Strategy for the Severn Estuary

Summary



















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Strategy for the Severn Estuary

Summary

Preface

The Severn Estuary is one of the largest estuaries in Britain, has the second highest tidal range in the world, and has a natural and cultural heritage which deserves special attention. It is also a living and working environment for many people who live around it's shores and care about it's future.

This Strategy is the result of the first five years of progress towards the integrated management of the Severn Estuary and its resources, and provides a framework for the sustainable management of the Estuary to meet the needs of present and future generations. It is the starting point for delivering tangible results and will be a catalyst for future action plans that will help foster an integrated and co-operative approach to addressing issues and opportunities on the Estuary. It is a voluntary Strategy and therefore it is through existing statutory powers, remit, interest and enthusiasm of all Partnership members, and of the wider community, that the aims of the Partnership and action on the ground will be realised.

I hope that you will be able to work with us at this exciting time on the Severn Estuary and look forward to your support and participation in the implementation of the *Strategy for the Severn Estuary*.

Cllr. Charles S Price Bristol City Council (on behalf of the Severn Estuary Partnership)

September 2001

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Acronyms

ASERA	Association of Severn Estuary Relevant Authorities	FFWAG	Farming, Forestry & Wildlife Advisory Group	RCAHM	N Royal Commission on the Ancient & Historical Monuments of Wales
BASC	British Association of Shooting and	FSA	Food Standards Agency	RIGS	Regionally Important
	Conservation	FUW	Farmers Union, Wales		Geological/Geomorphological site
CA	Countryside Agency	GCR	Geological Conservation Review	RSPB	Royal Society for the Protection of
Cadw	The National Assembly for Wales'	GoSW	Government Office for the South		Birds
	heritage agency		West	SAC	Special Area of Conservation
CCW	Countryside Council for Wales	IDBs	Internal Drainage Boards	SECG	Severn Estuary Conservation Group
CEFAS	Centre for Environment Fisheries and	LAs	Local Authorities	SELRC	Severn Estuary Levels Research
	Aquaculture Science	LA21	Local Agenda 21		Committee
CLA	Country Land and Business	LEAP	Local Environment Agency Action Plan	SEP	Severn Estuary Partnership
	Association	MCS	Marine Conservation Society		, ,
CTC	Cyclists' Touring Club	NAW	National Assembly for Wales	SES	Severn Estuary Strategy
DTLR	Department of Transport, Local	NAWAD	National Assembly for Wales	SMP	Shoreline Management Plan
	Government and the Regions		Agricultural Department	SPA	Special Protection Area
EH	English Heritage	NFU	National Farmers Union	SWRA	South West Regional Assembly
EN	English Nature	NFUW	National Farmers Union, Wales	SWSFC	South Wales Sea Fisheries Committee
EQS	Environmental Quality Standard	OSPAR	Oslo and Paris Conventions	WDA	Welsh Development Agency
EU	European Union	pSAC	possible Special Area of Conservation	WWT	Wildfowl and Wetlands Trust

Our vision for the Severn Estuary

A vibrant and prosperous community, working in partnership for a clean and pleasant Estuary environment, valued and protected for generations to come.

1. Setting the scene

1.1 The Severn Estuary

The Severn Estuary, *Môr Hafren* in Welsh, is one of the UK's largest estuaries and is located on the west coast of Britain. As with many other estuaries in England and Wales, it has long been a focus for human activity, a location for settlement, a source of food, water and raw materials and a gateway for trading and exploration. The Estuary and its coastal hinterland supports major cities including Cardiff, Bristol and Gloucester, and its ports are a gateway to the Atlantic, and have links to motorways through Wales and the South West of England. The Estuary's beaches and undeveloped coastline, including low-lying levels, wetlands, and cliff scenery are enjoyed by many for recreation and appreciation of the Estuary's wildlife.

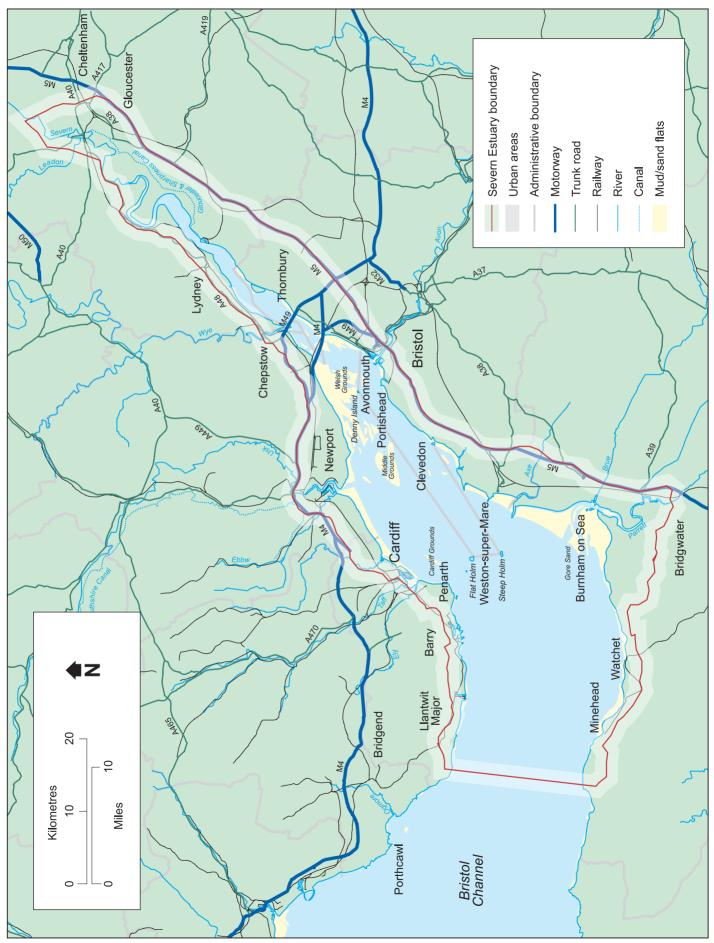
The Estuary is internationally recognised for nature conservation, having the status of Special Protection Area (SPA) under the EC Conservation of Wild Birds Directive and is a Ramsar site (a wetland of international importance). A significantly large area of the Estuary, including the subtidal zone, is a possible Special Area of Conservation (pSAC) under the European Habitats Directive. The area is of national and local conservation status with a variety of national and local conservation designations. The Estuary is an important migratory route for salmon and internationally rare fish species such as Shad. It supports commercial elver fisheries and is a habitat for a range of other species. It is also well known for the wealth of archaeological and historic interest features, as well as its high quality historic landscape. Having a high tidal range, the Severn Estuary presents a challenging and dynamic environment for coastal defence.

Today, major industries are sited around the Estuary's shores. There are modern port installations, chemical processing companies and nuclear power stations among others, and all play a vital role in the economy and social structure of the area. The service industry is the major employment sector with tourism attracting several million visitors each year to a large and varied number of attractions, accommodation types and transport services.

This summary document outlines the aims and principles of the Severn Estuary Partnership, the benefits of the project so far, and how the Partnership intends to implement the *Strategy for the Severn Estuary*. To address issues and opportunities over the past five years, the full Strategy document contains policies and proposals for action. This summary includes all policies in the Strategy document and examples of proposals for action. Further information on each of the themes presented can be found in the full Strategy document.



Figure 1. SES management area



1.2 The Severn Estuary Partnership

The Severn Estuary Partnership (SEP), originally called the Severn Estuary Strategy, is an independent estuary-wide project set up in 1995 by Local Authorities, the Environment Agency and the countryside agencies. It is a partnership of all organisations and individuals who have declared their interest in caring for the Estuary and want to encourage a more coordinated approach between organisations and agencies and their management activities. The key aim of the project to date has been to develop a strategic management framework to guide and support the sustainable development and wise use of the Estuary.

The area covered by the SEP is shown in Figure 1. The area extends between Gloucester and Hurlstone Point near Minehead on the English coast, and Nash Point (Vale of Glamorgan), on the Welsh coast. The area spans the boundary between Wales and the South West of England, and includes parts of thirteen local authority areas.

The SEP will endeavour to ensure that best use is made of the *Strategy for the Severn Estuary* and to guide the implementation process. It will not however have powers to impose particular management regimes on the Severn and its users. The duty of regulating activities will remain the responsibility of statutory bodies. The Partnership will provide a focus for co-ordination and a framework for integrating the diverse uses of the Estuary. It will aim to gain the support and participation of a wide range of organisations and individuals to adopt the policies, and by working together, and/or through their respective roles, implement the proposals for action and collaborate on agreed future project-related action plans.

Aim:

To bring together all those involved in the development, management and use of the Estuary within a framework which encourages the integration of their interests and responsibilities to achieve common objectives.

General Principles:

- Create mechanisms and provide opportunities for improving communication, understanding and cooperation between managing agencies, users and local people;
- Encourage and facilitate partnerships between all those involved in management or with an interest in the Estuary;
- Provide a flexible and supportive service to all those involved in management or with an interest in the Estuary;
- Be a focal point for research and information about the Estuary;
- Review existing information on the Severn Estuary, identify what further information is required to inform future management, provide an information based service and be a forum for information exchange;
- Highlight examples of good and bad practice and assist in disseminating this information;
- Co-ordinate and report on a programme of projects as identified in the Partnership's Action Plans;
- Encourage organisations to adopt policies that are complementary to each other and relate to policies outlined in the *Strategy for the Severn Estuary*.

The need for integrated management and a Strategy for the Severn Estuary

Some of the many activities that make the Severn Estuary so important to its users have the potential to damage its longterm future. It is crucial that a balance is achieved between economic, social and environmental interests, including the need for conservation of biodiversity, and that those demands on the Estuary are carefully managed. This sustainable development approach to managing the Estuary must also involve the local communities in decision-making. This is an important process in providing a broad-based consensus for action and in encouraging 'ownership' of the Strategy.

The need for integrated management is particularly pressing because the Severn Estuary includes the boundary between Wales and South West England. This results in parallel agencies and organisations and, because of the different systems under which these operate, sometimes leads to different management practices.

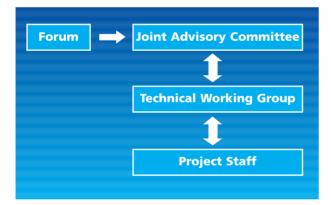
The Structure of the Severn Estuary Partnership

The Partnership encompasses all those who have had a valued input into the Severn Estuary Strategy (prior to the SEP), and incorporates a wide range of interests including Local Authorities, national agencies, industry, voluntary bodies and community interests.

All of those with an interest in the Estuary are encouraged to become members of the Severn Estuary Partnership Forum, which will meet annually to debate major issues and the progress being made. The Joint Advisory Committee (JAC) will be established to ensure the continued endorsement by members of Local Authorities and other key organisations. The JAC will meet bi-annually to inform on SEP progress and endorse the implementation programme.

The Partnership Project Officer is hosted by Cardiff University and serves as an impartial promoter of the Partnership, a catalyst for the implementation of future action plans, and a facilitator of communication and networking.

Figure 2. Severn Estuary Partnership organisational structure



Benefits of the SEP process

The SEP has:

- Given structure to previous ad-hoc consultation between organisations and identified opportunities for collaboration;
- Provided a mechanism for working towards consensus in relation to management of the Estuary;
- Developed consensus on the key issues that need to be addressed on the Severn Estuary;
- Developed a clear structure with a logical progression for issues, prioritisation, policies and proposals for action;
- Helped promote awareness of each other's perspectives on issues;
- Promoted the importance of a strategic Estuary-wide view;
- Provided factual information on matters around the Estuary;
- Published the SEP newsletter, Severn Tidings, bringing together news from the Estuary;
- Developed a database of organisations and individuals with an interest in the management of the Severn Estuary;
- Developed a web site with the potential for diverse use in the future;
- Established a Severn Estuary Biodiversity Group to address biodiversity issues around the Estuary;
- Raised the profile of the Severn Estuary area and its management.

The project is soon to start the implementation stage. Although some of the benefits of being involved will still be related to the process of a co-operative approach to managing the Estuary, the following outline of projects likely to be undertaken, indicate how you could benefit by being involved.

What the SEP intends to do	Benefit to you
Source & collate data and information that is useful to all organisations/agencies/interests. • 'Who's Who' • Internet-based data • Progress of organisations/agencies on their work/statutory duties Develop mechanisms to make this information available and raise the profile of partners and their role in the management of the Estuary. • Web site • Newsletters • Presentations • Action Plans • Media & PR strategy	 Access to a single source of data/information on a wide range of Estuary-related issues. Prevent duplication of work. Improved understanding of the roles and responsibilities of agencies/organisations. A flexible and developing platform to promote your organisation/interest to a wide and relevant audience. Improved understanding of your work and needs by other organisations and the public.
 Create a flexible structure that encourages involvement, co- operation and exchange of information. Annual Standing Conference Specific sub-groups Workshops 	 The opportunity to network with other agency, organisation and interest representatives. The opportunity to influence local, regional and national policy. The opportunity to influence the work/direction of the SEP. The opportunity to work collaboratively with partner organisations on particular projects with mutual goals.
Identify and address information gaps and information required by decision-makers in organisations/businesses/agencies. • Research Forum • Information system Maintain a database of organisations/contacts including their commitment to working towards Proposals for Action outlined in the Strategy document.	 The opportunity to influence research on and around the Estuary. Access to best available information for decision-making. Central point for obtaining information relating to the Estuary. Access to contacts around the Estuary. Source of potential partners for collaborative working towards mutual goals. Access to a wide variety of organisations/interests for use in consultation purposes.
Monitor, evaluate and report on the progress of the SEP.Reports to committeesPresentations	Feedback on the service provided by the SEP.Feedback on the work being undertaken by partners of the SEP.

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1.3 Strategy for the Severn Estuary

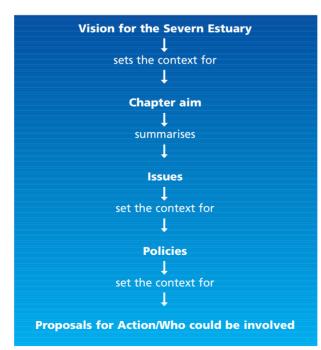
The preparation of the *Strategy for the Severn Estuary* has focused on reaching consensus and agreement on the issues and opportunities that exist across the wide cross section of users and interests. The SEP has worked to achieve this over the past five years, with its efforts being to ensure that the Partnership is working to address the concerns of all those who live, work and relax in the Estuary area.

The Strategy for the Severn Estuary has been produced as part of a strategic management framework for the Severn Estuary. It covers a wide range of issues and opportunities and has been developed to provide detailed justification for an integrated and co-operative approach to action on the Severn Estuary. It aims to involve all the users, cross sectoral, statutory and non-statutory bodies and commercial organisations around the Estuary in its future management. It promotes a series of policies that will lead to more sustainable management practice on the Estuary and addresses the challenge of realistically and sustainably managing competing demands. To help illustrate how the policies could be acted upon, the Strategy lists 'proposals for action' which will act as a catalyst for the preparation of agreed action plans and as an indication of what work could be undertaken by partners when the opportunity arises.

This summary includes all the policies contained within the full Strategy document and examples of the many proposals for action. Agreed action plans will be produced following the publication of the Strategy document. The main objectives of the *Strategy for the Severn Estuary* are to:

- Provide a detailed overview of estuarine themes;
- Highlight issues and opportunities that need to be addressed to ensure the future well-being of the Estuary;
- Outline policies to address the issues and opportunities, with detailed background and justification;
- Outline proposals for action to act as a catalyst for the preparation of agreed action plans, to address the issues and opportunities;
- Support and inform the policies and decision-making framework of existing regulatory, statutory, private and public sector organisations;
- Influence organisations, such as those within the voluntary sector and commercial and industrial sectors, to use the Strategy document to inform their own policy statements and work plans (e.g. tourism development plans and environmental charters);
- Act as an overarching document for Local Environment Agency Plans (LEAPs) around the Estuary.





Elements of	Elements of the Strategy document			
Chapter aims	Provide an overarching aim for the issues addressed in each chapter.			
Issues	Issues are closely related to those raised in the Severn Estuary Joint Issues Report (SES/Environment Agency 1997).			
Policies	Policies to address the issues and opportunities outlined in the Strategy document. Many of the policies will be related to other policies in different chapters, which supports the need for an integrated approach to management on the Estuary.			
Proposals for action	Suggestions for taking policies forward and to act as a catalyst for the preparation of future agreed project-based action plans. The SEP would welcome additions and/or amendments to these proposals for action to help develop action plans in the future.			
Who could be involved	Give an indication of those organisations with possible interests in proposals for action.			

How does the Severn Estuary Partnership (SEP) link to the work of other organisations and bodies on the Estuary?

The SEP aims to complement the work of other organisations around the Estuary and will provide a supportive and flexible service to all those involved in the management of or with an interest in the Estuary. However, the SEP will not have powers to impose particular management regimes on the Severn and its users, and the duty of regulating activities will remain the responsibility of statutory bodies acting within the bounds of current legislation and terms of reference. The SEP relies on the appropriate agencies, organisations and individuals working together voluntarily to take steps to adopt the policies in the Strategy document, consider the proposals for action for future action plans and implement actions agreed in future action plans.

Association of Severn Estuary Relevant Authorities (ASERA) – 'Scheme of Management'

ASERA has been set up to develop a scheme of management initially for the Severn Estuary SPA, and in advance of its formal submission by the Government to Europe as a candidate Special Area of Conservation (cSAC). A more detailed explanation can be found in Chapter 13, Nature Conservation and Wildlife. This will be the single scheme of management for the Severn Estuary European marine site. The SEP, with its wider objectives and aim to complement the work of other organisations, will be in a position to provide a service to ASERA as it deems appropriate.

Local Environment Agency Plans (LEAPs)

The Environment Agency has produced LEAPs which outline its local actions within a five-year planning horizon. The Strategy for the Severn Estuary has been produced using a similar approach to that used in the production of LEAPs and therefore will serve as a basis for actions by the Environment Agency in relation to the Estuary.

Shoreline Management Plans (SMPs)

SMPs are non-statutory documents prepared by Coastal Cell Groups; they provide a strategic management framework for managing coastal defence including the option of managed retreat.

The role of coastal cell groups is complementary to (and supportive of) the existing roles of the statutory authorities, and again, the SEP, with its wider objectives and aim to complement the work of other organisations, will be in a position to provide a service to the coastal cell groups as they deem appropriate. A Memorandum of Understanding already exists between the SEP, the Environment Agency and the coastal cell groups to share information and expertise and reduce unnecessary repetition of work.

The Standing Conference of Severnside Local Authorities (SCOSLA)

SCOSLA, which representatives of the Ports, other public bodies and governmental organisations and the Severn Tidal Power Group also attend, is a forum in which the Local Authority members can meet to exchange information and debate matters of common concern. This group is complementary to the SEP as it encourages close liaison between Local Authorities and others around the Estuary. It is anticipated that SCOSLA will have a representation on the SEP Joint Advisory Committee.

Local Planning Authorities (LPAs)

LPAs are required to prepare development plans for their areas and to review these at least at 5-yearly intervals. They also control developments through the planning permission process. The *Strategy for the Severn Estuary* is one of a number of documents that LPAs bordering the Severn Estuary will take into account in the preparation of their respective development plans and in controlling development. It provides a convenient summary of policies relating to the Estuary and it will provide an invaluable context for further development plan policy preparation.

1.4 Implementation of the Strategy for the Severn Estuary

Implementation overview

The *Strategy for the Severn Estuary* is non-statutory. Therefore, to be successful, it will involve a voluntary and cooperative approach that requires all those with an interest in the Estuary to accept it as a strategic framework to inform the future good management of the Estuary, and adopt the policies contained within (see Figure 4). Those with such an interest include:

- Local Planning Authorities, in the preparation and review of their development plans and in the exercise of development control;
- Other Local Authority functions such as environmental protection and land management functions;
- National agencies;
- The private sector;
- The voluntary sector;
- Communities and individuals.

The Partnership provides a focus for co-ordination and a framework for integrating the diverse uses of the Estuary. The proposals for action within the Strategy document will act as a catalyst for the SEP to prepare annual action plans agreed by all organisations with commitments within the action plan. The action plans will encourage collaborative working, when funding and other resources are available, and will be put into action through the operational programmes of existing statutory and non-statutory organisations around the Estuary.



The SEP aims to encourage participation and gain the support of the wide range of organisations and individuals involved to date, to adopt the policies and work together on future agreed action plans. It will work to achieve this by adopting the general principles, and more specifically by:

- Establishing and facilitating issue-specific groups to address projects which require integration of interests;
- Encouraging you as partner agencies, Local Authorities, local communities and the private and voluntary sector to take an active role; and
- Seeking funding from all sectors.

Reviewing progress and responding to new issues and opportunities

The publication of the Strategy document is merely a first step in working to provide a better long-term future for the Severn Estuary. It provides a starting point for us all to work from. The SEP is aware that the policies in the Strategy are mostly related to the issues raised in the JIR, which is a conscious effort to develop the consensus approach that has been adopted as part of the Partnership process. However, it is important to realise that the document and the policies it contains will evolve in time, as new challenges and opportunities arise.

In order to assess changing issues and priorities in the Estuary and evaluate the effectiveness of the Partnership, a structured process of review is required. This will be achieved by an action plan report and an annual Forum meeting.

Progress report

A report will be produced on projects within the agreed action plan. This will include a review of projects undertaken by the SEP. The report will inform on implementation progress, problems encountered and ideas and opportunities for further progress and action plans.

Annual Forum meeting

A Forum meeting will be held annually to bring together as wide a range of interests as possible to report on progress of the Partnership, provide a further opportunity to share information and identify new issues and opportunities.

Figure 4. How organisations/communities can become involved

Organisation	Involvement
National and regional organisations A number of policies and proposals for action contained within the Strategy document overlap with government agency remits (e.g. waste management, fisheries, nature conservation, dredging control).	 Ensure that the issues concerning the Severn are considered in the development of policies/objectives; Incorporate policies and proposals for action into regional and local programmes and business plans; Support projects that develop from SEP policies and proposals for action; Provide advice, guidance and data on issues concerning the Estuary; Ensure a consistent approach is adopted across the Estuary; Become a member of the Severn Estuary Partnership Joint Advisory Committee
Local Authorities (including Town and Parish Councils) It is fundamental for the success of the Severn Estuary Partnership that all constituent Local Authorities endorse its policies and proposals for action where appropriate.	 Adopt a corporate approach to the Estuary across all service responsibilities, Ensure that policies included within their plans are consistent with the Strategy document, Implement the policies through development control practice, Provide staff time, funding or other contributions in kind to aid the implementation of proposals for action and projects that develop from them, Ensure that a consistent approach to the Estuary is adopted with partner organisations, Become a member of the SEP Joint Advisory Committee.
Private sector The private sector, including landowners and farmers, has a major role to play in the management of the Estuary. The SEP seeks to encourage and support private sector involvement.	 Consider incorporating the policies and proposals for action within work programmes and business plans; Provide funding for projects that develop from SEP proposals for action; Provide advice, guidance and data on issues concerning the Estuary; Become a member of the Severn Estuary Partnership and ensure your interests are represented.
Voluntary sector Collectively, voluntary groups have a substantial stake in the management of the Estuary. They include nature conservation organisations, archaeological and history groups, sports clubs and their governing bodies and many more.	 Incorporate policies and proposals for action into their work programmes, Seek outside funding for specific projects, Help to conserve and manage the Estuary through practical action, Become a member of the Severn Estuary Partnership and ensure your interests are represented.
Local communities Each of us can play a significant role in working to achieve the aims of the SEP. The SEP seeks to encourage and support individual and community involvement in the future management of the Estuary.	 Get involved with projects that result from policies and proposals for action, Organise talks, walks or interpretative information, Undertake practical conservation management projects, Participate in surveying and monitoring programmes, Become a member of the Severn Estuary Partnership and ensure your interests are represented, Aim to develop a better understanding of Estuary matters.

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2. Planning and Management in the Estuary

Aim:

To aid the development of a planning and management system through partnerships to create a diverse and sustainable Estuary environment.

Estuary-wide management is essential for achieving sustainable development of estuarine areas. Within a European context, various existing directives influence the management of the Estuary. However, the recent adoption of a Recommendation on ICZM by the European Parliament may have the most impact, strengthening the call on national governments to take action. The UK Government has expressed a commitment to the sustainable use and development of the coast. An advanced land-use planning system, promoting sustainable and high quality development, has evolved, for which there is separate coastal guidance in England and Wales. At regional levels the emerging efforts of the South West Regional Development Agency (England) and the Strategic Planning Guidance for South East Wales are noteworthy.

Policies

M1: Continue to encourage and facilitate co-ordination, collaboration and partnerships between organisations on the Estuary.

M2: Support and encourage development of improved estuary and coastal management guidance at regional, national and international levels.

M3: Provide co-ordination, rationalisation and clarification of the different coastal boundaries employed for statutory and non-statutory planning and management.

M4: Promote improved understanding, awareness and enforcement of legislation and byelaws.

M5: Encourage wider consultation of all interests on estuary-related matters concerning development and management.

M6: Encourage, where appropriate, the harmonisation of regional planning guidance that affects the Estuary.

M7a: Encourage the availability of recent studies and ongoing research on the Estuary to aid understanding and awareness of its natural dynamics and the interrelationship with social, cultural and economic needs.

M7b: Promote collaboration between researchers and managers to provide co-ordinated, accessible and accurate data based on sound science that informs management decisions and facilitates monitoring of sustainability.

M8: Promote greater understanding of the Severn Estuary and its management.

M9: Sustainability appraisal should be undertaken of plans and activities on and around the Estuary.

Other estuary-wide groups with an interest in the Estuary's planning and management include the European network, Les Esturiales and the Standing Conference of Severnside Local Authorities. In addition, there is a large range of statutory and non-statutory plans, schemes and strategies of relevance. These include the Severn Estuary Partnership, Local Environment Agency Plans, Shoreline Management Plans and the Scheme of Management of the Association of Severn Estuary Relevant Authorities as well as statutory development plans prepared by Local Planning Authorities.

The Severn Estuary Partnership aims to bring together all those involved in the development, management and use of the Estuary within a framework which encourages the integration of their interests and responsibilities to achieve common objectives.

Proposals for Action	Who could be involved	Benefits
M1(i) Explain and disseminate information on 'who does what' on the Estuary.	SEP	 Improved understanding of organisations' roles and responsibilities.
M1 (iii) Explore and develop opportunities for dialogue, debate, co-operation and collaboration, and partnership working between organisations on the Estuary.	SEP, Estuary management groups such as ASERA, LAs, GoSW, NAW, SCOSLA, Coastal Cell Groups	 Increased understanding of estuary matters. Improved co-ordination between organisations, authorities and their plans. A co-ordinated approach to planning on the estuary and adjacent coastal land.



3. Sustainable land use, development and transport

Aim:

To develop a prosperous, vibrant and sustainable economy whilst protecting and promoting the natural, cultural and historical heritage.

Development takes place for many reasons – tourism, leisure, transport, jobs and homes. However, it is important to encourage those developments which conserve and/or enhance the cultural, natural and built heritage, and support the identification of areas where development cannot be accepted. In addition, sustainable transport systems should be encouraged, full environmental appraisal of renewable energy schemes undertaken and a co-ordinated and complementary approach towards development proposals which might impact on the Estuary be promoted.

The Severn Estuary Partnership is working to promote the enhancement of environmental, recreational and tourism

Policies

D1: Support the identification of coastal zones where new greenfield development will only be permitted if a coastal location is necessary, where it does not compromise environmental objectives and where it takes account of cumulative impacts.

D2: Encourage development and land uses which conserve and enhance the cultural, natural and built heritage.

D3a: Liaise and co-ordinate plans across boundaries to achieve an integrated approach to developing sustainable transport systems.

D3b: In working towards sustainable transport systems, encourage consideration of the wider benefits of mechanisms such as rail freight terminals, port facilities and ferry services, as well as their potential cumulative impacts.

D4: Encourage and support research and initiatives to minimise the impact of one-way bridge tolls on environmental and traffic infrastructure.

D5a: Support the avoidance of new development on lowlying land that is at risk from flooding, or would exacerbate flooding elsewhere, or on coastal sites liable to erosion.

D5b: Where the development of flood/coastal defence proves to be unacceptable because of socio-economic constraints or because of environmental interests, support schemes for 'managed retreat', if accompanied by appropriate financial compensation to the landowner and user and continuation of the rights of way network.

D6a: Encourage wide consultation when barrage, weir and renewable energy schemes are proposed, and ensure the possible local and regional socio-economic, environmental and flood defence benefits of future barrage and weir schemes are weighed against their impacts on landscapes/seascapes and the sensitivity of wildlife habitats on the Estuary.

D6b: Collaborate and exchange information between organisations that results in the use of the best scientific data in consideration of proposed new barrages, weirs and renewable energy schemes.

resources whilst supporting the regeneration of resorts, port improvements, agricultural, fishing and tourism diversification, all in a sustainable manner.

Proposals for Action	Who could be involved	Benefits
D1 (iii) Enable inclusion/participation of Estuary users, relevant bodies and the public in consideration of development proposals.	SEP, LAs, ASERA, NAW, GoSW, Commercial developers, Port Authorities	 Development proposals that reflect local priorities and concerns.
D2 (i) Develop guidance that directs development to minimise the adverse impacts on natural, archaeological and scientific interests on the Estuary.	NAW, GoSW, SWRA, ASERA, CCW, LAs	 Reduced impacts on wildlife, archaeology and other scientific interests (such as geology).



4. Agriculture

Aim:

To promote viable and sustainable agriculture and associated communities, so they may operate in a way that is sensitive to the Estuary environment and surrounding countryside.

Agriculture is the most common use of land around the Estuary, with a long and continuing history of private ownership and farming activities alongside traditional farming communities. Agriculture is important to the rural economy, and there is a need to encourage sustainable farming practices. There is continued pressure for farmers to maintain farm incomes and to diversify their activities, such as providing facilities for commercial re-use, recreation and tourism and to provide for public access. Conservation initiatives may also be a source of income, whilst providing positive help for farmers to conserve and enhance wildlife. These measures are positively encouraged by Government initiatives.

Policies

R1: Raise awareness of existing mechanisms that allow farmers to engage in the land use planning process and other initiatives.

R2: Encourage and support diversification schemes which do not have an adverse environmental impact.

R3: Raise awareness of agri-environment schemes (such as Rural Development Plans and Tir Gofal) and other incentives available to farmers that enhance wildlife and landscape, and maintain the nature conservation status of designated sites.

R3a: Support further funding for farmers and landowners to maintain designated sites at favourable nature conservation status.

R4a: Publicise codes of practice and pollution prevention measures in relation to agricultural activity and ensure that their effectiveness is monitored.

R4b: Discourage intensive farming methods that result in the deterioration of the Estuary hinterland, such as destruction of hedgerows and ploughing close to cliff edges.

Much of the Severn Estuary rural landscape is low-lying, such as the Somerset, Avon and Gwent Levels. These areas of lowlying land have been artificially reclaimed since Roman/Mediaeval times and the drainage channels characteristic of the Levels are of important historical and wildlife value. Appropriate drainage of the Levels is key to their management. The narrow strip of Estuary saltmarsh borders much of the extensive mudflats and is an important natural feature of the Estuary, and is valuable as a wildlife habitat. The management of the saltmarsh, including the intensity of grazing, affects not only the wildlife value of this habitat, but also maintenance of the net area of saltmarsh on the Severn Estuary.

The Severn Estuary Partnership aims to provide an opportunity for agricultural interests to be examined alongside the wide range of other interests within the Estuary, and will work to promote a range of projects that will benefit agriculture in the Estuary area into the future.

Proposals for Action	Who could be involved	Benefits
R1 (ii) Raise awareness of opportunities for farmers and landowners to be involved in Countryside Strategy Fora (Wales), LBAPs, LEAPS and the LA21 process.	LAs, SEP, FFWAG, CLA, NFU/NFUW, DEFRA, Environment Agency	 Establishment of working relationships between those with statutory duties and those who manage the land. Better understanding of each other's roles and needs. Better management and use of the countryside. Co-operation between all organisations involved.
R2 (i) Promote farming diversification schemes farm trails, cycle hire facilities, converted barns for accommodation, coastal trails and other infrastructure for "green tourism".	Wildlife Trusts, NFU/NFUW, CLA, YHA, CA, CCW, NAWAD, WDA	 Progress towards a sustainable rural such as economy. Best use of farm facilities. Appropriate access for the general public.



5. Coastal protection and flood defence

Aim:

To provide sustainable flood defence and coastal protection, developed through a holistic understanding of the Estuary and its communities, heritage and processes.

The Severn Estuary presents a challenging environment for coastal defence. The tidal range in the Estuary is the second highest in the world. Adverse weather conditions can raise water levels by more than two metres above predicted levels. In addition, average sea levels have been rising since the last ice age and the rate of rise is now increasing due to global warming.

Over hundreds of years, coastal defences have been constructed to reduce the risks from tidal flooding and coastal erosion. Today thousands of people around the Estuary depend upon constructed defences to protect coastal land and property from flooding and erosion. These defences may protect only a few properties, a seaside town or a major

Policies

C1: An integrated, strategic framework to guide the planning and provision of sustainable coastal defence should be developed, implemented and monitored.

C2: Promote and encourage a better understanding of the implications of sea level rise and increased storminess for the Severn Estuary in order to inform the preferred option within Shoreline Management Plans and to raise stakeholder understanding.

C3: Ensure detailed decisions regarding specific schemes are compatible with the overall Shoreline Management Plan and are based on principles of sustainability and do not result in unacceptably increased problems elsewhere.

C4: The predicted implications of sea level rise must be taken into account when the future management of land drainage is planned.

C5: Saltmarsh and other intertidal and beach habitats should be conserved and enhanced in a manner which balances coastal protection, flood defences and nature conservation needs through the SMP framework, Coastal Habitats Action Plans (CHaMPs), and other emerging plans, and by meeting the requirements of the Habitats Directive.

C6a: Decisions regarding the provision of flood defences or coastal protection should take full account of the need to protect nature conservation, landscape character, amenity and features of geological and archaeological interest.

C6b: Full consideration should be given to soft engineering options and managed retreat, and the potential impacts where coastal protection works are proposed.

C7: Operate a reliable and timely flood warning system for flooding around the Estuary.

industrial area. In parts of the Estuary, many square kilometres of land are more than 3 m below the highest tides.

The Severn Estuary Partnership aims to encourage an Estuarywide approach to coastal protection and flood defence by promoting the strategic planning of coastal defences which take account of the need to protect natural and built up areas.

Proposals for Action	Who could be involved	Benefits
C2 (i) Review the best available advice on rates of sea level rise and storminess in the SEP area and identify any need for new research.	Environment Agency, EN, CCW, Maritime Las, DEFRA, NAW, IDBs	 Better information on environmental change to inform planning and management decisions relating to coastal defence and nature conservation.
C5 (v) Increase accessibility of information and encourage awareness-raising campaign on environmental processes during implementation of coastal defence schemes.	Environment Agency, DEFRA, Coastal Cell Groups, British Waterways, CLA, NFU/NFUW, LAs, SEP, IDBs	 Greater awareness of coastal and riverine processes and understanding of coastal defence initiatives.



6. Tourism, recreation and access

Aim:

To maintain and improve the accessibility and availability of sustainable tourist and recreational facilities that enhance the economy, whilst considering the local environment.

Being one of the largest employment sectors in the area, tourism has an economic and physical influence on the Estuary. There are several million visitors to the Estuary each year, sustaining a large and varied number of tourist attractions, accommodation types and transport services. Tourism in many ways is a fragmented industry, and there is the need to involve and agree a direction from the many partners involved. The Estuary and surrounding coastal lands also offer a diverse and often challenging environment for a wide variety of sporting and recreational interests, such as sailing, angling, walking and horse-riding, and many people come to the Estuary for bird-watching and to visit nature reserves.

It is important however to balance the needs between the demands of visitors, the protection of the environment and the interests of local communities.

The Severn Estuary Partnership provides a mechanism by which tourism, recreation and access can become co-ordinated around the Estuary and it aims to provide a focus for co-ordinated action.

Policies

T1a: Adopt current best practice guidelines for sustainable tourism to reduce impact on the environment, improve the quality of life for host communities and improve the enjoyment of visitors.

T1b: Promote tourism initiatives that encourage the natural and cultural history interest of the Severn Estuary.

T2: Support the regeneration and enhancement of existing resorts and dockland areas, in order to minimise adverse impact on the environment of new sites and improve the quality of life for the host communities.

T3: Promote appropriate water based tourism as a means of increasing visitors' enjoyment of the Estuary.

T4: Support the improvement of Public Rights of Way along the banks and in the vicinity of the Estuary and enhance the recreational and 'green' transportation network , particularly where this will contribute to the transportation and sustainable recreation objectives, and where it does not conflict with other interests.

T5: Support measures for additional access to the shore where appropriate, including access that meets the needs of disadvantaged groups where practical, and increased access facilities for craft on Estuary waters. Additional access will need to be considered in the context of safety, wildlife conservation, the needs of landowners and other users.

T6: Adopt current best practice for sustainable tourism in order to minimise the impact on the natural environment.

T7: Encourage the improvement of facilities for recreational boat users around the Estuary where they do not conflict with other interests.

T8: Continue to encourage the siting of marina development close to other development and appropriate infrastructure, subject to the mitigation of environmental impacts.

T9: Work in partnership to achieve voluntary controls on motorised watersports.

T10: Support and promote codes of conduct and guidelines prepared by relevant governing bodies; and the preparation of further codes of conduct to address conflicts with other interests.

T11: Promote the public understanding of recreation management as part of a wider educational programme such as 'Navigate with Nature'.

Proposals for Action	Who could be involved	Benefits
T1a (vi) Establish a working group to investigate improved information sharing on sustainable initiatives, including raising the awareness and appreciation of tourist providers and training so that they can pass on their awareness to visitors.	SEP, NAW, GoSW, LAs, Tourist Boards / companies, RDAs, Transport operators, Trade associations, Local businesses, Resident association groups, Conservation groups	 Prevent duplication of effort Sharing of ideas from a variety of interests Integration of sustainability ethos in local tourism Bring different groups together to learn from experiences and discuss ways forward.
T4 (ii) Establish a Recreation Forum to involve all major interest groups on the Estuary, encourage dialogue and understanding to seek voluntary solutions to conflicts.	SEP, LAs, CCW, EN, CA, User groups, NFU, Environment Agency, RYA, BASC, RA, RSPB, Port Authorities, BHS, FSA, CTC	 Sharing of ideas from a variety of interests. Integration of sustainability ethos in local tourism. Raise awareness of other users needs. Help develop co-operation. Generate ownership of issues.



7. Ports, shipping and navigation

Aim:

To promote and support the sustainable development and the continued viability of the Estuary's ports, wharves and harbours, and their associated navigation infrastructure.

The Severn Estuary's ports are extremely important to the local and regional economy. There are major ports at Bristol (Royal Portbury and Avonmouth), Cardiff, Newport and Barry, together with a number of smaller facilities elsewhere.

By way of support to vessels using the Estuary, Trinity House and the port authorities provide and maintain navigation aids, and authorised pilots are available for every port. Maintenance dredging takes place at most ports in the area and the dredged fine silts are disposed of at licensed disposal sites. Capital dredging is sometimes also necessary, for

Policies

P1: Support the Estuary's ports and harbours in promoting sustainable development.

P2: Continue to implement environmentally responsible dredging via the current licensing arrangements.

P3: Support measures to encourage the adequacy of aids to navigation and advice to commercial sea operators and leisure craft.

P4: Support training and other initiatives aimed at raising awareness and improving safety amongst recreational users.

P5: Continue to provide adequate co-ordinated emergency, plans and search and rescue facilities in the Estuary, and the further development of associated lines of communication.

P6: Raise awareness amongst canal boat users of the potential dangers of using canal craft on the Estuary below Sharpness.

example to accommodate larger vessels thus helping to ensure the continued economic viability of the port in question. There is also widespread and increasing use of the Estuary by recreational users. Some ports have developed codes of practice for leisure users and/or set up local recreational user forums.

The Severn Estuary Partnership will work to promote the continued viability of the Estuary's ports while taking into consideration the wider context of all users and the valuable estuarine resource.

Proposals for Action	Who could be involved	Benefits
P1 (ii) Encourage high levels of environmental responsibility when proposing port and harbour developments (such as thorough Environmental Impact Assessments where appropriate to identify and mitigate against impacts).	Port and harbour authorities, Competent authorities	 Environmentally acceptable development proposals.
P1 (iii) Promote the relative environmental benefits of waterborne transport.	SEP, Port and harbour authorities, DLTR, LAs	 Increased awareness and understanding of relative benefits.



8. Waste management and pollution

Aim:

To maintain and improve air, land and water quality through using resources wisely; adopting appropriate waste management practices, minimising pollution and developing water management strategies.

The Estuary area is heavily urbanised and industrialised and produces significant and increasing quantities of waste. Unless its maintenance and disposal is effectively controlled, waste can pollute water, air and land and can also impact upon human health.

There is a wide range of discharges to the Estuary that can affect the water quality. These include sewage and industrial effluent, agricultural run-off, highway drainage, contaminants in rivers and spillage from industrial premises and marine vessels. There are significant discharges of both domestic and industrial waste to the atmosphere from major industries, car exhausts, landfill sites, waste burning and natural pollution. Contaminated land occurs around the Estuary in areas of intense industrial activity, old landfill sites, oil refining, oil storage and gas production among others. Fly tipping and coastal litter also cause significant problems.

The Severn Estuary Partnership will encourage further collaboration between authorities responsible for tackling these waste management and pollution challenges around the Severn Estuary.

Policies

W1a: Encourage further research into the sources of litter to identify polluters and support the national research programme aiming to standardise litter management co-ordinated by the National Aquatic Litter Group.

W1b: Encourage further collaboration between authorities responsible for designing strategies to tackle the problem of beach litter.

W2: Support strategies to combat fly-tipping around the Estuary.

W3: Encourage water companies to improve sewage treatment in general and upgrade the sewerage infrastructure to accommodate new and proposed development.

W4: Support measures to reduce inputs of oil to the Estuary, including the promotion of such schemes as the 'Oil Care Campaign' and 'Navigate with Nature'.

W5: Support water companies to invest to encourage compliance with the Guideline Standards at designated Bathing Waters.

W6: In the short term, support bringing all nondesignated bathing waters up to the minimum Mandatory Standards laid out in the EU Bathing Waters Directive, and in the long term, bringing them up to Guideline Standards.

W7a: A continued programme of monitoring, awareness raising and pollution prevention measures will be carried out along the Gloucester-Sharpness canal.

W7b: An agreement between major operators on the canal will be formalised in order to reduce the risk of pollution without compromising the operation of the Gloucester-Sharpness canal.

W8: Continue with stringent monitoring of nuclear discharges from the four nuclear power stations and Nycomed Amersham by the operators and Environment Agency and continue efforts to reduce emissions.

W9: Support the minimisation of emissions to air by all industrial processes, householders and vehicles in order to meet National Air Quality Standards.

Policies

W10a: Undertake research to identify the significance of eutrophication in the Estuary and sources of nutrient inputs to the upper and middle Estuary.

W10b: Support the reduction of nutrient loadings in the upper and middle Estuary, prioritised according to those sources identified as having the greatest impact.

W10c: Support the application of the Urban Wastewater Treatment Directive (Eutrophic) and Nitrates Directive as appropriate.

W11: Co-ordinate investigations into the impacts of cooling waters discharging to the Estuary, and encourage liaison between the Environment Agency, the dischargers and conservation bodies.

W12: Encourage dischargers to comply with their authorisations and with the requirements of the EU Dangerous Substances Directive and Oslo and Paris Conventions (OSPAR).

W13: Support the minimisation of organic compounds introduced to the Estuary with the ultimate aim of preventing these compounds finding their way into the marine environment.

W14: Identify sites that may affect the environment or human health under the requirements of Part IIA of the Environmental Protection Act 1990 and encourage redevelopment of contaminated sites where there is a goo design strategy for dealing with contamination.

W15: Improve leachate and gas management systems where justified on the grounds of safeguarding human health or the environment.

W16: Continue research into the effects of harmful substances on the environment and setting of Environmental Quality Standards (EQSs) and support the development and implementation of Direct Toxicity Assessment.

W17a: Promote research into assessing the environmental impact of harmful substances discharged into the Estuary and programmes to effect minimisation of the discharge of these substances.

W17b: Widely publicise data from monitoring programmes, including compliance and enforcement action taken.

Policies

W18: Encourage and support liaison between appropriate bodies, including the Port Authorities, Environment Agency, Maritime and Coastguard Agency, Local Authorities and conservation bodies for further integration of marine pollution counter measures.

W19a: Promote safety measures to reduce the potential of a nuclear accident.

W19b: Conduct further research into the environmental and public health impacts of living close to a nuclear power station and encourage wide publication of information on the safety of these stations, to inform the general public.

W20: In the long term, undertake research into the utilisation of alternative substances or processes which have significantly less impact upon the environment than those currently in use and in the short term, use the safeguard procedures currently in place.

W21: Encourage implementation of National Waste Strategies.

W22: Support the development of renewable energy schemes providing there is acceptable impact on the environment and human health and support from local communities.

Proposals for Action	Who could be involved	Benefits
W2 (iii) Undertake specific campaigns e.g. surveillance of fly – tipping blackspots and provision of educational material to landowners.	LA's, SEP, Environment Agency, Police, Landowners, building and construction companies	 Increased surveillance leading to more prosecutions and reduction in incidents of fly-tipping.
W5 (i) Identify and remedy the cause of failure of the designated beaches not meeting EU water standards.	Dwr Cymru/ Welsh Water, Wessex Water, Environment Agency	 Safer beaches for bathing and water based recreation.



9. Aggregates and other minerals

Aim:

To meet society's need for minerals by maximising the use of secondary and recycled materials and encouraging the use of marine and land based sources in a way that least harms the Estuary's off-shore and on-shore environments.

Sand and gravel has been extracted from the Severn Estuary since the early part of this century. The Estuary bed is an important source of aggregates (mostly sand) and 80-90% of the sand used for construction in South Wales comes from the Bristol Channel. Mineral extraction is licensed at five sites on the Estuary with applications for new and renewed licenses. It is important that an adequate supply of minerals is available for society's needs. However, marine aggregates dredging can also have environmental impacts and therefore should be reconciled with the need to protect the environment. The Government aims to ensure the sustainable provision of marine dredged aggregates for construction and beach management, consistent with the limit of the resource and the potential environmental impact.

The Severn Estuary Partnership aims to encourage and support a sustainable strategy for minerals provision around the Estuary by encouraging greater use of secondary materials and

Policies

A1a: Encourage further research and dissemination of current studies to aid understanding of the availability of both marine and alternative land-based sources of primary aggregates and their associated environmental impacts.

A1b: Support the development of a policy framework to guide future proposals for both marine and land-based aggregate extraction that minimises environmental impact.

A2a: Encourage maximum use of secondary and recycled minerals, as a means of conserving both marine and land-based primary sources.

A2b: Encourage and support further research into sources of both secondary and re-cycled minerals in order to increase understanding of these resources and to minimise the use of primary resources.

A3a: Encourage and support further research into the impact of dredging on coastal erosion, sediment transport and beach levels to aid and inform decision-making.

A3b: Support adequate monitoring and mitigation measures through the licensing system.

A4a: Support and promote increased understanding of aggregate extraction issues within the wider estuary ecosystem.

A4b: Support a full environmental impact assessment for aggregate extraction proposals.

A4c: Encourage further research into the impact of minerals dredging on fisheries and wildlife and the sharing of data to inform managers and decision makers.

A4d: Minimise the adverse impacts of mineral extraction on wildlife and its habitats in the Estuary.

A5: Promote measures to minimise the effects of dredging on archaeology.

A6: Support and encourage measures to both minimise the visual impact of onshore mineral working on the character of the Estuary and allow full access to the coastline.

A7: Encourage increased access and involvement of local stakeholders in the procedure for issuing licences and permissions for dredging in the Estuary.

A8: Encourage regular review of the system for issuing licences and planning permissions.

supporting an appropriate balance between marine and land based primary mineral sources which minimises environmental impact. In doing so it also encourages increased access and involvement of local stakeholders in the decision process.

Proposals for Action	Who could be involved	Benefits
A2a (i) Support the development of policies giving greater emphasis and support to the use of secondary rather than primary minerals .	DTLR/NAW, Environment Agency, Mineral Planning Authorities	 Will encourage greater use of secondary materials and reduce the demand for primary minerals and associated impacts.
A4a Raise awareness and understanding of aggregate extraction issues within the wider estuary ecosystem.	SEP, NAW, DTLR, DEFRA	Greater understanding of aggregate issues .



10. Water resources

Aim:

To manage water resources in order to meet society's needs while protecting the natural environment.

Water resources impacts on the Estuary are dependant on the volume of water flowing from rivers (and sewage treatment works) into the Estuary. The demands of society include abstractions for public water supply, agriculture and industry, recreation and navigation. Environmental demands include the need for sufficient flow to attract migratory fish, to support other species sensitive to increases in salinity and to maintain water quality.

The Environment Agency are progressing the majority of policies within this chapter under current statutory responsibilities e.g abstraction licence determination,

development and implementation of Catchment Abstraction Management Strategies (CAMS), the Habitats Directive Review and the duty to secure the proper use of water resources in England and Wales.

X1: Support the determination and achievement of flow regimes into the Estuary that meet the demands placed on its water resources, including those obligations

X2a: Seek the restoration of water levels at sites of importance for nature conservation, including the review of existing and new abstraction licences in line with the

X2b: Seek to ensure that development of any new resource does not have an irreversible negative impact

X3 Promote the wise use of water in order to safeguard the environment from unnecessary damage and to

arising under the EC Habitats Directive.

Policies

EC Habitats Directive.

on the environment.

improve economic efficiency.

The Severn Estuary Partnership is working to raise awareness of existing legislation and initiatives as well as promoting the wise use of water.

Proposals for Action	Who could be involved	Benefits
X2b (iv) Raise awareness of the importance of appropriate water levels for wildlife.	Environment Agency, EN, CCW, IDB's, SEP, WWT	 Improved understanding of the importance of water level management and the benefits to wildlife.
X3 (i) Ensure efficient use of water in the home, in commerce, industry, agriculture, water treatment works and in the supply infrastructure, ensuring that leakage is reduced to and maintained at the lowest achievable level at reasonable cost in line with OFWAT targets.	Water companies, OFWAT, Environment Agency, major industrial and agricultural water abstractors	 Better use of abstracted water decreases demand for abstraction and therefore reduces the impact of abstraction on the aquatic environment. Reduced environmental impacts associated with reduced need for water treatment and pumping. Cost savings for water users.



11. Fisheries

Aim:

To support and promote the sustainable use of the Estuary's fisheries and to protect estuarine habitats whilst recognising the value of the fisheries to local communities.

The Severn Estuary and the rivers Usk, Wye and Severn are valuable conservation areas largely because they serve as important migratory routes for rare and protected migratory fish species such as the salmon, lamprey and shad. Elvers are also important and over a hundred other species of marine fish are present. This important resource supports both commercial and significant recreational activities.

Policies

F1: Ensure that salmon and sea trout can migrate freely through Estuary waters.

F2: Where there is over-exploitation of mixed stock salmon, encourage reductions in fishing to ensure fish stocks are maintained at a sustainable level.

F3: Conserve traditional methods such as putchers and other heritage fisheries at a sustainable level whilst ensuring that mixed stock salmon are protected.

F4a: Promote liaison between landowners, nature conservation organisations, recreational users and fishermen to resolve apparent conflicts, by providing guidance and assisting in conflict resolution on issues of access, litter, fish stocks and bait digging.

F4b: Support measures to improve access to the shore, which must be balanced against safety and conservation measures and the requirements of other users.

F5: Harmonise and promote awareness of fish byelaws.

F6: Support improved understanding and management of eel stocks in the Severn.

Analysis has shown that a number of marine fish are increasing but salmon and sea trout stocks have declined. The need to protect the mixed stock salmon has been identified as being a key priority. There has also been a decline in elver stocks over recent years.

The Severn Estuary Partnership is working to address the conservation, commercial and recreational needs of the Estuary in order to ensure the sustainability of the fisheries.

Proposals for Action	Who could be involved	Benefits
F3 (ii) Promote the preservation of traditional (heritage) methods of fisheries at a sustainable level that ensures the protection of the mixed stock salmon.	Fishery interest, Environment Agency, SWSFC, Tourist Boards, CCW, EN, Local Authorities	Retaining of traditional practices.
F4 a&b (i) Set up a liaison group to seek a way forward on issues affecting anglers and other users.	SEP, British Federation of Sea Anglers, Bristol Channel Federation of Sea Anglers, SWSFC, Environment Agency, Relevant Port Authorities, CLA, EN, CCW, ASERA, MCS, LA's	 Raised awareness of the problem. Improved relationships between organisations involved. Responsible use of the Estuary shoreline.



12. Landscape and seascape

Aim:

To conserve, promote and enhance and where necessary restore the special and distinctive character and quality of the Estuary's landscape and seascape.

The open flat nature of much of the Estuary means that large developments may be visible over long distances, including views across the Estuary from the opposite shore. The undeveloped areas have a natural, unspoilt appearance, which it is important to retain, although it should be noted that this "natural" landscape has been carefully shaped by generations of human communities.

The character of the Estuary is defined by the continuous dynamic movement of the water. With the second highest tidal range in the world, of at least 12 metres, the waters are turbid with a high suspended sediment, creating a mass of grey, brown and yellow water depending on the status of the tide, the light conditions and the weather. In the middle of this

Policies

L1a: Promote the adoption of a co-ordinated, characterbased approach to landscape and seascape assessment and the preparation of policies for landscape appraisal, conservation and enhancement.

L1b: Co-ordinate a policy framework for landscape and seascape conservation and enhancement across authority boundaries.

L1c: Plan and design all new developments including infrastructure and transport so that they conserve and enhance the character of the Severn Estuary landscape and seascape across authority boundaries.

L2: Integrated across the SEP area, support and promote initiatives which implement the conservation of the distinctive landscape and seascape character qualities and enhancement of degraded areas.

L3: Seek to encourage that proposals for coastal and river protection demonstrate due regard for landscape and seascape conservation and /or enhancement at both strategic and site specific levels. Impact on landscape and seascape character and visual amenities should be a material consideration in the assessment of options for flood defence and coastal protection.

L4: Encourage sustainable farming practices to secure the conservation and/or enhancement of the particular character of the SEP area landscapes and seascapes.

expanse of constant movement are the Carboniferous limestone islands of Flatholm and Steepholm, and the two bridges crossing the Estuary in its upper reaches. The edge of the Estuary is characterised by the muddy interface between land and sea. Once this was a vast expanse of salt and fresh water marshes, but over the centuries the land has been drained to leave intertidal mud flats and narrow strands of saltmarsh.

With several large port based developments in the area, transportation and shipping also have an influence on the landscape and seascape.

The Severn Estuary Partnership is committed to working to ensure that the special and distinctive landscapes and seascapes are managed in a way that retains the natural character of the Estuary.

Proposals for Action	Who could be involved	Benefits
L1a (ii) Identify the key characteristics which determine the particular character of the SEP landscapes and develop suitable indicators as monitors of change.	LAs, CCW (LANDMAP and seascape research), CA, Rural conservation bodies, Community / Parish Councils, Local Residents	 Baseline information against which to judge change and support sustainable decision- making.
L2 (ii) Raise awareness of the value of the landscape.	SEP, LAs, CADW, Environment Agency, EH, CCW, EN, CA, NFU/NFUW, CLA, local communities and interest groups	 A greater understanding on the value of landscape.



13. Nature conservation and wildlife

Aim:

To maintain and enhance the biodiversity and abundance of wildlife, especially the habitats and species that contribute to the character and integrity of the Estuary.

The Severn Estuary is a dynamic, extreme and challenging environment, home to internationally important populations of birds and migratory fish, it has wide expanses of sandbanks, mud, saltmarsh and has numerous geological features.

Much of the SEP area is designated as a European Marine Site and Site of Special Scientific Interest. This requires public bodies, landowners and others to take nature conservation into account in their activities. The Severn Estuary Partnership can play a significant role in helping to maintain and enhance the biodiversity of the Estuary by:

- Encouraging an integrated approach to the conservation of biodiversity and geology and to the management, collection and dissemination of relevant information;
- Helping to ensure that nature conservation is fully integrated in the activities of key sectors, such as development, recreation, agriculture, aggregate extraction and industry;

Policies

N1a; Support and encourage the establishment of the statutory scheme of management for the Severn Estuary SPA and a shadow scheme of management for the pSAC.

N1b: Promote estuary-wide co-ordination to develop mechanisms for the enhancement of biodiversity and to prevent the deterioration of estuarine habitats.

N1c: Encourage initiatives to raise awareness and increase understanding of the range of existing statutory regulations and non-statutory initiatives affecting nature conservation.

N2: Raise awareness of international designations and the proposed statutory management scheme for the SPA and pSAC.

N3a: Identify and record wildlife resources in a format that is accessible for planners, developers and other interests.

N3b: Protect and monitor wildlife resources through the planning process and other management initiatives.

N3c: Encourage an appropriate impact assessment of effects of development proposals on sites, habitats or species of nature conservation importance.

N4a: Seek to avoid disturbance to wildlife from existing recreation and tourism.

N4b: Encourage the development and operation of recreation and tourism activities and facilities which avoid and decrease adverse impact on wildlife.

N5: Support and promote the development and implementation of mechanisms for providing better public information about pollutants released into the Estuary and their impacts; support and promote existing and emerging pollution controls.

N6: Encourage and promote management initiatives and regimes that maintain and enhance habitats and species in a way that benefits the character of the Estuary as a whole.

N7: Support and encourage the protection, identification, notification, and promotion of geological and geomorphological features including GCR (Geological Conservation Review) sites and RIGS (Regionally Important Geological /Geomorphological Sites).

- Complementing statutory activities including the Scheme of Management for the European Marine site;
- Raising awareness of statutory and local designations, and their associated opportunities and implications.

Proposals for Action	Who could be involved	Benefits
N1a (i) Support the Relevant Authorities in preparation of the Scheme of Management for the Severn Estuary SPA, particularly with respect to involvement of non relevant authority interests.	ASERA, SEP, Owners, occupiers, rightholders, local interest groups, local user groups, conservation groups WWT	 Co-ordinated approach to the protection of bird species noted in the Severn Estuary SPA designation. Co-ordinated Non relevant authority input to scheme of management.
N1b (i) Develop further mechanisms and schemes to protect and enhance biodiversity in the Estuary area, including BAPs, HAPs, and SAPs.	ASERA, Environment Agency, LAs, CCW/EN, Wildlife Trusts, SECG, Local Records Centres, NAW, DTLR, SEP, WWT	 Protection and enhancement of wildlife habitats and the diversity of the Estuary's wildlife.



14. Archaeology and the historic environment

Aim:

To conserve and enhance the Estuary's archaeological and cultural heritage, and to secure its sensitive management and promotion.

The archaeological and historical resource of the Severn Estuary and its levels and moors are of international significance. They are a finite and irreplaceable record that contributes to our understanding of the evolution of human interaction with, and modification of, the changing environment. It is clear that the archaeological potential of the Estuary is greater than the current record would suggest.

There are considerable development pressures on the Estuary and its coastal levels which have to be reconciled with the need to conserve aspects of the archaeological resource and the historic landscapes which survive here. It is therefore

Policies

H1a: Promote surveys, research and integration of data to achieve a strategic understanding of the archaeological, palaeoenvironmental, industrial heritage and cultural interests of the historic landscape, intertidal and subtidal areas.

H1b: Encourage effective communication links between all relevant agencies and organisations to improve coordination in archaeological issues and promote public understanding of the value of the historical environment around the Severn Estuary.

H1c: In the context of new development, undertake adequate surveys of historic resources to facilitate appropriate assessment of possible impacts.

H2: Conserve, and where appropriate, enhance the historic landscape bordering the Severn Estuary.

H3: Encourage the need for conservation and enhancement of the historic environment to be incorporated into all levels of planning policy in both statutory and non-statutory plans relating to the Estuary.

H4: Support the conservation and, where appropriate, the enhancement of the historically important features and/or sites in and bordering the Severn Estuary where damage could be caused by erosion.

essential that the cultural and palaeoenvironmental resources of the Severn Estuary are identified, recorded, and where appropriate, conserved and enhanced for the benefit of present and future generations.

The Severn Estuary Partnership is committed to ensuring that the Estuary's archaeological and cultural heritage remain available for the benefit of present and future generations.

Proposals for Action	Who could be involved	Benefits
H1a (i) Produce a research and management framework, based on a systematic audit of the archaeological and historic heritage of the Estuary.	RCAHMW, EH, Cadw, Archaeological Trusts, LAs, EN, Universities, SELRC, SEP, NAW, GoSW, Environment Agency, Universities	 Improved quality and integrity of information on the historic environment. Improved access to information for decision-makers. Estuary-wide co-ordination of archaeological research and management.
H1b (iii) Promote awareness of the role of the Sites and Monuments Record to Local Authorities.	SEP, Archaeological Trusts, EH, Cadw, LAs	 Increased understanding among planning authorities.

Contributing organisations and individuals

Many organisations and individuals, reflecting a wide range of interests, have contributed to the process that has resulted in the production of this Strategy document. Through attending regular meetings, participating in workshops, and responding to questionnaires and documents, these organisations and individuals have influenced its content.

- Alpha Quest Associates
- Associated British Ports
- Avonmouth Responsible Care Group
- Avon Wildlife Trust
- British Association of Shooting and Conservation
- Bristol Channel Federation of Sea Anglers
- Bristol Channel Yachting Conference
- Bristol City Council
- British Geological Survey
- British Horse Society
- British Marine Aggregates Producers
 Association
- British Marine Industries Federation
- Bristol University
- British Waterways
- Cadw: Welsh Historic Monuments
- Caldicot and Wentlooge Internal Drainage
 Board
- Cardiff Bay Harbour Authority
- Cardiff County Council
- Cardiff University
- Career Paths Cardiff & Vale
- Confederation of British Industries
- CEFAS Lowestoft Laboratory
- Cheltenham & Gloucester College
- Chemical Industries Association
- City and County of Swansea Bay Coastal Cell Group
- CoastNET
- Coastal Zone Canada Association
- Community Council of Goldcliff
- Congresbury Parish Council
- Countryside Council for Wales
- Country Landowners Association
- Council for the Preservation of Rural Wales
- Council for the Protection of Rural England
- Crown Estate Commission
- Cybestuaries
- Devon Wildlife Trust
- Department of the Environment Transport and the Regions
- Dow Corning Ltd
- Dunster Beach Holidays Ltd
- Dwr Cymru (Welsh Water)
- English Heritage
- English Nature
- Environment Agency
- Environment Canada
- Esturiales

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- Ewenny Community Council
- Exmoor National Park
- Flat Holm Project
- Forest of Dean District Council
- Friends of the Earth
- Gifford and Partners
- Glamorgan Heritage Coast
- Glamorgan/Gwent Archaeological Trust
- GlosNet
- Gloucester City Council Gloucester Harbour Trustees
- Gloucestershire County Council
- Gloucester Wildfowlers Association
- Greenpeace
- Gwent Authorities Emergency Planning
 Services
- Hinckley 'B' Power Station
- ICI Estates
- Inland Waterways Association
- Internal Drainage Boards
- Joint Strategic Planning and
- Transportation Unit
- Kenneth Allsop Memorial Trust
- Kinston Seymour Parish Council
- Laing GTM
- Local Agenda 21 Officers
- Ministry of Agriculture Fisheries and Food
 - Marine Conservation Society
- Maritime and Coastguard Agency
- Monmouthshire County Council
- Monsanto Chemicals UK Ltd
- National Assembly for Wales
- National Coasts and Estuaries Advisory Group
- National Farmers Union
- National Museum of Wales
- Newport County Borough Council
- North Devon Somerset & S. Avon Coastal Cell Group
- North Petherton Town Council
- North Somerset Council
- Pembrokeshire College of Further Education
- Rhone Poulenc Chemicals
- Royal Commission Historical Monuments
 England
- Royal National Lifeboat Institution
- Royal Society for the Protection of Birds
- Royal Yachting Association
- SABINA

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- Sedgemoor District Council
- Severn Estuary Net & Fixed Engines Fishermen's Association
- Sedgemoor District Council Tourism
 Association
- Severn Estuary Levels Research Comittee
- Severn Estuary Coastal Cell Group
- Severn Estuary Conservation Group

Society for Underwater Technology

Somerset Trust for Nature Conservation

South Wales Sea Fisheries Committee

Sports Council South West Region

Standing Conference of Severnside Local

Severn Tidal Power Group

Somerset County Council

South West Tourism

Authorities

Sustrans

Sports Council for Wales

Sustainable Somerset Forum

Terra Nitrogen (UK) Ltd

The Bristol Port Company

The Ramblers Association

Tourist Board England

University of Bristol

University College London

University College of Wales

University of Glamorgan

University of Reading

Wales Tourist Board

Wessex Water

Zeneca

The Institute of Civil Engineers

Historic Monuments in Wales

The Vale of Glamorgan Council

Trinity House Lighthouse Authority

University of the West of England

Westbury-on-Severn Parish Council

West Somerset District Council

Wildfowl and Wetlands Trust

World Wide Fund for Nature

Youth Hostels Association

Welsh Development Agency

West Country Tourist Board

The Royal Commission on Ancient and

The Berkeley Estate

The Ports Panel

South Gloucestershire Council