# **Preface**

This report has been prepared by the Exe Estuary Management Partnership. The work has been made possible through the Cycleau project. The Partnership acknowledges this support and the valuable contributions made by all of those who use and value the Exe Estuary.

This Management Plan updates the 1998 Exe Estuary Management Plan and will cover the period until March 2011.

The "Exe Estuary Management Plan, 2006 - 2011" forms the second part of the review process. It outlines policies, issues and five year objectives to ensure sustainable use of the Exe Estuary for the future. Integration with spatial planning and informed management activity will strengthen our commitment to this valuable area for the future.

The "Exe Estuary Management Plan 2006-20011" is supported by the "State of the Exe, 2006". The "State of the Exe, 2006" describes the changing pressures, natural processes, varied uses and quality of the Estuary, and how they interact with each other. It was used to identify the management measures of the Management Plan.

## Acknowledgments

We would like to thank all of the people who have contributed to this report: to the local people who use the Estuary and have offered their time, opinions and experience; to the professionals who monitor, manage and protect the Estuary and have offered their advice and views for the future; to the partners of the Exe Estuary Management Partnership who contribute daily to its successful functioning, both professionally and financially; and to the members of the Cycleau Project for the valuable trans-national experience and input.

# Exe Estuary Management Partnership - Cycleau Project Team

The Management Plan review was facilitated and funded by the European Cycleau project.























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### List of Abbreviations

CROW: Countryside and Rights of Way Act 2000

Defra: Department for Environment, Food and Rural Affairs

EEMP: Exe Estuary Management Partnership

OS: Ordnance Survey

PROW: Public Rights of Way

RSPB: Royal Society for the Protection of Birds

SAC: Special Area of Conservation SPA: Special Protection Area

SSSI: Site of Special Scientific Interest

Source of the information presented in the images

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Source of the information presented in the figure

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Please note that the software used for the mapping only allows kilometres to be spelt as "kilometers".

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# 1. Background of the Exe Estuary Management Plan

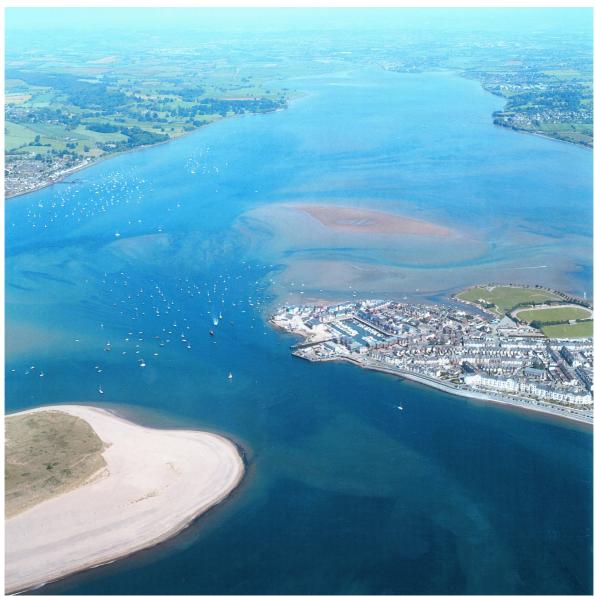


Image1: Aerial view of the Exe Estuary

# **Area of Study**

The Exe Estuary Management Plan study area is based on the 5m contour line around the Estuary. (Please see Figure 1)

The main focus of the management work is, therefore, on the sub-tidal, inter-tidal, shore and nearby areas of the River Exe between Exeter and Exmouth/Dawlish.

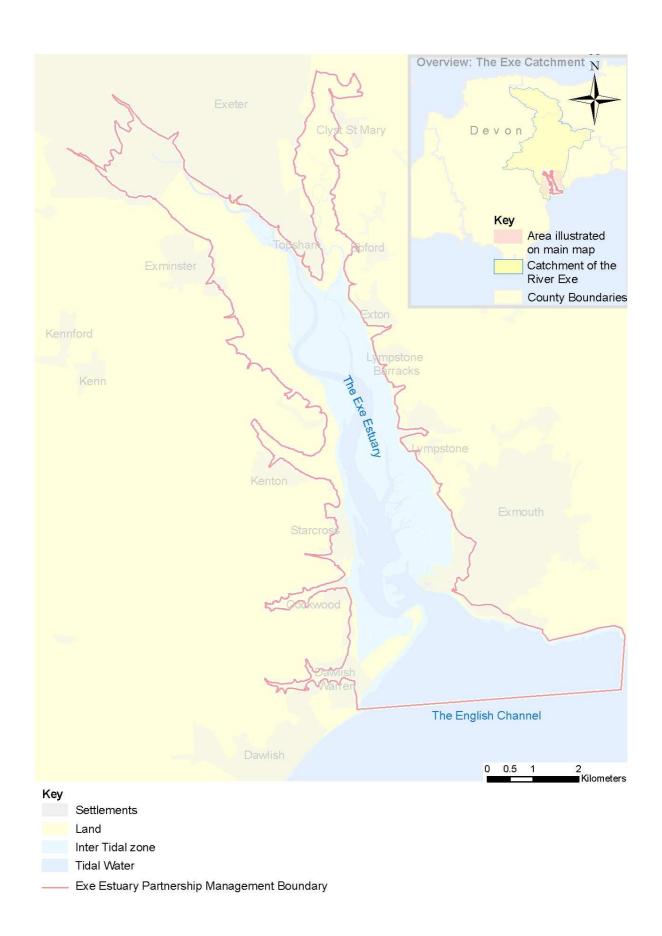


Figure 1: 'he area managed by the Exe Estuary Partnership Source: Devon County Council and OS

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### The Exe Estuary

The Exe Estuary covers 3,000 hectares of diverse aquatic and terrestrial habitat. It is internationally designated as an Estuary of great importance for nature conservation.

Protected from the open sea by the sand spits of Dawlish Warren and Pole Sands, the Estuary lends itself beautifully to a feeding and breeding retreat for birds. This also makes it a perfect open space for a wide range of recreational activities, shellfish cultivation and tourism.

### The need for a Management Plan:

The Exe Estuary Management Plan is written to provide guidance on delivering statutory compliance and best practice in managing this special place. It will:

Promote the sustainable use of the Exe Estuary, balancing the demands made on its natural resources and resolving conflicts of interest where they arise.

Provide a framework for the co-ordinated management of the Estuary and improve communications between users and organisations with authority over the Exe.

It is envisaged that the Exe Estuary Management Plan will run for a five year term before being reviewed.

#### The contents of the Management Plan:

- Potential management issues
- Policy guidance
- What do we want to achieve over the next five years?

The Exe Estuary Management Plan provides a description of **potential management issues** together with the **policy guidance** necessary to resolve them. This document sets the objectives for each sector of activity: **What do we want to achieve over the next five years?** 

The Exe Estuary Management Plan incorporates the Management Scheme for the Special Protection Area (Regulation 34, Habitats Directive). Therefore, it identifies objectives which aim to achieve favourable condition of the wildlife and supporting habitats protected under the Special Protection Area (SPA). **These objectives appear in bold in each relevant section of the document.** Relevant actions will apply to the Competent Authorities that have a statutory responsibility for the protection of the SPA.

## The Management Plan: Where has it come from? Where does it take us?

The Exe Estuary Management Plan:

- Is based on a scientific report: "The State of the Exe, 2006"
- Identifies specific management measures which will be implemented through an annual "Action Plan"

The "State of the Exe, 2006" displays the information currently available on the condition of the environment. It shows how the Estuary has changed over the years and illustrates its present condition. The report identifies the potential management issues on the Exe. These issues have been addressed in the Management Plan.

The Action Plan indicates how the Management Plan will be implemented and identifies who is responsible for a given action.

Copies of the "The State of the Exe, 2006" and the "Exe Estuary Annual Action Plan" can be obtained from the Exe Estuary Officer, Devon County Council, County Hall, Exeter, or are available on the Partnership's website at <a href="https://www.exe-estuary.org">www.exe-estuary.org</a>

## The Exe Estuary Management Partnership

The Exe Estuary Management Partnership has existed since the mid 1990s. Due to the complex array of organisations with (sometimes overlapping) management responsibilities for different aspects of the Estuary, a partnership approach is the most effective model by which to achieve consistent management of the Estuary resource as a whole. The Exe Estuary Management Partnership is the management group responsible for the delivery of the SPA management scheme.

The Exe Estuary Management Plan is jointly agreed by Partner organisations and local community representatives of the Exe Estuary Management Partnership. This Management Plan will be delivered through annual Action Plans in a process lead by the Exe Estuary Officer.

The structure of the Exe Estuary Management Partnership has recently been revised by the funding Partners (See Figure 2). The main priorities of the structure review were to ensure that the Partnership is focussed on delivering Estuary-related work and has an effective, streamlined structure. Users of the Estuary will retain a key role in the Partnership and the Public Forum will continue through annual public meetings.

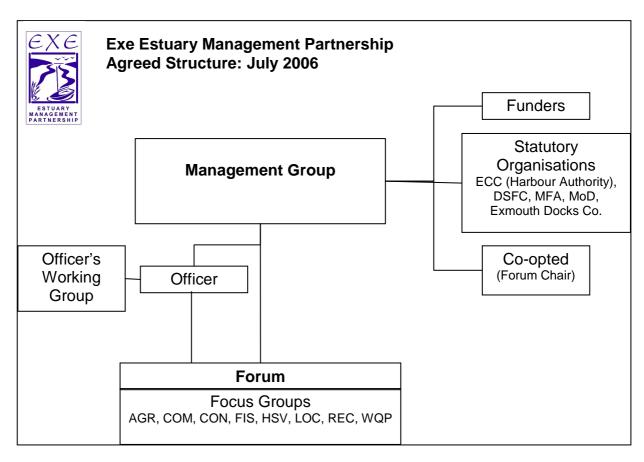


Figure 2: Structure of the Exe Estuary Management Partnership

#### Delivery of the Exe Estuary Management Plan 2006 - 2011

Due to the complex array of organisations with management responsibilities for different aspects of the Exe Estuary, a Partnership approach is the most effective model by which to achieve consistent management of the Estuary resource as a whole. The Exe Estuary Management Partnership is the management group for the delivery of the statutory SPA management scheme.

The Exe Estuary Management Plan 2006 – 2011 is jointly agreed by Partner organisations and local community representatives. Priorities for action were decided through a public consultation exercise in 2006. This Management Plan will be delivered through annual Action Plans in a process lead by the Exe Estuary Officer.

## Action Plan for Year 1: June 2007 - March 2008

- Investigate the importance of Cockwood Marsh and the feasibility of measures to ensure future habitat protection.
- Consult on recommendations in draft Access Strategy, finalise document and circulate.
- Promote Code of Conduct for Crab Collection and monitor its effectiveness.
- Prepare policy guidance on pontoon proposals and developments.
- Prepare a planning protocol for the Partnership's involvement in planning applications.
- Ensure estuary-wide moorings association is fully aware of SSSI and SPA requirements for moorings management.
- Support delivery of new viewing areas and platforms in mid-estuary locations through the NCN interpretation work.
- Organise a clear-up of old fishing gear.
- Co-ordinate removal of foreshore debris and target sources in order to recommend preventative action.
- Continue to promote awareness of Exeter City Council's Harbour Revision Order.
- Facilitate increased communication with agriculture/landowner interests and publicise current issues.
- Deliver the core outputs of the Exe Estuary Partnership including two editions of the Exe-Press newsletter, up to date Partnership website, quarterly news bulletin for inclusion in local community newsletters, one public Forum event, and maintenance of the Partnership's Contacts Database for use by the Estuary Officer.

## Action Plan for Year 2: April 2008 - March 2009

- Pursue implementation of recommendations from the draft Environmental Health Audit.
- Develop an estuary-wide agreement on management of abandoned boats and hulks.
- Publicise planning applications to assist with the identification of 'in-combination' effects.
- Identify local knowledge and information on coastal processes to inform long term monitoring of sediment movements and coastal change.
- Map features of historical interest on the Estuary.
- Produce and distribute a Boating and Environment leaflet and / or Admiralty Chart Small Craft Guide.
- Collaborate with Exeter City Council, the Turf Hotel, RSPB and other potential partners to develop an estuary-based information outlet and promote the Turf as an 'eco-hotel'.
- Provide Estuary information to schools using publicised information and specially developed information packs.
- Facilitate increased awareness of availability of water quality information.
- Promote the provision of sewage pump-out facilities on the Exe Estuary.
- Deliver the core outputs of the Exe Estuary Partnership including two editions of the Exe-Press newsletter, up to date Partnership website, quarterly news bulletin for inclusion in local community newsletters, one public Forum event, and maintenance of the Partnership's Contacts Database for use by the Estuary Officer.

### Action Plan for Year 3: April 2009 - March 2010

- Implement zonation scheme for activities on the Exe.
- Implement sustainable fisheries management measures.
- Deliver the core outputs of the Exe Estuary Partnership including two editions of the
  Exe-Press newsletter, up to date Partnership website, quarterly news bulletin for inclusion in
  local community newsletters, one public Forum event, and maintenance of the Partnership's
  Contacts Database for use by the Estuary Officer.

# 2. Climate Change

#### Key and statutory organisations:

- Defra
- Environment Agency
- Devon County Council
- District Councils
- Natural England

# Key documents, legislation and statutory plans:

- "A Warm Response; Our Climate Change Challenge"; A DCC Strategy for 2005 and the Foreseeable Future
- County Structure Plan, DCC, 2004
- Municipal Waste Management Strategy for Devon, 2003
- Devon Local Transport Plan, 2006



Image 2: Sunset on the Exe Estuary

## **Policy**

Raise awareness of the causes and impacts of climate change in the Exe Estuary and monitor the changes taking place.

Promote sustainable management minimising related impacts of climate change.

Favour low energy and environmentally friendly goods and services.

- 1. ▶ The impacts of climate change are on a scale that is much greater than that of the Exe Estuary.
  - ▶ It is difficult to manage the Estuary appropriately through 5 year Management plans when the impacts of climate change are on a much larger timescale.
  - ► Climate change will impact broadly on all social, environmental and economic aspects of the Estuary.
- **2.** ► The contribution of the Exe Estuary activities to global warming is unknown.
  - ▶ It is difficult to evaluate the potential impact of climate change on specific locations, people or wildlife.
  - ▶ Lack of monitoring of climate related impacts on social, economical, environmental aspects of the Estuary.
  - ► Cessation of funding for the local weather station monitoring in Exmouth in 2004.
- 3. ► Limited understanding of global warming and related climate change processes.

- 1. ldentify the contribution of Exe Estuary activities to global warming.
  - ▶ Minimise the impact of Exe Estuary activities on global warming.
- 2. ▶ Use local knowledge and existing surveys to analyse past occurrence of climate related incidents on social, economic and environmental aspects of the Estuary.
  - ▶ Evaluate the impact of climate change on Estuary communities and identify future flood and coastal protection management options, as an outcome of the Exe Estuary Coastal Management Study led by East Devon District Council and the Environment Agency.
  - ▶ Assess the effects of climate change on the SPA and identify suitable mitigation.
  - ▶ Identify the areas which are the most vulnerable to climate change, prioritise and suggest adequate sustainable management, and "climate proof" the chosen management method for the following 50 years as recommended in the Devon Climate Change Strategy.
  - ▶ Develop an integrated monitoring method for analysing the impact of climate change on the Estuary in the short, medium and long term, in line with the wider Devon Climate Impact Assessment.
- **3.** ► Encourage responsible behaviour and increase public understanding of their contribution to climate change and the likelihood of potential impacts.

This section is closely linked to the following:

3. Natural and Historical Environment

4. The Use of the Exe

5. Environmental Quality

6. Promoting Understanding of the Exe

7. Protecting the Exe

# 3.1 Habitats and Designations

#### Key and statutory organisations:

- Defra
- Natural England

# Key documents, legislation and statutory plans:

- Birds Directive 79/409/FC
- CROW Act 2000
- Dawlish Warren Management Plan, 2005
- Exmouth Local Nature Reserve Management Plan, 2000
- Regulation 33 English Nature, 2001
- RSBP Exe Estuary Nature Reserve Management Plans, 1996
- The Habitats Directive 92/43/EC



Image 3: Eelgrass at Dawlish Warren

## Key achievements

● The majority of the Exe Estuary SSSI has reached a favourable condition ● Over-wintering populations and internationally important species such as Avocet and Black Tailed Godwit have increased. ● Contribution was made to the eelgrass survey in 2002. ● The Sub Tidal survey was completed in 2005.

#### **Policy**

Maintain the nature conservation features of the designated sites in favourable condition and, where possible, enhance them.

- Lack of knowledge of the implications of designated site legislation for Competent and Relevant. Authorities.
  - ► Limited public understanding of the benefits of designated sites.
- 2. Parts of designated sites are in unfavourable condition.
  - ▶ Loss and deterioration of intertidal habitats due to development, including coastal defence.
  - ► Impact of invasive species.
- 3. ► Lack of an integrated monitoring plan for the Estuary.
- **4.** ► Lack of appropriate management framework for fisheries within the designated sites.
  - ▶ Need to improve further the management of wildfowling.
  - ▶ Lack of management and enforcement of recreation activities on the designated features.
  - ▶ Environmentally inappropriate farming practices on isolated sites.
  - ▶ Diffuse impact effects of upstream inputs.
  - ▶ Cumulative effect of isolated development on the Estuary not being assessed.
- **5.** ► Climate change impacts on habitat loss and change.

- **6.** ► Lack of knowledge of the impact of sediment and hydrodynamics on the habitats and designated areas.
- 7. ► Some areas of nature conservation value fall outside of present designations.

- 1. ► Increase awareness of all users of the implications of the designated sites.
  - ► Ensure all Estuary users comply with designated site legislation.
- 2. Achieve favourable condition status of the SPA, SAC and SSSIs.
  - ▶ Identify all habitat re-creation opportunities and progress with the priority sites.
  - ► Ensure that, wherever suitable, habitats are seen as a natural form of sea defence and that opportunity is given to protect, maintain and enhance them.
  - ▶ Identify ways to enhance the nature conservation value of the area covered by the Exe Estuary Management Plan.
- 3. ▶ Produce and implement an integrated monitoring plan for the designated sites.
- 4. ▶ Develop and produce an appropriate management framework to control and manage all fisheries.
  - ► Limit conflict with recreational activities and protect nature conservation through revision of existing zoning.
  - ► Ensure moorings within the Estuary do not affect the nature conservation features of the designated sites through the development of an integrated mooring management plan.
  - ► Ensure all farming activities within designated sites achieve nature conservation objectives.
  - ▶ Reduce diffuse pollution inputs through improved farming practices upstream.
  - ▶ Ensure recreational access and use does not adversely affect the designated sites.
- 5. ► Improve understanding of the implications of climate change on management of the Estuary.
- 6. ► Ensure all flood and coastal defence plans adhere to nature conservation legislation.
- 7. Ensure all other areas of high conservation value are recognised and designated.

2. Climate Chang	ge 3.2 Wildlife	4.1 Farmi	ng and Farmed landscape		
4.2 Fisheries	4.3 Recreation	5.1 Air Qua	lity 5.2 Water Quality		
5.3 Waste Management and Recycling  6.1 Education and Interpretation					
7.2 Coastal Defe	nce and Shoreline I	<b>l</b> lanagement	7.3 Spatial Planning		

# 3.2 Wildlife

## Key and statutory organisations:

- Defra
- Local Authorities
- Natural England
- RSPB
- Devon Wildlife Trust

# Key documents, legislation and statutory plans:

- Devon Biodiversity Action Plan
- UK Biodiversity Action Plan
- Teignbridge District Council Biodiversity Action Plan
- East Devon District Council Biodiversity Action Plan



Image 4: Brent Geese feeding

#### **Key Achievements**

● A key contribution was made to the objectives and targets for the Estuary as stated in the Biodiversity Action Plan. ● A contribution was made to the analysis of the "WeBs" count data with the RSPB. ● Agreement between RSPB and the Devon Wildfowlers' Association was facilitated. ● Ringed Plovers are successfully breeding at Dawlish Warren. ● Continued grazing has helped to control and manage Dawlish Warren scrubland.

# **Policy**

Ensure that no net loss of biodiversity occurs within the management plan area and where possible, identify enhancement opportunities.

- 1. ► Lack of understanding of the Biodiversity Action Plan process and issues.
- 2. Loss of biodiversity due to development pressures, including coastal defence.
  - ▶ Decline in some farmland and breeding birds.
  - ► Impact of invasive species.
  - ▶ Disturbance of biodiversity from recreational, commercial and military activities.
- 3. ► Lack of an integrated monitoring plan within the Estuary.
- **4.** ► Impact on biodiversity due to lack of appropriate management framework for fishing.
  - ▶ Impact of recreational activities on biodiversity linked to lack of management and enforcement.
- 5. ► Impact of climate change on biodiversity.
- **6.** ▶ Difficult to evaluate the financial value of biodiversity.
- 7. Direct impact of waste and litter on biodiversity.

- 1. ▶ Meet the Biodiversity Action Plan targets relevant to the EEMP area.
- 2. ► Safeguard biodiversity by assessing the cumulative effects of development and developing best practice guidance.
  - ▶ Halt the decline in the breeding of farmland birds and increase breeding of key species through proactive targeting of agri-environment schemes.
  - ▶ Minimise the impact of recreational, commercial and military activities wherever possible.
- 3. Ensure all biodiversity interest is appropriately monitored.
- **4.** ► Develop and produce an appropriate management framework to control and manage all fisheries.
  - ▶ Limit conflict between wildlife and recreation, and protect biodiversity through revision of the zonation scheme.
- 5. ► Improve understanding of the implications of climate change on biodiversity.
- **6.** ► Achieve greater appreciation and awareness of biodiversity.
  - ► Assess the value of biodiversity to EEMP area.
- 7. ► Increase awareness of the threats posed to wildlife by the presence of litter and waste on the Estuary.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

4.1 Farming and Farmed landscape

4.2 Fisheries

4.3 Recreation

4.4 Tourism

4.5 Public Transport and Access

5.1 Air Quality

5.2 Water Quality

5.3 Waste Management and Recycling

6.1 Education and Interpretation

7.1 Contingency Planning

7.2 Coastal Defence and Shoreline Management

7.3 Spatial Planning

# 3.3 Landscape

## Key and statutory organisations:

- District Councils
- Devon County Council
- Defra
- Natural England

# Key documents, legislation and statutory plans:

- Devon Landscape Strategy, 2004
- Devon Landscape, 2002
- Country Planning Act, 1990
- County Structure Plan, 2004
- Regional Spatial Strategy for the South West, 2005



Image 5: Landscape around the Exe Estuary - Source: Adrian Evans

#### **Key Achievements**

• Working closely with the Local Planning Authorities, awareness has been raised of the importance of the landscape when dealing with planning applications and the sensitivity of the Estuary to development.

#### **Policy**

Promote understanding and appreciation of the natural and cultural landscape of the Exe Estuary.

Support the delivery of environmental schemes aimed at maintaining and improving the landscape character and natural resources of the Estuary.

- 1. ▶ Potential loss of the Estuary landscape entity (zone 5 of the landscape strategy) by subdividing the current area into relevant future sub-sections.
- **2.** ► Visual impact of substantial strategic development along the Estuary, such as the M5 and the Royal Marine Commando Barracks.
  - ▶ Visual impact of increased development pressure on the landscape along the Estuary.
  - ▶ Conflict with inappropriate industries sited next to the Estuary and settlement of marine related business.
  - ▶ Visual impact of recreational and tourism facilities on the landscape.
- **3.** ► Change in agricultural practice could have a significant effect on the Estuary's landscape. character, especially on sensitive areas, such as the Exminster and Powderham Marshes.
- **4.** ► Visual impact of development outside the Exe Estuary Partnership boundary on the Estuary landscape.
- **5.** Potential impact of coastal defences on visual aspect of the landscape.

- 1. ► Ensure that all relevant authorities treat the Estuary as a single landscape entity, and that land management advice is targeted to maintain the distinctive nature of the Estuary's landscape.
- 2. Ensure that proper consideration is given to the character of the Exe Estuary landscape when major strategic developments are proposed.
  - ► Ensure that existing landscape policies are respected when developing urbanised areas.
  - ▶ Promote low visual impact building when allowing the development of marine and other commercial businesses (regarded as a regional and sub-regional economic growth priority).
  - ► Encourage new recreation and tourism initiatives to promote and help celebrate the unique and distinctive nature of the Estuary's landscape within their activities and promotional tools.
- **3.** ► Ensure that land management schemes are targeted to maintain the distinctive character of the Estuary landscape.
- **4.** ► Work with the Local Planning Authorities to limit the visual impact of development visible from the EEMP area by developing a planning protocol.
- **5.** ► Consider and limit the visual impact of coastal defence on the landscape wherever possible.

2. Climate Change 3.1 Habitats	and Designations	3.4 History and Archaeology
4.1 Farming and Farmed landscape	4.3 Recreation	4.4 Tourism
4.5 Public Transport and Access	4.6 Commercial and	Other Uses
6.1 Education and Interpretation	7.2 Coastal Defence	and Shoreline Management
7.3 Spatial Planning		

# 3.4 History and Archaeology

#### Key and statutory organisations:

- English Heritage
- Environment Agency
- Defra
- Local Authorities
- National Trust
- RSPB

# Key documents, legislation and statutory plans:

- "Coastal Defence and the Historic Environment", English Heritage, 2003
- "Taking to the Water": Policy for the Management of Maritime Archaeology in England, English Heritage, 2002
- "The Human Habitat: Devon's Historic Environment", Devon County Council Role Action Plan,



Image 6: Historic hulk and boats at Topsham

#### **Key Achievements**;

Support has been given to the ongoing study on historic hulks led by the University of Plymouth.

#### **Policy**

Ensure that the historical and archaeological environment resource of the Estuary is safeguarded, conserved and, where appropriate, promoted.

- 1. ▶ Potential exposure, damage and/or loss of historical and archaeological features due to pressures such as development, dredging and coastal defence works
  - ▶ Potential damage or loss of historical and archaeological features due to changing land use and agricultural practices in the Estuary hinterland.
- 2. Potential exposure and damage of historical and archaeological sites and related evidence due to coastal erosion and human activity.
  - ▶ Unknown impact of potential water level changes likely to alter archaeological preservation conditions.
- 3. ► Lack of information concerning the extent of the Estuary's archaeological and historical resources and features.
  - ▶ Lack of promotion of existing cultural and heritage features along public access routes.
- **4.** ► Lack of understanding of the value of historical and archaeological sites and need to protect them.
  - ► Loss of historical features perceived as an "eyesore".
  - ▶ Potential non-reporting of archaeological discoveries on land, intertidal zone and at sea.

- 1. Ensure appropriate consideration of historical and archaeological interest when judging new development, dredging and coastal defence proposals, and ensure early implementation of existing consultation procedure.
  - ▶ Ensure appropriate action is taken following archaeological consultation results.
  - ▶ Encourage landowners to enter into Environmental Stewardship Schemes and to maximise the historical and archaeological component of these.
- 2. Ensure that coastal erosion affecting historical and archaeological sites is monitored and appropriate action is taken.
  - ► Support continued monitoring of the condition of historical and archaeological sites, especially where threatened by erosion or potential development.
- **3.** ► Improve the general level of understanding of the value and sensitivity of historical and archaeological sites, features and related evidence.
  - ► Take account of cultural and heritage features when managing the public right of way network.
  - ▶ Take opportunities to celebrate the historic heritage of the Exe.
- **4.** ► Raise awareness of existing reporting schemes when archaeological or historical discoveries are made on land, at sea or in the inter-tidal zone e.g. informing the Exeter Museum Finds Liaison Officer, the Historic Environment Record, the Receiver of Wrecks.

2. Climate Chan	ge	4.1 Farming and Farmed landscape			4.3 Recrea	ation	
4.4 Tourism	4.5	Public Transport and Access 6.1 Edu			ıcation and I	nterpret	ation
7.2 Coastal Defence and Shoreline Management				3 Spatial	Planning		

# 4.1 Farming and farmed landscape

#### Key and statutory organisations:

- Defra
- Environment Agency
- Local Authorities
- Natural England

# Key documents, legislation and statutory plans:

- Environmental Stewardship Scheme
- Exe Catchment Abstraction
   Management Strategy, Environment
   Agency, 2003
- Exe Catchment Management Plan, Environment Agency, 1996
- Regulation 33, English Nature, 2001
- The Agricultural Waste Management Regulations, 2006



Image 7: Grazing at Powerdham

#### Key achievements

● Thanks to publicity of farming and land management issues, communication with agricultural and land owner interests has increased. ● The majority of agricultural land adjacent to the Estuary is now within a Stewardship agreement. ● Practical support for achieving more sustainable land management through involvement with the Lower Clyst Project.

## **Policy**

Facilitate the implementation of sustainable agriculture practice through consultation with the farming community and relevant regulatory organisations.

- 1. ▶ Impact of existing farming practices on the decline of farmland and breeding birds.
- 2. ► Lack of research on the impact of farming practices on water quality through diffuse pollution and soil erosion.
  - ► Unknown impact of air pollution on soil quality.
- 3. ► Farming practices and rapid changes in farming practices as they follow the market or price changes, which affects the landscape as well as water and soil quality.
- **4.** ► Farming activity is only viable through payment subsidies or other mechanisms of financial support.
  - ▶ Uncertainty of continued economic viability to support the current mixture of farming.
  - ► Complexity of funding schemes and guidance at European, national and local level.
- **5.** ► Impact of natural and physical processes on agriculture and farming around the Estuary.

- 1. ► Halt the decline in the breeding of farmland birds and increase breeding of key species through agri-environment schemes.
- 2. ► Identify further and improve understanding about the link between catchment land use, water quality and sediment deposition in the Estuary.
- 3. ► Support sustainable farming activity.
- **4.** ► Maximise benefits of the Environmental Stewardship Scheme.
  - ▶ Promote frequent reviews of funding schemes to take account of market conditions and ensure continued viability and sustainable practice.
  - ▶ Proactively identify and implement Countryside Stewardship Agreements to achieve Favourable Condition.
- **5.** ► Identify the effects of natural and physical processes on agricultural and farming around the Estuary.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

3.3 Landscape and Designations

3.4 History and Archaeology

5.1 Air Quality

5.2 Water Quality

6.1 Education and Interpretation

7.2 Coastal Defence and Shoreline Management

# 4.2 Fisheries

#### Key and statutory organisations:

- Environment Agency
- Defra, Centre for Environment
   Fisheries and Aquaculture Sciences
- Defra
- Devon Sea Fisheries Committee
- Natural England

# Key documents, legislation and statutory plans:

- Bass Protection Order, 1990
- CROW Act, 2000
- DSFC Byelaw 24
- DSFC Regulatory Order, 2006
- Exe Management Plan and Action Plan, Environment Agency
- Habitats Directive 92/43/EC
- Salmon Act, 1986
- Salmon and Freshwater Fisheries Act, 1975
- Shellfish Water Directive 79/923/ECC



Image 8: Mussel diving on the Exe Estuary

#### Key achievements

- The initial Regulating Order consultation was completed A code of conduct for crab tiling has been developed.
- Facilitation work also helped improve dialogue between users and reduce conflict. Mussel beds were mapped on the Estuary. Additional areas were identified for shellfish classification Productivity of shellfish beds has been improved. A bass nursery area has been designated and maintained to protect juveniles.

#### **Policy**

## Manage the fisheries resource within the Exe Estuary sustainably.

- 1. ► Complex consenting processes and regulation, and lack of a flexible management framework for fisheries (shellfisheries and sea fishery).
- 2. Lack of economic viability.
  - Lack of data on the existing resource to facilitate the development of a strategy.
  - ► Fishing infrastructure falling into disrepair (oyster racks / crab tiles).
- **3.** ▶ Decrease in salmon stock population.
  - ▶ Unknown impact of climate change on fishery resources.
- 4. ▶ Impact of fishery management techniques on river bed habitat and maritime archaeology.
  - ► Conflict with other users.
- 5. Impact of water quality on shellfish quality and price.
  - ▶ Limited water quality testing system and understanding of associated economic impacts.

- 1. ▶ Develop and implement a flexible and responsive framework for sustainable fisheries management.
- 2. ► Improve the viability and productivity of the Exe fishery through working with the local industry and within environmental controls.
  - ▶ Investigate the potential for sustainable certification of Exe fisheries.
  - ▶ Investigate potential markets for suitable seafood species, which are currently commercially unexploited.
  - ▶ Undertake regular survey work of the fish stocks to underpin management decisions.
  - ▶ Undertake regular (biannual) surveys of crab tiles within the Estuary and promote the Crab Tiling Code of Conduct.
  - ▶ Implement appropriate management controls of crab tiling if it is proved to have an adverse effect on the SSSI or SPA.
  - ▶ Remove all fishing gear and infrastructure that is not being actively used.
- **3.** ► Continue to protect and enhance the salmon fishery.
  - ▶ Improve understanding of the implications of fisheries on biodiversity.
- **4.** ► Work with other sectors to develop a code of good practice for sustainable fisheries management.
  - ► Ensure that the fisheries within the Exe are sustainable and have no adverse effect on the condition of the SPA.
- 5. ► Work with Regulatory Authorities to safeguard and improve shellfish water quality.
  - ▶ Improve water quality testing for the Estuary by continuing to share good practice within the wider European context.

2. Climate Change	3.1 Habi	tats and Designations	3	3.2 Wildlife		
3.4 History and Archaeology		4.3 Recreation	4.	4.6 Commercial and Other Us		
5.2 Water Quality	6.1 Educa	tion and Interpretation	า			

# 4.3 Recreation

#### Statutory and main organisations:

- Devon County Council
- District Councils
- Environment Agency
- Natural England
- Harbour Authorities
- Maritime and Coastguard Agency

# Key documents, legislation and statutory plans:

- CROW Act, 2000
- Dawlish Warren Management Plan, 2005
- Exmouth Local Nature Reserve Management Plan, 2000
- Navigation acts and byelaws
- RSBP Exe Estuary Nature Reserve Management Plans, 1996



Image 9: Kite surfing on the Exe Estuary

#### Key achievements

● Support has been given to an Estuary-wide Moorings Association. ● The Exe Police Patrol was developed and promoted. ● The Kite surfer 'Code of Conduct' was facilitated and promoted. ● Information leaflets were produced about the" Water and Shore Safety" and "Birds on the Estuary". ● A successful "Water Safety Day" was organised and run in 2003.

# **Policy**

## Promote the safe and sustainable use of the Estuary for recreation activities.

#### Issues

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- 1. ▶ Disturbance to biodiversity.
  - ▶ Pollution and exploitation of the Estuary.
- 2. ► Lack of awareness of policy restrictions and controls for water based activities.
  - ▶ Lack of compliance with boating safety and mooring standards set by relevant organisations.
  - ▶ Lack of clarity over management of moorings.
- 3. ► Increasing competition for space insufficient co-ordination in the control of recreation activities on the Estuary.
  - ▶ Unknown cumulative impact of existing activities.
- **4.** ► Lack of access, safe access facilities and control of access to the water.
- Lack of consideration for all amongst various users of the Estuary endangering and disturbing other users and wildlife.
  - ► Threats from new recreational activities.
- **6.** ▶ Poor facilities for watersports and insufficient opportunities for training.
  - ▶ Lack of EEMP involvement in taking forward the National Cycle Network route project.

7. Impact of poor water quality incidences on bathing and recreation.

#### What do we want to achieve over the next five years?

- 1. ▶ Ensure that no recreation activity is causing an adverse effect on the SPA, SSSI or SAC.
  - ▶ Develop an effective strategy for ensuring that the disturbance caused by recreational activities is minimised.
- 2. Develop effective ways to promote and educate users about policy restrictions and controls within the Exe Estuary, boating safety and mooring standards.
  - ▶ Work in partnership with new the harbour authority, representing the needs of all stakeholders.
  - ▶ Support enforcement of speed limits on the Estuary.
- 3. Develop and implement a flexible and responsive framework for recreation management
  - ▶ Seek to investigate the recreational capacity of the Estuary.
- **4.** ► Support sustainable improvements to access facilities on the Estuary.
- **5.** Achieve a balance of interests on the Exe where conflicts arise.
  - ▶ Increase awareness and understanding of each other's needs amongst users of the Exe.
  - ► Continue to work with recreation organisations (e.g. those representing sailing, mooring and angling) to optimise opportunities and minimise conflict and environmental damage.
  - ▶ Promote a comprehensive approach to safety.
  - ▶ Develop a consensus and acceptable zonation scheme for the various uses. Any zoning plan should include a review of moorings and mooring management. The zoning plan should be developed to consider what the users would like, and also what is required for the SPA and SSSI.
  - ► Facilitate a responsible approach to any new recreation activities emerging on the Exe.
- 6. ► Identify and promote further recreation opportunities and resources on the Estuary.
  - ▶ Develop partnerships to make the best of opportunities presented by the completion of the National Cycle Network.
- **7.** ► Seek to diminish the effects of poor water quality incidences on recreation.

2. Climate Change	3.1 Habitat	s and Designations	3	3.2 Wildlife		
3.3 Landscape and Des	signations	4.2 Fisheries	4.4	4 Tourism		
4.5 Public Transport a	5.2 Water Quality	5.1 Air Quality				
6.1 Education and Inte	rpretation	7.3 Spatial Planr	ning			