strategic planning, relevant service areas (including procurement and functions and taking steps to implement the opportunities identified);
- Management of land holdings in a way that is sensitive to biodiversity;
- Making efforts to raise awareness of staff, managers and elected members with regard to biodiversity issue;
- Demonstrating a commitment and contribution to biodiversity initiatives;
- Using information and data and demonstrating progress against key biodiversity indicators.

The draft 'Marine Bill' which is due to be considered by Parliament in 2008/9 will create very significant further opportunities to implement the NERC Biodiversity Duty in the marine environment. They include proposals for a Marine Policy Statement to support a system of Marine Spatial Planning and scope to prepare a series of marine plans which will apply the policy objectives set out in the Marine Policy Statement in more detail within specific parts of the UK's water. Most of the planning activity would be carried out by a Marine Management Organisation.

The aim of this guidance has been to explore what the Biodiversity Duty means for marine and coastal public authorities in the South West. There are plenty of ideas, existing commitments and a number of opportunities to have regard to biodiversity in the marine and coastal environment. There is also a great deal of expertise and information to support such action. Through case studies and recommendations this guidance outlines some of the ways that each organisation can have regard to biodiversity throughout its operations. By working together, in innovative ways we can build on this groundwork to develop further best practice examples of how public authorities can undertake to have regard to biodiversity. By rising to the challenge to incorporate this thinking into our activities, a great deal can be achieved for safeguarding biodiversity now and into the future, which will have

⁴ http://www.defra.gov.uk/marine/legislation/index.htm

positive benefits across the social, cultural, economic and natural maritime heritage of the South West.

6. Further information

There is a growing resource base available to support public authorities in fulfilling their Biodiversity Duty in the coastal and marine environment and organisations able to provide supporting information.

General background

Biodiversity. The UK Action Plan. HMSO 1994.

Conserving Biodiversity - the UK approach

Working with the Grain of Nature - Taking it Forward. Vols I & II

The Natural Environment and Rural Communities Act (2006)

Defra Guidance for local authorities and public authorities on implementing the Biodiversity Duty

Wildlife Trust Guidance on Biodiversity Duty

Defra (2003) Working with the grain of nature. A biodiversity strategy for England

Marine Conservation Society Local Biodiversity Action Plan guidance manual for England

Coastal and marine biodiversity in the South West

The South Western Peninsula Marine Nature Area Report

http://naturalengland.communisis.com/naturalenglandshop/docs/CORP1.48.pdf

The Western Approaches Marine Natural Area Report

http://naturalengland.communisis.com/naturalenglandshop/docs/CORP1.49.pdf

South West Observatory www.swenvo.org.uk

The South West Dolphin Report

http://www.marineconnection.org/docs/SW%20Dolphin%20Report%20LOW%20RES.pdf

Channel Coast Observatory www.channelcoast.org

National Biodiversity Network Gateway www.searchnbn.net

The Marine Life Information Network (MarLIN). www.marlin.ac.uk

Multi-Agency Geographic Information for the Countryside (MAGIC) www.magic.gov.uk

South West Biodiversity Implementation Plan

www.wildlifetrust.org.uk/avon/www/Regional/SWBIP_Final.pdf

Useful contact organisations for maritime biodiversity information

Environment Agency www.environment-agency.gov.uk

Joint Nature Conservation Committee www.jncc.gov.uk

Local Records Centres www.nbn-nfbr.org.uk/nfbr.php

Marine Biological Association www.mba.ac.uk

Marine Conservation Society www.mcsuk.org

National Marine Aquarium www.national-aquarium.co.uk

National Trust www.nationaltrust.org.uk

Natural England www.naturalengland.gov.uk

Royal Society for the Protection of Birds www.rspb.org

Biodiversity South West www.biodiversitysouthwest.org.uk

The Shark Trust www.sharktrust.org

The Wildlife Trusts www.wildlifetrusts.org



Front Cover; Male Corkwing wrasse, Babbacombe Back Cover; Intertidal zone, Wembury PHOTOGRAPHS BY Paul Naylor, www.marinephoto.co.uk

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