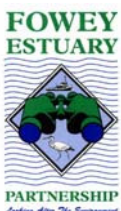


# FOWEY ESTUARY MANAGEMENT PLAN



2012 - 2017



## FOWEY ESTUARY PARTNERSHIP

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## Abbreviations

AGLV	Area of Great Landscape Value
AONB	Area of Outstanding Natural Beauty
BAP	Biodiversity Action Plan
CBWPS	Cornwall Bird Watching and Preservation Society
CC	Cornwall Council
CEFAS	Centre for Environment, Fisheries & Aquaculture Science
CGS	County Geology Sites - Cornwall Geoconservation Group (formerly known as RIGS)
CIFCA	Cornwall Inshore Fisheries & Conservation Authority
CWS	County Wildlife Site
CWT	Cornwall Wildlife Trust
DEFRA	Department of Environment, Fisheries and Rural Affairs
DTR	Department of Transport & the Regions
EA	Environment Agency
EC	European Commission
ERCCIS	Environmental Records Centre for Cornwall & the Isles of Scilly
EU	European Union
FEMP	Fowey Estuary Management Plan
FEP	Fowey Estuary Partnership
FHC	Fowey Harbour Commissioners
FPHA	Fowey Port Health Authority
FWAG	Farming and Wildlife Advisory Group
HC	Heritage Coast
JNCC	Joint Nature Conservation Committee
LEAP	Local Environment Agency Plan
MCA	Maritime & Coastguard Agency
MCZ	Marine Conservation Zone
MoU	Memorandum of Understanding
MMO	Marine Management Organisation
MPA	Marine Protected Area
NDMP	National Dormouse Monitoring Programme
NE	Natural England
NT	The National Trust
SAFFA	Salmon and Freshwater Fisheries Act 1975
SSSI	Site of Special Scientific Interest
SWW	South West Water
VMCA	Voluntary Marine Conservation Area
WeBS	Wetland Bird Survey
WCRT	West Country Rivers Trust
WLP	Waste Local Plan



## Definitions

Estuary management is a generic term representing a spectrum of planning and management activity. Three further definitions are needed to describe specific elements of estuary management.

**The Estuary Management Plan** – refers to the planning document. This is an estuary specific plan that includes guidance and action plans that have been prepared by the Partnership in consultation with all who live, work and relax on the estuary.

**The Fowey Estuary Partnership** – refers to the organisations and bodies involved in preparing and implementing the Estuary Management Plan.

**Estuary Management Process** – refers to the process of estuary management. This is a broader term that embraces the Plan, the Partnership, the framework and the decision making process for the estuary.

**Advisory Group** - refers to the grouping of organisations that oversee the estuary management process and are largely responsible for setting the Fowey Estuary Partnerships work programme from the Estuary Management Plan.

**Focus Group** – comprises organisations with similar concerns, interests and areas of expertise. A representative from each focus group sits on the Advisory Group.

**Estuary Forum** - open to any one group or individual who has an interest in the management of the estuary.



*Low tide at Lerryn*

## Section 1. Introduction & Vision

Britain has the most extensive estuarine resource of any country in Europe. Its estuaries are of fundamental importance to the economy and are subject to a wide range of uses including commercial navigation, commercial fisheries, tourism and recreation. Many of England's estuaries are also nationally or internationally important for wildlife.

Estuarine habitats are sensitive to human use and pressure. Some of these pressures result in adverse impacts on the natural estuarine resources and other estuary users. The estuary management process seeks to achieve a balance between the competing demands placed on estuaries through the principle of sustainable use.

The Fowey Estuary Management Plan is a practical document containing guidelines to inform, advise and guide current and future management. It is not a statutory plan and has not been designed to dictate detailed management actions or set up complex new working arrangements. Instead it builds upon the successes and strengths of existing organisations and activities by providing a framework within which decisions can be made and actions can be taken.

### Our Vision

The Fowey Estuary is valued and appreciated as a place to live, work & relax, an environmental asset and a focus for activities in the local area.

The Partnership seeks to:

Stimulate an appropriate balance between competing demands placed on the Fowey Estuary, through shared information, co-operation and action

Create a culture of openness and communication

Work towards a sustainable future for the Fowey Estuary

***To achieve this vision will take more than the production of this document. It requires the commitment, awareness and co-operation for the ideas and guidance it contains, through action now and in the future.***

## Section 2. Background

Increasing concern over the sustainable future of estuaries and coastal areas has led the government to re-examine the way in which these important areas are managed and used.

The Marine & Coastal Access Act (2009) will ensure clean, healthy, safe, productive and biologically diverse oceans and seas by putting in place better systems for delivering sustainable development of the marine and coastal environment. The act will be implemented through revised policies on marine planning and licensing, fisheries management including migratory and freshwater fisheries and marine enforcement and the provision of environmental data and information. There will also be policies to improve coastal access, marine and nature conservation and coastal and estuary management. The government now has the Marine Management Organisation (MMO) to deliver these objectives.

The Marine & Coastal Access Act (2009) has also created the concept of Marine Conservation Zones (MCZ) to protect nationally important marine wildlife, habitats, geology and geomorphology. The MCZs along with other types of Marine Protected Areas (MPA) will be used to deliver an 'ecologically coherent network of Marine Protected Areas'. Sites will be selected to protect not just rare or threatened species but a range of marine wildlife. The MCZ Project is being led by Natural England (NE) and the Joint Nature Conservation Committee (JNCC) to identify and recommend MCZs to Government. In the south-west area, the recommended MCZ areas have been delivered by the Finding Sanctuary project and involved working with sea users and interest groups. The next stage is for NE and JNCC to analyse the recommendations and provide advice to Government which will be used as the basis for selecting MCZs for designation.

It has long been thought that if we are to look at the coast in a more sustainable way, we should improve coordination between management mechanisms and communication between all those with an interest in coastal issues through integrated coastal zone management (ICZM), this is a principle embedded within the Marine & Coastal Access Act.

On a European level, the Integrated Maritime Policy identifies the need for the EU to look at the oceans and seas in an integrated manner if Europe is to maintain its resource base and continue being competitive in maritime affairs.

Shoreline Management Plans (SMP) were developed as a large scale assessment of the risks associated with coastal processes such as tidal patterns, wave height, wave direction and the movement of beach and seabed material and the way in which these risks to people and the developed, historic and natural environments may be managed. The first SMPs were produced in the mid 1990s and there is currently a second generation of SMPs in production to take into account the changes to our coastline in response to social, economic and environmental pressures and therefore the present and future needs of managing our coastal environment.

The production of the Fowey Estuary Management Plan looks at ways of delivering the aims of the Marine & Coastal Access Act and the principle of integrated coastal zone management at a local level. This is achieved by ensuring sustainable levels of economic and social activities within the harbour whilst protecting the estuary environment. It considers the activities of those involved in the development, management and use of the estuary within a framework that facilitates the integration of their interests and responsibilities.

The plan is a rolling programme of liaison and action, rather than a one off plan and has therefore been reviewed after five years of implementation.



*Fowey Lower Harbour*

### Section 3. The Management Plan Area

The Fowey Estuary contains a diverse wildlife, landscape and built and cultural heritage that is valued by those who live, work and visit the area.

The Estuary covers an area of nearly 1000 acres and caters for large numbers of commercial ships, resident and visiting craft, as well as various commercial activities. Most of the land fringing the estuary is owned by large landowners such as The National Trust, Network Rail and the Forestry Commission.

Fowey Harbour Commissioners have been the principle managers of the Fowey Estuary since 1869. The Harbour Commissioners are a self-financing Trust Port that has owned the majority of the fundus and foreshore in the estuary since 1933, and its income from moorings and harbour dues cover its expenditure.

The area covered by this plan lies within the following limits: from Gribbin Head to the eastern end of Lantivet Bay, and stretching north to the tidal limits of the rivers Fowey and Lerryn; and the pills and streams leading into the river, to 5 miles from the centre of the tidal river bed (Figure 1).

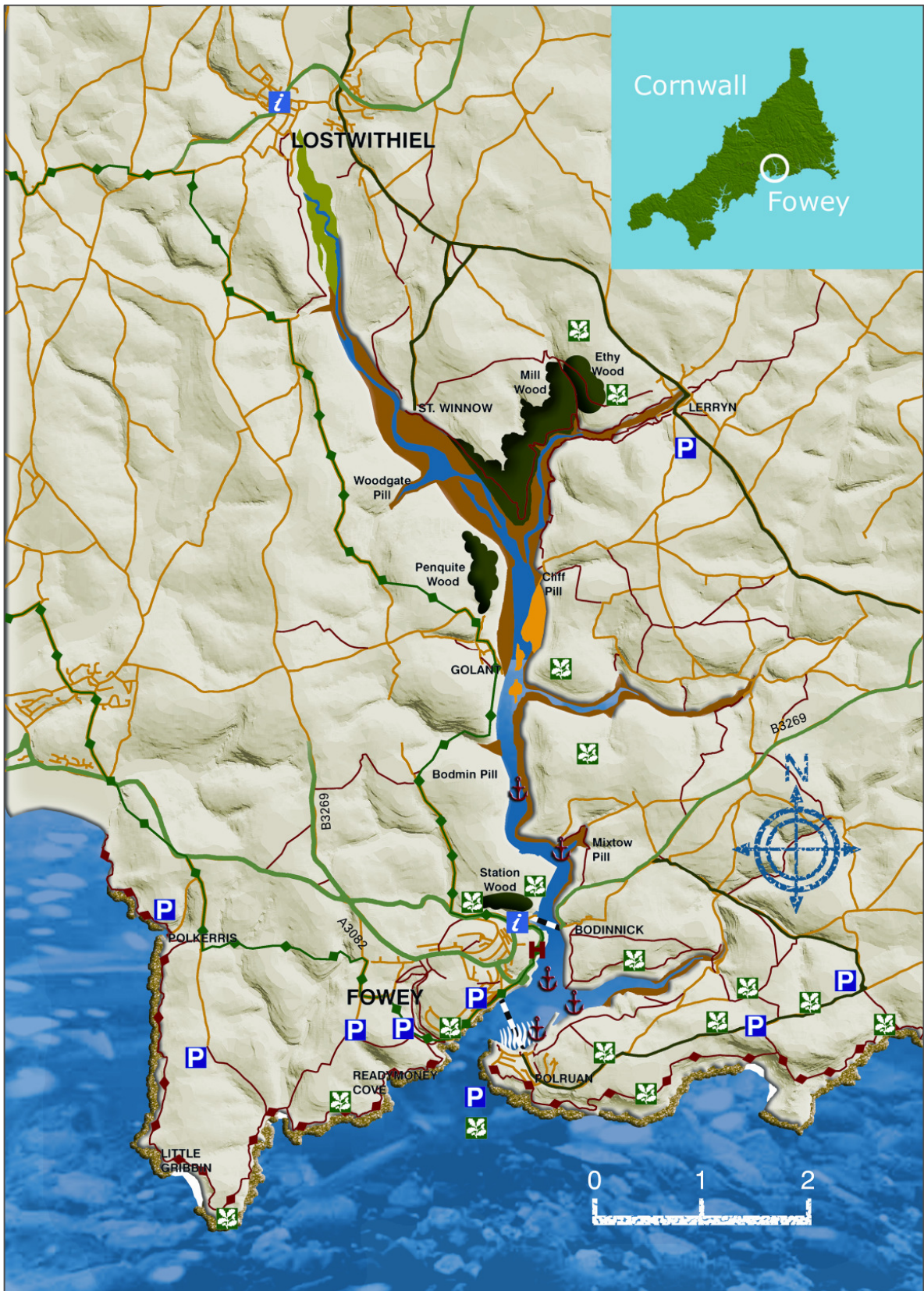
The work of the Partnership is not restricted to issues that fall solely within the area marked by the boundary of Figure 1. Occasionally a more flexible consideration of this boundary should be recognised, as many issues and opportunities of importance to the estuary overlap or fall outside the boundary. Consequently the Partnership is committed to working on any issue that has an impact on the estuary and uses the boundary as a guide to its work.



*Aerial view of Golant and downstream*



Figure 1: Immediate Area Covered by the Fowey Estuary Management Plan





## Section 4. Management Framework

### 4.1 Linking the Fowey Estuary Management Plan (FEMP) to the work of other Organisations & Bodies

The Fowey Estuary Management Plan is a non-statutory document. There are no legal powers to ensure that all the guidance in the plan is implemented or adhered to. However, a number of the guidelines relate to the statutory duties of organisations involved in the plan's development. The Plan acts as a mechanism for informing and co-ordinating these duties to ensure that a holistic approach is taken to the management of the estuary.

There are several plans that are relevant to the FEMP area. All apply the principles of sustainable development and focus on their particular areas of interest. The Fowey Estuary Management Plan has regard to and informs the following plans and initiatives.

#### **Cornwall Council Core Strategy** (Statutory)

The Core Strategy is being developed by Cornwall Council as their 20 year plan to establish the context for future growth and development within Cornwall and will set the framework for all subsequent development plan documents.

Cornwall Council are also working towards the production of a Cornwall Maritime Strategy in order to consider peoples aspirations for the future of Maritime Cornwall and to ensure that this is used as a guide by Cornwall Council when considering development of policy, action plans and operations in the maritime sector.

#### **River Basin Management Plans** (Statutory)

These plans assist the Environment Agency in achieving its objectives for the whole of the River Fowey Catchment and neighbouring catchments. The Water Framework Directive (WFD) became part of UK law in December 2003 and is an opportunity for the Environment Agency to plan and deliver a better water environment, focussing on ecology. Measures are set out in River Basin Management Plans (RBMP) drawn up for each River Basin District which describes the river basin district and the pressures the water environment faces. It shows what this means for the current state of the water environment, and what actions will be taken to address the pressures. It sets out what improvements are possible by the end of the first 6 year planning cycle (2015) and how the actions will make a difference to the local environment. The RBMPs were developed through river basin liaison panels which represents a wide range of interests.

#### **Cornwall & Isles of Scilly Shoreline Management Plan** (Non-statutory)

This sets out the strategy for sustainable coastal defence. This plan provides a strategic framework for the management of coastal defences along this coastline in the future and a basis upon which future informed decision making and policy setting can be made. The Shoreline Management Plans are currently being reviewed and the second generation of plans will take into account longer term changes to the coastal environment.

#### **The Cornwall Biodiversity Initiative** (Non-statutory)

Individual Biodiversity Action Plans (BAPs) for wildlife habitats & species, including one for estuaries, have been prepared and continue to be developed and implemented. The Fowey Estuary has eel grass beds and salt marsh, both of which are listed as key habitats.

Due regard is also given to the **Fowey Harbour Waste Management Plan** (Statutory) and **The Fowey Harbour Oil Spill Contingency Plan** (Statutory) prepared by Fowey Harbour Commissioners, along with other planning documents as they arise. Fowey Harbour Commissioners control and manage the estuary through enforcement of the Harbour Byelaws and publication of guidance leaflets, codes of conduct and policy statements. The Fowey Estuary Partnership Advisory Group is an advisory group to the Fowey Harbour Commissioners Board.

Inaccessibility and remoteness from main roads have helped to keep the estuary relatively unspoilt by limiting public access to the water's edge and restricting the spread of recreational activities. The policies and plans of the Harbour and local authorities have generally protected the estuary from harmful developments. In this task the local authorities have the support of central government and national agencies through national designations such as Areas of Outstanding Natural Beauty and Heritage Coasts.

The Fowey Estuary Partnership aims to provide a fresh approach to the management of the estuary by providing a vehicle for co-operation, change where needed, and the motivation to realise appropriate solutions to existing and future problems and opportunities. The duties and powers of regulating activities on and around the estuary will remain the responsibility of statutory bodies. New duties are not imposed on the agency, organisation or individual; instead the FEMP relies on relevant agencies, organisations and individuals working together voluntarily to take steps to implement the guidance and actions held within this plan.

## 4.2 FEMP objectives

To provide guidance and advice to those bodies influencing the planning system and regulation of activities below high water relating to the Fowey estuary.

To promote a common understanding of the objectives, beliefs and activities of the organisations reliant upon the estuarine resources.

To inform decision makers about the status of the estuary and what progress is being made / needs to be made towards sustainable use.

To act as a mechanism for agreeing short, medium and long term priorities for the management of the estuary.

To help prevent conflict by providing a balanced framework for resource allocation, objective setting and decision-making.

To be aware of the initiatives and plans of others and to communicate their implications to those organisations who are reliant on the estuary.

## 4.3 Guiding Principles

A set of guiding principles fundamental to the management of the estuary as a whole has been identified. They aim to consider the estuary as a valuable resource in terms of its biodiversity, natural and built heritage, environmental quality and a focus for economic growth.

Through effective consultation with and input from local communities and others with an interest in the Fowey Estuary, it is anticipated that the following guiding principles can be achieved:

The rationale of sustainable development should underpin all management decisions along the estuary.

The estuary should be treated as a single unit across interests and organisational boundaries, through a co-ordinated management approach.

To provide a framework for co-operation amongst estuary users, statutory agencies and other organisations to sustain and manage the resources of the Fowey Estuary.

To protect and where possible enhance the unique natural beauty and distinctive landscape character of the Fowey River & Estuary for future generations and to promote the conservation of natural assets of the area by raising awareness of all estuary users on the value of those assets.

To protect, conserve and enhance the biodiversity of estuarine habitats, including the estuarine fringe, and the wildlife they support through the promotion of environmental awareness amongst all relevant bodies and estuary users.

Ensure the protection, promotion and understanding of the historical & cultural resource, including safeguarding and augmenting the existing network of designated sites and promoting careful evaluation of any proposals for development that may affect them.

To sustain the commercial viability of the Port of Fowey. Encourage efforts to ensure that all development proposals balance the economic and environmental needs of the estuary.

To seek ways of managing recreational & commercial fisheries without undue detriment to stocks, the environment or other estuary users.

To work towards the maintenance and improvement of water quality standards within the estuary for the benefit of the natural environment. Support and promote measures to reduce pollution throughout the estuary.

To work towards a better understanding of the process of sedimentation and to maintain deep water access in the estuary while causing minimum environmental impact.

Work towards ensuring that the estuary remains, as far as practical, free from litter

Maintain and enhance opportunities for recreation and leisure on the estuary to provide suitable conflict-free access for all.



*Fowey, a diverse port*



## 4.4 Plan Review and Implementation

The Fowey Estuary Management Plan was first published in May 1997. This document is a result of a subsequent review process.

The plan has undergone several changes since its original publication. The structure is currently as follows:

*The Plan will be fully reviewed every 5 years.*

*The Partnership via the Advisory Group (Section 4.6) will review the Plan's priorities annually, to develop a work program that specifies a range of practical projects to be implemented in the coming year.*

*The Partnership must be accountable for providing best value through the plan's implementation and monitor and evaluate the success it has in delivering its objectives and guiding principles.*

*Focus Group (Section 4.6) meetings will be held when they are required. Each focus group has a representative on the Advisory Group. The other members of the focus group can raise issues with the Advisory Group through this representative.*

*A wider Estuary forum will be held when there is a need for dissemination of information and wider consultation.*

The Harbour Commissioners are currently the Lead Body and it is intended that as the Plan continues through the implementation phase, they will act as a clearing house for enquiries relating to the Plan. This will provide a central point of contact from which enquiries can be fielded out to the relevant organisation(s).

It should be noted that this system of representation will be constantly under review, to ensure that it continues to run as efficiently as possible and to accommodate any necessary changes. New subgroups may be formed if specific issues arise that require co-operation between different organisations.

## 4.5 Commitment to the Estuary Management Process

As the Plan is non-statutory, proposals arising from it will only succeed if they are practical and popular; proposals that lack support are more likely to fail. For the Plan to succeed and endure, the organisations and individuals concerned with management of the estuary must adopt it. For this reason the members of the Advisory Group have signed a Memorandum of Understanding (MoU).

The MoU acknowledges the importance of working together through the Estuary Management Process. All parties acknowledge that this process provides an opportunity to co-ordinate their work programmes, their organisation's policies, and actions that may be the consequences of this work. The MoU was drawn up to achieve the following aims:

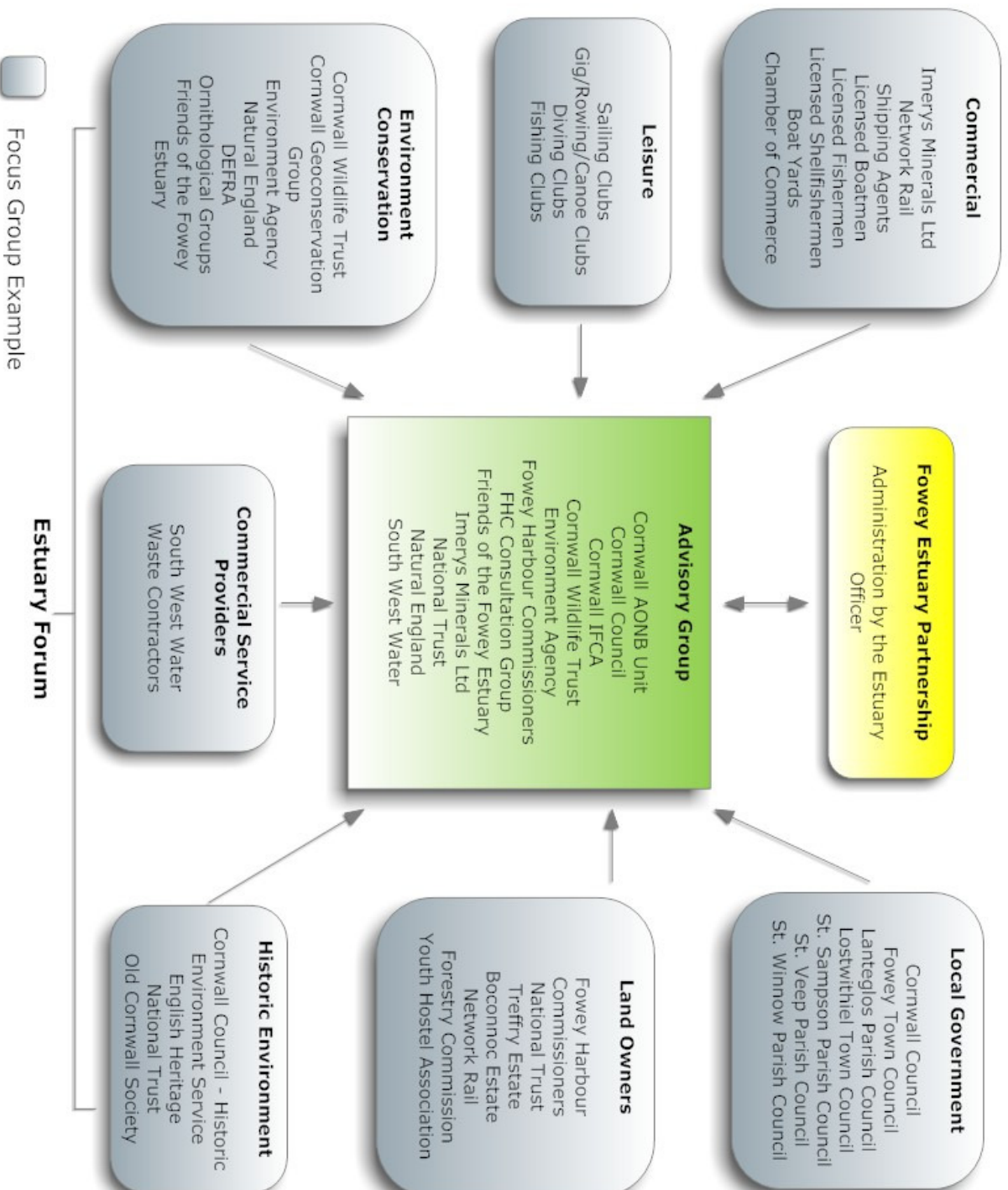
- To reiterate the aims of the partnership
- To reduce unnecessary repetition of work
- To share expertise and information
- To confirm the commitment of the Advisory Group members to the Estuary Management Process

The MoU does not alter or affect any members' statutory responsibilities or rights.

## 4.6 Fowey Estuary Partnership Management Framework

The Management Framework for the Fowey Estuary Partnership consists of a core Advisory Group, with Focus Groups contributing (Figure 2). Overall, this forms the Estuary Forum.

Figure 2: Fowey Estuary Partnership Management Framework



## Section 5. Management Policies

### Guiding Principle

To provide a framework for co-operation amongst estuary users, statutory agencies and other organisations to sustain and manage the resources of the Fowey Estuary.

### 5.1 Develop a Management Framework to facilitate the delivery of the Estuary Management Plan

The resources of the Fowey Estuary are shared by many, from the local residents and visitors to businesses and local clubs who have interests as diverse as commercial shipping, sailing, nature conservation and tourism. The Fowey Estuary Management Plan is a non-statutory process that offers a basis for voluntary co-operation between the authorities with management duties and local user groups.

Regulating bodies such as the Fowey Harbour Commissioners, Cornwall Council, the Environment Agency and Cornwall IFCA have statutory controls over certain activities such as navigation, pollution and fishing. Many other organisations have an interest in the estuary and the resources it has to offer.

A stronger framework for exchanging information about existing responsibilities and users' activities is needed. This will provide a mechanism to resolve potential conflicts of interest and realise opportunities to improve environmental, social, and economic conditions allowing further progression towards sustainable management of the estuary's resources. The Partnership's Management Framework (Figure 2) has formed the basis for improving co-ordination and communication between interested parties.

### 5.2 Encourage on-going public participation and involvement in estuary management

Local ownership of the Management Plan needs to be retained if it is to influence the daily use and management of the estuary's resources. There are over seventy organisations represented with different interests in the Fowey Estuary Partnership. However, it is important for the Management Plan to directly reach as many estuary users as possible.

### 5.3 Identify future funding to support the work of the Fowey Estuary Partnership

Fowey Harbour Commissioners initiated the Fowey Estuary Management Plan in 1994. Since the initiative's launch in May 1997, a number of financial contributions have been made by Fowey Harbour Commissioners, Natural England and the Environment Agency, with smaller amounts from other Advisory Group members and local organisations. The continued full implementation of this Plan and its guidance and objectives requires long-term commitment of resources to the plan. Ongoing contributions will be sought, both in-kind and financial to ensure the continuation of data and information collection and to implement the objectives highlighted in the FEMP.

### 5.4 Improve access to high quality, up to date and relevant data for decision making

Estuary management involves both consultation and research work to identify needs for management. Decisions about the future sustainable use of the resources should be based on an understanding of user's needs and sound facts in all aspects of the estuary environment. It is intended that the supporting document to this Plan 'The Manual of Estuary Data' will provide an ongoing context for collecting, analysing and distributing information about the estuary environment.



## Section 6. Landscape Conservation

### Guiding Principle

To protect and where possible enhance the unique natural beauty and distinctive landscape quality of the Fowey Estuary for future generations, and to promote the conservation of the area's natural assets by raising awareness of all estuary users of the value of those assets

### 6.1 Promote wider understanding and recognition of landscape character and quality

The Fowey ria or valley system, cut into slate, siltstone and sandstone, was drowned after the last glaciation c10,000 BC by melt water which rose to shape its coast and creeks. The River Fowey rises on Bodmin Moor and flows for 36km in a southerly direction before reaching the tidal limits just above Lostwithiel. It then enters the estuary, and finally the English Channel. The estuary is approximately 11km in length, being 0.5km wide at the mouth and about 0.25km wide along the rest of its length. The River Lerryn is the main tributary and the main creeks are Pont Pill, Penpoll and Mixtow.

Its early deciduous woodland was probably cleared from the upper valley slopes and rounded hills as permanent settlements were established, from around 4000 BC. The resulting combination of semi-natural and managed land has created a landscape of variety and quality, much of which is covered by landscape designations.

The landscape character of the Fowey valley is identified in the 2008 Cornwall and Isles of Scilly Landscape Character Study which brings together information about the natural, historic and visual environment as well as giving advice about planning and land management guidelines.

The Fowey Estuary is within an Area of Outstanding Natural Beauty (AONB), a statutory designation. The primary purpose of an AONB is to conserve natural beauty, but the need to safeguard agriculture, forestry and rural industries and the economic and social needs of the local communities is recognised. Local Authorities have a statutory duty under the Countryside and Rights of Way Act 2000 to produce a plan which sets out policies for managing the AONB. The Management Plan (2011-2016) for the Cornwall AONB has been published and adopted by the members of the Cornwall AONB Partnership. The review process involved a widespread consultation with partners, stakeholders, parishes and community groups and the general public.

The local Gribbin Head to Polperro coast is designated as Heritage Coast (HC). HC is non-statutory and applies to coast of exceptionally fine scenic quality exceeding 1 mile in length. There is no separate HC management plan but policy protection is given in Council Plans.

Cornwall Council designates the upper reaches of the Fowey Estuary as an Area of Great Landscape Value (AGLV). This non-statutory designation denotes countywide significance. These areas are afforded some protection through policies in the local development plans restricting future development that affects the appearance or character of these areas.

Procedures for the protection of the geological landscape are less widespread than those for the protection of wildlife. However, the whole of the Fowey Estuary, along with Lantic Bay, has been classified as a County Geology Site (previously known as RIGS). CGS are sites of value for geological, mineralogical and geomorphological interest. Their conservation is of concern for scientific research, education, historic and aesthetic importance. CGS are a regional level, non-statutory designation and are generally afforded protection through policies in local plans.

The overall quality and variety of the landscape of the Fowey Estuary is valued highly both by residents of the area and within Cornwall generally. Consequently, issues relating to landscape frequently generate debate. The visual landscape is an important factor in encouraging visitors and tourism activities, thereby contributing to the areas economy. The management of the estuary's landscape is therefore fundamental to the social and economical success of the area.

## Section 7. Nature Conservation

### Guiding Principle

To protect, conserve and enhance the biodiversity of estuarine habitats, including the estuarine fringe, and the wildlife they support through co-operation with relevant bodies and increased awareness of estuary users

The Fowey Estuary is biologically rich, in terms of both biodiversity and habitat. The Manual of Estuary Data is a compilation of all known surveys and species information for the Fowey Estuary. The National Trust has completed biological surveys of the land and foreshore under its jurisdiction, and the Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) contains some additional data. Several areas within the Fowey catchment are designated areas (section 6), within the Fowey River catchment, there are several Special Sites of Scientific Interest (SSSI) including the Upper Fowey Valley, North Fowey Valley and Boconnoc Park and Woods in the Lerryn Valley. Golitha Falls, part of Draynes Wood SSSI, is a designated National Nature Reserve.

### 7.1 Identify and pursue opportunities for habitat creation and enhancement, in line with Biodiversity Action Plan targets

Estuaries such as the Fowey are a vital part of our natural heritage and are of great national and international importance for their wildlife. The UK Government is committed to conserving key habitats and species. In 1996 the Cornwall Biodiversity Initiative (CBI) produced the first volume of Cornwall's Biodiversity and in 2004, volume 3 'Action Plans' was produced in line with the UK Biodiversity Action Plan (BAP) process to guide local conservation work to ensure that Cornwall's wildlife continues to be an inspiration for future generations. The Cornwall BAP Volume 4 has now been produced to prioritise the list of biodiversity projects whilst reflecting national and regional changes. The Cornwall BAP list now contains 43 habitats and 360 species.

**Key features, habitats and species listed in the Cornwall Biodiversity Action Plans (BAP) have been identified on the Fowey Estuary and a work program was developed with organisations to achieve the targets. Key habitats in the Fowey Estuary include salt marsh, *Zostera* beds and ancient woodland.**

### 7.2 Education and public awareness to nature conservation

Public awareness of the value of wildlife is necessary to facilitate co-operation in its protection and conservation. This will help to ensure proper balance between wildlife and people using and working on the estuary. Education is a major component of awareness and information dissemination, and resources aimed at local schools and interest groups would help to achieve this. All age groups can be engaged through the production of leaflets, guided walks, websites and topical talks. Part of this is achieved by the Friends of the Fowey Estuary, a membership group aimed at people interested in the natural history and conservation of the Fowey Estuary Environment.

### 7.3 Increase understanding of the dynamics and distribution of species and habitats throughout the estuary and monitor their status

#### Intertidal and Subtidal Areas

Information has been gathered on parts of the estuary through surveys carried out by the National Trust, Environment Agency and others. This provides information on which to build a more complete picture of the flora and fauna of the estuary as a whole. It would be of benefit to collate and interpret this data to identify any gaps in the existing knowledge and to identify areas for further research. Up to date information about habitats and species in and around the estuary is necessary to determine the relative importance of different areas that may require protection and conservation.

The establishment of a comprehensive and up to date record of existing wildlife will also provide a baseline for assessing the existing and future health of the estuary environment. Areas specifically in need of survey include the salt marshes of Madderly and Shirehall Moors. Salt marsh is relatively scarce in the south west and these marshes are therefore of biological importance to the area.

The community ecology of previous subtidal macrofaunal surveys has demonstrated the Fowey Estuary to contain a relatively rich and diverse community. Some intertidal areas were reported to indicate disturbance, which were tentatively attributed to copper contamination or organic enrichment. Further monitoring of the communities involved is required to establish this. A small area of the scarce biotope *Ascophyllum nodosum* and *Fucus vesiculosus* on variable salinity mid eulittoral rock (SLR.Asc.VS) is present, however no rare or scarce species were found.

#### Woodland bordering the Estuary

Insect, lichen and plant surveys have been carried out by the National Trust in areas under their jurisdiction. This provides data on areas along the Estuary's length, and some benefit could be gained by collating and interpreting the data to give a broader overview of the Estuary wildlife. This would also help to identify areas requiring further research and would provide a baseline for assessing the existing and future health of the estuary environment.

Ancient Woodland also occurs around the estuary, with rich ground flora and invertebrate species characteristic of ancient woodland present. Ancient oak trees, beech trees and wild service trees harbour a wealth of species, including the nationally rare click-beetle (*Dirhagus pygmaeus*) as well as other uncommon beetle species. Species associated with ancient woodland are found in these woods, and include the hay-scented buckler-fern (*Dryopteris aemula*) and the ancient woodland brown snail (*Zenobiella subrufescens*).

Evidence of dormice presence in an area of hazel coppice led to the installation of dormice boxes, and the woodland is being managed with this in mind and regular dormouse surveys undertaken with data forming part of the National Dormouse Monitoring Programme (NDMP).

Kingfishers are present along most of the middle to upper estuary and use the shelter of the shoreline trees from which to fish.

#### Other land bordering the estuary

Habitats of importance identified in some National Trust surveys include damp herb-rich meadows, wet heath, hazel coppice and oak coppice, possibly of primary origin. Salt marsh in creeks such as Lerryn and Pont Pill has also been identified. The herb-rich meadows, wet heath and ancient woodland represent habitats scarce in Cornwall. These habitats contain nationally rare species such as heath lobelia (*Lobelia urens*) and woodlark (*Lullula arborea*). Several sites contain good populations of south western species such as yellow bartsia (*Parentucellia viscosa*) and bog pimpernel (*Anagallis tenella*).

Habitats such as grassland and scrub around the estuary are of varied importance ecologically; some areas are used agriculturally while others are impenetrable and undisturbed. Some inaccessible and well-developed scrub habitats around the Fowey area are locally important for fauna, in particular for small birds. Small tall herb communities around tidal creeks form important habitat for certain bird species such as the dipper. Other birdlife around the estuary include curlew, rock pipit, heron, little egret and herring gull.

Fresh water streams feeding into the estuary add to the rich diversity of habitats around the estuary. Fauna present in some of these fresh water streams include the local leaf-beetle (*Galerucella lineola*) and the nationally scarce craneflies (*Limonia inusta*) and (*Tipula yerburyi*).

#### Cliff communities and foreshore

The lower estuary mainly contains deep silts with shingle beaches, covered by green algae and bladder wrack (*Fucus vesiculosus*). The strand line contains remains of seaweeds, cockle shells (*Cerastoderma edule*) and shore crabs (*Carcinus maenus*). The cliff edges support good populations of the maritime lichen, sea ivory (*Ramalina silquosa*) as well as a varied flora. Maritime *Festuca-Armeria* grassland on ledges and exposed areas contains species such as *Plantago maritima* and *Crithum maritimum*.

Shore dock (*Rumex rupestris*) is categorised as Annex 2 species on the Habitats Directive, is Endangered in Britain and is a Red List species. It has been recorded on cliffs in Lantivet Bay and Lantic Bay, both adjacent to Fowey, within the Polruan to Polperro SSSI.



## 7.4 Support the Fowey Estuary Voluntary Marine Conservation Area (VMCA)

In 1999, one of the aims of the Fowey Estuary Partnership was to set up a Voluntary Marine Conservation Area (VMCA) within the Fowey Estuary. Fowey Harbour Commissioners designated the areas to be included within their jurisdiction in 1999, with the designation of the surrounding land following in June 2003. The non-statutory designation allows the areas of the estuary included to be highlighted and promoted in conservation terms, particularly those areas of the upper estuary which are undeveloped and unspoilt. The majority of the estuary is included, with the aspiration that the estuary as a whole be designated in the future. The commercial areas in the lower harbour are presently not included as a precautionary measure by the commercial sector, the main reservation being statutory ruling in the future.

The purpose of the VMCA is to achieve success in the following aims and objectives by working together with those with a direct interest in the estuary and its surroundings, such as fishermen, leisure and commercial users, landowners, students and statutory and non-statutory organisations.

### Key aims and objectives

- To encourage community involvement with the marine environment and to raise awareness of the value of marine and coastal life around the Fowey Estuary.
- To conserve, protect and investigate the biodiversity of the marine and coastal areas of the Fowey Estuary within its many varied habitats.
- To ensure the estuary and surrounding environs are managed in such a manner as to conserve and protect the general environment.

### Targets

- Engage the local community in VMCA work and events, through the Friends of the Fowey Estuary, the Estuary Project Officer and published or online documentation.
- Initialise a literature search on the Fowey Estuary regarding its various habitats and associated flora and fauna.
- Use the designation as a vehicle to secure funds to carry out high quality scientific studies relating to the physical and biological nature of the estuary.
- Compile new and existing knowledge and data in an accessible format, readily available to those who wish to use it.
- Use the knowledge and data to indicate the interrelationship between all aspects of the estuary, both physical and biological and to indicate the importance of a whole estuary, whole system approach.

A leaflet has been produced, designed to encourage visitors to explore the estuary, outlining the habitats around the estuary and giving some background information to the environment.

The Cornwall Wildlife Trust is leading a project entitled 'Your Shore' to engage people in their local marine environment; this will be focussed on the five existing VMCA areas in Cornwall. The project will run for three years from March 2010 and is funded by a grant from the Heritage Lottery Fund (HLF). An annual programme of local events, such as rockpool rambles, guided walks and river cruises are held for the general public to explore and learn about the coast and surrounding sea. Residents and users of the local area are being encouraged to get more actively involved and become a VMCA volunteer or members of the management group so they can effectively monitor, manage and protect their local marine environment.

The Fowey VMCA has benefitted greatly from the CWT 'Your Shore' project and has a dedicated volunteer group with a number of skills and interests. The volunteers could form the basis of more regular monitoring of the habitats within the estuary.

In the longer term and beyond the timescale of the Your Shore project it is hoped that the VMCA volunteers and the Friends of the Fowey Estuary Group will join forces to develop their common aim to conserve the habitats and wildlife of the Fowey Estuary and increase public awareness.

## Section 8. Historic Assets

### Guiding Principle

To ensure the protection, promotion and understanding of the historic and cultural resource of the Fowey Estuary and to promote careful evaluation of any proposals for development that may affect them

The Fowey Estuary is rich in archaeological remains representing its exploitation by people from prehistory to the present day. Information on these sites is contained within the Fowey Estuary Historic Audit, January 2000, published by Cornwall County Council, which includes a gazetteer of all recorded sites. The National Trust has completed a more detailed archaeological assessment for all their property between Gribbin Head and Lansallos, including the Fowey Estuary. Additional information on many sites is available in the Historic Environment Record, a computerised database maintained by Cornwall Council's Historic Environment Service. The National Inventory of Maritime Sites compiled by English Heritage is a database of wreck sites, and the records for the Fowey area are in Appendix 4 of the Fowey Historic Audit.

### 8.1 Designations

Statutory protection is afforded in some cases by Scheduled Monument, Listed Building or Conservation Area status. However, most archaeological sites and historic structures have no such protection and there are no designated wreck sites in the area. Both Fowey and Lostwithiel are designated Historic Settlements, which is a non-statutory planning designation to highlight the Medieval origin of these settlements.

### 8.2 Promote knowledge & public awareness of local heritage

The rich local heritage of the Fowey Estuary offers opportunities for locals and visitors to understand more about the past use of the estuary. The provision of information and sensitively planned access arrangements can aid greater awareness and understanding of the local heritage.

**Interpretative Literature** – The extensive literature relating to the Fowey Estuary includes books on different aspects or periods of its development, which do not set out to provide either histories of the estuary as a whole or interpretation of specific archaeological sites. The Visitors' Guide to the Fowey Estuary provides an interpretative guide to the estuary.

**Interpretation centres** – Aspects of the history of the estuary are presented in the two small museums at Fowey & Lostwithiel, run by the respective town councils. They do not provide interpretative material for the history and archaeology of the estuary as a whole, but exhibit a variety of archaeological finds and traditional artefacts, collections of old photographs & documents. There are also private collections open to the public at the Farm Museum at St. Winnow, and the Daphne Du Maurier Visitor Centre/Tourist Information Centre in Fowey that focuses on the writers' life and work.

**On site Interpretation** – The Fowey Harbour Heritage Project have used money awarded by the Heritage Lottery Fund to develop nine new interpretation boards in the lower estuary to provide visitors with information about the estuary's maritime history and general tourist information. There are also information panels at the Saints Way footpath; Coulson's Park, Lostwithiel; Restormel Castle; Hall Walk, Polruan; and in the car parks in Fowey, Readymoney and Lerryn. The sequence of panels at Restormel Castle includes interpretative plans and reconstruction drawings. Any future interpretation must be in keeping with the area and follow the Fowey Estuary interpretative strategy.

**Guided walks, talks and boat trips** – The National Trust, English Heritage and local Council organise events which explore the history and environment of the estuary, such as the Du Maurier Festival. Assistance should be given where appropriate by local authorities to support and promote such events to wider audiences.

### 8.3 Protect and conserve the historic environment

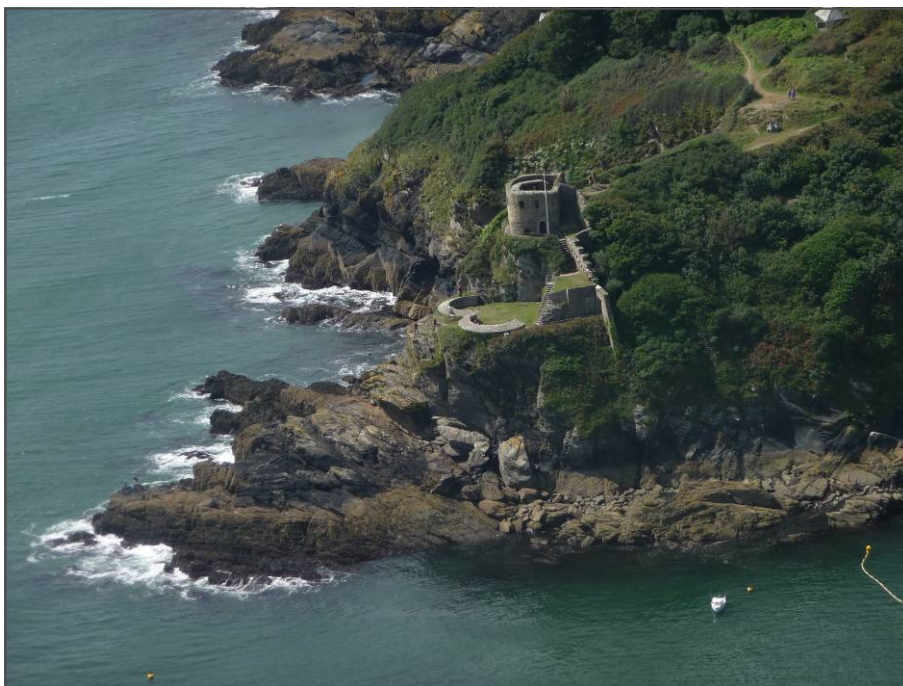
Local archaeological heritage is managed according to ownership and status on statutory lists. English Heritage maintain and manage St. Catherine's Castle, Fowey Castle, Restormel Castle and St. Saviour's Chapel ruins as guardianship, archaeological and historic monuments. The National Trust manages its extensive properties on the estuary as historic landscapes, and has consolidated many historic structures within them. The former Caradon District Council repaired and made safe a limekiln at Lerryn, and Polruan Town Trust restored the Old Coal Wharf and 15th century blockhouse at Polruan. Hall Chapel has been consolidated as a building of archaeological and historical interest with funding from English Heritage.

Information about surviving sites is contained in the Fowey Estuary Historic Audit. More detailed site-specific surveys are required to identify the history, degree of survival and condition of many key sites. Following the completion of the Historic Audit, broad management recommendations for the historic environment of the Fowey Estuary have been prepared and approved by the Fowey Estuary Partnership.

Statutory protection is afforded to some archaeological sites and historic structures by scheduled monument, listed building, or conservation area status. These apply to only 5% of the sites recorded during the 1999 Fowey Estuary Historic Audit. Over 90% of sites identified by the audit that are known or suspected to have surviving remains are not protected. The Cornwall Council's Historic Environment Service will continue to incorporate these sites into the Historic Environment Record where appropriate, although statutory protection for many of these sites is unlikely. These sites will be best protected through the policies of local organisations and voluntary site-specific management agreements.

The Fowey Estuary Historic Audit identified many new sites that have not been recorded before. Previous archaeological recording has only taken place at the following sites: St. Catherine's Castle; Quay Street, Lostwithiel; Restormel Hillfort; Restormel Castle; Madderley Moor, South East of Lostwithiel; Ethy Estate; Hall Chapel, Bodinnick.

These projects were undertaken to enhance the record of scheduled or listed sites, mostly in advance of repair work, or to record newly discovered sites in response to development. It is hoped that where sites have now been identified, local authorities will encourage the landowners to commission archaeological recording and research work. The local planning authorities should also require archaeological recording as a condition of planning permission.



*St. Catherine's Castle, Fowey*

## Section 9. Commercial Activities

### Guiding Principle

To sustain the commercial viability of the Port of Fowey and to encourage efforts to ensure that all development proposals balance the economic and environmental needs of the estuary

### 9.1 Promote sustainable commercial activities

The aim is to ensure that commercial activities continue to thrive and grow in harmony with the valuable nature conservation, heritage, recreation and landscape of the estuary.

Commercial shipping of china clay through the Port of Fowey is well recognised as one of the most established activities in the area which continues to provide employment and trade to the local and wider economy. The income generated from the harbour dues and towage services for the commercial clay boats partly supports the provision of harbour services that benefit the wider recreational user. The Fowey sites are monitored for environmental parameters by the Environment Agency.

The boat building industry has always been an important part of the commercial activity of the harbour. Today the industry is somewhat smaller, although several yards continue to carry out important building and repair work to small commercial craft, fishing vessels and leisure craft. C. Toms & Sons in Polruan builds fishing boats of up to 55 feet in length, using modern and traditional skills. The boatyard there has modern undercover facilities, with craning facilities to lift vessels of up to 30 tonnes, and two slipways capable of taking craft up to 80 feet in length.

The Harbour Commissioners yard, on the Polruan side of the river at Brazen Island, is on the site of the former sardine factory and includes extensive engineering and shipwrights workshops. The slipway, protected by an arm, is capable of hauling out vessels of up to 160 ft (48.5 m) in length, 30 ft (9 m) beam and 450 tonnes weight. Outside work is undertaken to offset operational costs. The yard is serviced by a mobile crane lifting up to 20 tonnes, and has the capacity for boat maintenance and storage. The Harbour Commissioners also offer extensive storage and launching facilities at Penmarlam, within Mixtow Pill.

Other boat building and repair yards include Fowey Boat Yard at Pottery Corner. Hunkins Yard is on the road from Caffa Mill to Four Turnings at Millpool, specialising in building small wooden craft. Hunkins also provides maintenance and repairs together with boat storage. P. Williams runs a small yard at Bodinnick. At Golant, there are services providing boat maintenance. In addition there are a number of firms specialising in engine repairs and specialised maintenance and services including hydraulic and sail repairs, all along the river from Fowey to Lostwithiel.

Cruise liner visits to the harbour are increasing, bringing more tourists to the estuary. Fowey Harbour Commissioners, in conjunction with other partners, employ the services of a Cruise Co-ordinator to promote the port to prospective cruise line operators. The proximity of the Eden Project from the Fowey Estuary has further interested the cruise line operators. In addition, promoting local amenities, businesses and linking the business and leisure communities is important. The local business sector, through channels such as the Chamber of Commerce, shipping agents and local authorities are all involved in raising the commercial profile of the estuary.

The recreational boating sector is an increasingly important part of harbour operations, with over 7000 visiting craft each year.

Tourism is a vital part of the local economy, with many visitors arriving by land as well as by sea. Local facilities such as accommodation, restaurants and visitor attractions prove popular and are becoming increasingly used through the winter months as well as the more traditional summer period.

Commercial port and harbour activities and associated maritime industry makes an important economic contribution to the Fowey Estuary area.



## 9.2 Ensure sufficient contingency arrangements for the Estuary

Contingency arrangements are a vital part of any operations, whether land or water based. Cornwall Council has an emergency management department with plans to cover eventualities in the FEMP areas. Fowey Harbour Commissioners hold the Port Marine Emergencies Plan, covering eventualities within the Harbour and Estuary areas.

Fowey Harbour Marine Emergencies Plan sets out the action to be taken in an emergency or potential emergency in the Harbour area and in the event of a major incident declared by the emergency services.

Cornwall Council hold a Coastal Counter Pollution Plan, with the aim of assisting in the co-ordination of actions, or provision of co-ordinated action by all participants in dealing with pollution incidents affecting the coastline of Cornwall.

The Cornwall Standing Environment Group represents the main authorities likely to be concerned with dealing with a coastal pollution incident in Cornwall. Under normal conditions, i.e. when no related incidents are underway the Cornwall Standing Environment Group meet and undertake the planning and activities required to ensure they are ready to respond during an incident. When activated, the purpose of this 'Environment Group' is to minimise the impact of the marine incident on the environment and public health.

Pollution contingency planning is outlined further in Section 11.4.



*Commercial Towing in the Port*

## Section 10. Fisheries

### Guiding Principle

To seek ways of conserving and enhancing recreational and commercial fisheries without undue detriment to the environment or other estuary users

Natural fisheries are important ecological assets and are also of commercial value for angling and netting. Fish and shellfish are good overall indicators of the health of estuaries and rivers.

### 10.1 Support existing fisheries management arrangements

Fowey Harbour has long been used as a base for the fishing industry and is the registration port for boats from Dodman Point to Seaton. Today the fishing industry in Fowey is of a lower commercial significance to the neighbouring harbours of Looe, Polperro and Mevagissey.

The Fowey estuary is not ideal for supporting a major coastal fishery; the quays are small, road access is poor, there are no storage or vehicle parking areas available and there are limited landing facilities. There are no berths available to boats for deep water access at all states of the tide, nowhere that they can lie to service or take on equipment and no facility exists to provide ice.

Without these facilities the fishing industry in the port will not be sustainable. New EC Directive Regulations on landing requirements for all types of fish, crustaceans and bivalve molluscs restrict landing at sites other than those specifically designated for the purpose. Without these sites being made available, the fishing industry in the port is likely to remain a minor component of the commercial activities of the area.

Cornwall Inshore Fisheries & Conservation Authority (CIFCA), the Environment Agency and the Marine Management Organisation (MMO) regulate fishing activity around the whole Cornish coast, through a combination of byelaws, EU and National legislation governing landing sizes and the types of gear used.

Significant runs of salmon and migratory trout (sea-trout) pass through the Fowey Estuary on their way into the freshwater Fowey system. Under the Salmon and Freshwater Fisheries Act 1975 (SAFFA), the Environment Agency enforces the Salmon and Sea Trout Legislation within the estuary and out to a six nautical mile limit from the coast. The open season for fishing for salmon in freshwater is 1<sup>st</sup> April – 15<sup>th</sup> December, although salmon can only be retained after the 16<sup>th</sup> June (*National Spring Salmon byelaws 1999*). The open season for migratory trout is 1<sup>st</sup> April – 30<sup>th</sup> September. Anglers need an Environment Agency National Rod Licence (*Rod & Line Fisheries Byelaws for the South West Region*) to fish for salmon, trout (including migratory trout), coarse fish and eels in the South West.

The Environment Agency has published its Salmon Action Plan for the River Fowey, which describes the current state of the salmon stock and identifies future actions to protect salmon.

Legislation has allowed the creation of a closed netting season for salmon and trout. There are currently two net licences on the Fowey, which can be used from 16<sup>th</sup> June – 31<sup>st</sup> August, although the usual season is between 2<sup>nd</sup> March – 31<sup>st</sup> August. The longer period licences were bought by SWW as part of a mitigation process for the construction of Colliford reservoir, but this may change in the future. There are four designated netting stations on the Fowey. The net licensees report their catches as part of the licence requirements.

Other fisheries legislation is in force and detailed advice should be sought from the Environment Agency on 08708 506 506 prior to fishing.

The Fowey Estuary also contains a designated bass nursery area which allows fishing from a boat to be regulated. The closed season is 30<sup>th</sup> April – 1<sup>st</sup> January inclusive, up stream of a line drawn 270° true from Penleath Point to the opposite shore. The minimum size limit for bass in Cornish estuaries and on the coast to a six mile limit is 37.5cm. It is an offence to retain any bass under this size from either an estuary (EA byelaw) or from the coast out to six miles (Cornwall IFCA byelaw).

Part of the Fowey Estuary is also designated as Shellfish Water under the EC Shellfish Waters Directive. Pacific oysters, mussels, cockles and Manila clams are produced in Pont Pill, where they are also relayed. Mussels and Pacific oysters are farmed in part of Wiseman's Reach. There are ropes for growing mussels deployed around the harbour area under floating structures such as pontoons. There is also a purification, depuration and despatch centre in Fowey docks which is approved by the Cornwall Port Health Authority.

## 10.2 Identify sustainable levels for bait harvesting

The collection of peeler/soft back crabs and the digging of Polychaete worms (such as lugworm and ragworm) have long been established for recreational use. Bait harvesting on a commercial scale has been raised as an issue of concern with regard to its visual impact, the potential hazards these operations cause and the environmental impacts to the intertidal communities. This is an emotive subject and needs to be dealt with in a sensitive manner. Site-specific management needs to be identified using national and regional guidance in co-operation with those who practice bait harvesting.

A Voluntary Code of Conduct for digging bait is in place in the Fowey Estuary, adopted and developed jointly by Fowey Harbour Commissioners, the Cornish Federation of Sea Anglers and the National Federation of Sea Anglers (Cornish Division). Fowey Harbour Byelaw 102 (*Appendix 2*) prohibits bait digging within six metres of moorings, quays and buoys to preserve the integrity of such structures and to protect the safety of people using them.

Studies have been carried out to establish the impacts of commercial crab tiling on the estuarine environment and to identify acceptable numbers of tiles and frequency of collection. This work needs to be progressed to develop management plans for crab tiling.

## 10.3 Increase understanding between fisheries interests and other estuary users

The Partnership need to provide a mechanism for increasing communication within and between the various fisheries that operate on the estuary and are associated with the estuary and other user groups to reduce the potential for conflict and encourage greater understanding of the issues involved. This can be achieved through the distribution of literature amongst all sectors of the fishing industry and other relevant parties relating to voluntary or statutory measures for fisheries management, including Voluntary Codes of Conduct and byelaws. The various interested parties can also be brought together to encourage liaison through targeted focus group meetings or through individual contact as appropriate.



*Crab tiles in the Fowey Estuary*

## Section 11. Water Quality and Pollution

### Guiding Principle

To maintain and improve water quality standards within the estuary for the benefit of the natural environment, and to support and promote measures to reduce pollution throughout the estuary.

Due to the low concentration of urban populations and industry around the Fowey Estuary, the water quality has been generally good and pollution low.

### 11.1 Ensure legal minimum standards are met and seek to further improve water quality.

The Environment Agency has statutory duties in relation to water quality and pollution to ensure compliance with standards set by the European Commission (EC) Directives and in United Kingdom Law, of which a number apply to the Fowey Estuary, including the EC Bathing Water Directive and EC Urban Waste Water Treatment Directive.

South West Waters 'Clean Sweep' which was completed in 1996, has greatly improved sewage treatment facilities with all sewage from the towns around the estuary now receiving secondary treatment to meet the appropriate level under the EC Urban Waste Water Treatment Directive.

Issues relating to the quality of water, soil and air and their current and future management have been addressed by the Environment Agency through the Water Framework Directive and the production of the statutory South West River Basin Management Plan covering the Fowey and surrounding catchments.

Public awareness of water quality is important and the public should be encouraged to report incidences of non-compliance or concern to the Environment Agency via their 24-hour pollution hotline number 0800 807060.

### 11.2 Identify and reduce sources of diffuse or other pollution

There is a considerable amount of farmland and forestry around the estuary and it is not surprising therefore, that land run-off enters the estuary. This is probably one of the biggest sources of diffuse pollution that enters the estuary. The Environment Agency works with a number of organisations to regulate and minimise pollution from diffuse sources (e.g. run-off from agricultural land) within the catchment. However, many sources of pollution entering the streams and rivers have unknown bacteriological, biochemical and nutrient loads. It is difficult to trace and record the occurrence and origins of diffuse pollution, especially with regards to responsibility.

The Environment Agency liaises with landowners and other organisations to encourage sympathetic land management techniques that could reduce the risk of polluting substances entering the estuary.

Heavy metals are also a source of diffuse pollution. Nationally significant sediment loads of copper and zinc have been recorded at Restormel, a legacy of old mine workings and abandoned mines. This occurs in many rivers in Cornwall as a result of intensive historic mining. Heavy metal quantities in the river water cannot be reduced, but monitoring keeps a check on the levels.

### 11.3 Reduce pollution from boats

Pollution from boats in the form of litter, fuel and oil are prohibited and sewage is discouraged. Fowey Harbour Commissioners provide waste disposal facilities and services for visiting and resident craft within the Harbour. Commercial operations such as boatyards should also have facilities for the safe disposal of waste that arises from their operations.



All boat types need to use anti-fouling paints, but consideration should be taken of their polluting effects on the environment. Legislation has banned use of TBT based antifouling on boats under 25m in length and no boatyard in Fowey can take vessels over this threshold. However, copper based antifouling is used, which is by definition toxic to marine life. Promotion of good practice for the disposal of anti-fouling paints and other substances from painting and scrapping of boats and marine structures should be encouraged by all businesses working on the estuary. The Fowey Harbour Commissioners provide facilities for the safe disposal of hazardous waste and encourage harbour users to consider using alternative products.

Other sources of pollution from commercial and recreational craft may be of concern to the Environment Agency, MMO and the MCA.

#### **11.4 Support the development and implementation of pollution contingency planning**

Despite increasingly stringent legislation, coastal wildlife populations are still at risk from accidental oil and chemical spillages. Although potential spills in the estuary area are more associated with water-based activities, similar incidents can also occur on the land. All agencies and organisations with responsibilities in this area should encourage the continual development of their own and others contingency planning.

Fowey Harbour Commissioners have in place an MCA approved Oil Spill Contingency Plan, this is a statutory requirement under the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention Regulations 1998). This plan was produced in consultation with the Environment Agency, Natural England, Cornwall Council Emergency Management Service, the MCA and others, all of whom are statutory consultees.

The plan is designed to guide Fowey Harbour Commissioners through the processes required to manage an oil spill originating either from operations within the Harbour or one entering the Harbour from the open sea or the land. The response would make use of Fowey Harbour Commissioners own oil spill response equipment and/or the equipment of their accredited Tier II contractor in the case of a more serious incident.

The plan is exercised regularly in co-operation with IMERYS and the Environment Agency. All FHC staff members have completed accredited training to recognised levels in the use of oil spill equipment and managing their response to an oil spill.

**Those spills and emergencies not related to oil are dealt with in the Emergency Plans outlined in Section 9.2.**



*Designated Bathing Water at Readymoney Cove*

## Section 12. Sediment, Dredging and Disposal

### Guiding Principle

To work towards a better understanding of the process of sedimentation and to maintain deep water access in the estuary while causing minimum environmental impact

Each year a significant volume of sediment has to be dredged from the estuary to maintain the deep water channel. As in most estuaries there are two main potential sediment sources; sand from offshore areas being washed into the estuary or sediment being transported by the rivers draining into the estuary from the land.

### 12.1 Work towards reducing sediment input into the estuary

Siltation is a process occurring naturally in any river. The amount of siltation that occurs at any one time is related to the geology of the landscape and the oceanographic regime.

A rapid rise in sea level following the last glaciation 10,000 years ago drowned the river valley to form the steep sided narrow Fowey Estuary. Natural sediment supply rates were low, but human activity in the medieval period had a dramatic effect. Working the river sediments on Bodmin Moor for the mineral cassiterite, the source of tin, was a huge industry and the workings released a large amount of sediment into the rivers. This sediment accumulated and led to rapid siltation – the narrow head of the estuary started to fill up with sediment, affecting maritime trade. The intertidal sediments near Lostwithiel provide a clear chemical and mineralogical record of this impact (*Source: Camborne School of Mines*). Once the working for tin stopped, the rate of sediment supply to the estuary decreased.

Currently, the river catchment is largely pasture and forestry whose associated land management techniques have their own influence on the amounts of sediments running off the land and into the streams, rivers and the estuary. Land management changes can have the biggest impact on the sediment content of a river system.

The flow characteristics of the River Fowey are regulated to a degree by South West Water and the Environment Agency through the operation of Colliford Dam and Siblyback Reservoir, resulting in the altering of peaks of flow reducing the natural erosion.

The deposition of sediment within a river system is dependent on a number of factors that need to be looked at in detail. Sediment run off from land based sources needs to be reduced wherever practical, through appropriate land management practises and the distribution of guidance and literature referring to best practise.

Fowey Harbour Commissioners were involved in the EU-funded trans-national Cycleau project which ran from 2003 – 2006, the principal project in the Fowey catchment area was a study into the delivery sources and dynamics of sediment within the estuary. This and other such investigations provide the Harbour Commissioners with data to inform the dredging regime in the estuary. Pre- and post-dredge hydrographic surveys are also undertaken to ensure the dredging programme targets the areas to be dredged efficiently and effectively.

### 12.2 Seek alternative disposal for maintenance dredging spoil

Maintenance dredging remains an essential activity, dredging to at least 7 metres below chart datum in the main channel, from the harbour mouth to the commercial berths at Mixtow, to guarantee safety of navigation within these limits at all states of the tide. The Harbour Commissioners maintain a constant dredging programme from the entrance to Pont Pill up as far as jetty number 8 with dredging activities taking place all year round.

Currently the only viable option open to the Fowey Harbour Commissioners is the disposal of the dredged sediment at sea to an MMO licensed spoil ground, located off Lantic Bay, 1 mile to the east of the Harbour mouth. The Commissioners apply every three years for a Marine Licence from the MMO which are issued under the Marine & Coastal Access Act (2009). The spoil ground site is monitored and there is no indication that sediment has caused detriment to the area. Alternative methods of disposal are constantly sought for the dredged spoil and this is a requirement as part of the marine licence.

The Fowey Harbour Commissioners have also developed a Dredging Protocol Baseline Document in accordance with protocol developed as a result of Governments response to the EC Habitats Directive relating to maintenance dredging in Harbours containing a European Marine Site or Special Area of Conservation. The Fowey Estuary does not contain such designations, however the Harbour Commissioners are committed to maintaining high environmental standards and the document supports the dredging application.



*Grab Dredger 'Mannin' in Fowey*

### 12.3 Monitor sediment quality

Heavy metals present in estuarine sediments have the ability to attach to fine grain sediments, with the potential to be dredged in the estuary then discharged offshore at the spoil ground into the marine environment. Sediments from areas of intense shipping and industrial activities tend to have higher metal concentrations than those from less active areas. Metal pollutants often occur in West Country estuaries, mainly as a result of the historic mining and tin streaming activities. The metals enter the estuary in both dissolved and particulate form, mainly through riverine input at tidal limits, freshwater run-off and outfalls discharging from banks. Heavy metals can have a detrimental effect on many organisms if they are released into the environment in high concentrations.

The toxicity of target contaminants within dredged spoil are assessed every three years to ensure compliance with strict guidelines. The sample results for the Fowey Estuary are analysed by the MMO through CEFAS and are well within the prescribed criteria in order to permit dumping of sediment at sea under the present guidelines.

Research work by Camborne School of Mines into the chemical composition of the estuarine sediments has indicated relatively low heavy metal contamination in comparison to other estuaries in the Southwest. The metals present in the Fowey sediments are not bioavailable i.e. they are associated with the sediment in such a way that the flora and fauna of the estuary cannot ingest them, even if the sediments are disturbed.

### 12.4 Support the implementation of the shoreline management plan

The Rame Head to Lizard Shoreline Management Plan identifies sustainable coastal defence strategies for the future management of the shoreline. The preferred strategic option for the Fowey Estuary (covering the estuary banks south of Town Quay, excluding Pont Pill) is in the short term to keep the undefended stretches that way, and to hold the line elsewhere.

The Shoreline Management Plans are currently under review as outlined in Section 4.1

## Section 13. Litter and Waste Disposal

### Guiding Principle

Work towards ensuring that the Estuary remains, as far as practical, free from litter; that recycling is encouraged where possible, and that waste is disposed of safely and according to current legislation

Virtually all activities taking place in and around the estuary involve the production of waste materials. If not disposed of responsibly, the litter produced can become an unsightly problem in the countryside and may cause damage or death to the wildlife. Personal awareness needs to be raised and adequate facilities must be available in order to limit irresponsible waste disposal.

The management of waste is the responsibility of all parties involved in the handling of waste and is regulated by a series of European Directives and UK Legislation.

### 13.1 Support the implementation of waste strategies in the area covered by the Fowey Estuary Management Plan

Fowey Harbour Commissioners have a statutory responsibility to provide management for waste disposal within their jurisdiction, and this is clearly set out in the Port Waste Management Plan. The Port Waste Management Plan is in compliance with the Merchant Shipping Notice M1709.

The Waste Management Plan is internally reviewed every year and is formally reviewed by the MCA every 3 years. It is split into three sections dealing with commercial waste, leisure waste and Fowey Harbour Commissioner's own waste streams separately.

Cornwall Council has responsibility for waste generated in the local area and the strategies of their waste contractor work in tandem with Fowey Harbour Commissioners where possible. The Port Waste Management Plan sets out the areas in which this is achievable, for example using a floating skip on the water to collect bagged yacht waste, which is then collected and disposed of separately rather than the waste coming into the towns and villages bordering the estuary.

### 13.2 Promote recycling of waste wherever possible

The emphasis on recycling is being increased, from waste generated in all areas of life. The public are being asked to separate household waste and businesses are similarly being expected to send an increasing proportion of their waste for recycling. Cornwall Council have adopted the Waste Local Plan (WLP) this takes into account projected future amounts of waste, recycling and composting levels, environmental impacts and transport, regulatory requirements and siting for necessary waste treatment facilities.

Fowey Harbour Commissioners are working closely with Cornwall Council's waste contractor to increase the amount of waste recycled from the Harbour area and to encourage the use of facilities provided. Recycling bins for the collection of glass, tins and plastic bottles are sited on all major pontoon areas. This is in accordance with the targets set by Government in the Directive to Councils to reduce landfill, and in accordance with Fowey Harbour Commissioners Waste Management Plan.



## Section 14. Tourism, Recreation & Interpretation

### Guiding Principle

To ensure that the needs of the visitor are integrated with the needs of the community, and the development and promotion of recreation and tourism is achieved whilst sustaining the natural environment

The tourism and recreation industries are vital sectors of the local economy of the Harbour area and its associated communities. Employment is provided directly through boatyards and related industries as well as indirectly through a wide range of businesses reliant on tourist and leisure spending to maintain their livelihoods. Recreation and tourism are often closely related activities. However, an important difference between them is that irrespective of the presence or absence of tourists, there is a need to provide for the recreational needs of the local population.

### 14.1 Tourism

The coastal area is heavily used for a variety of water-based recreations and encouragement is given to recreational pursuits away from the coast. Promotion of the estuary and the surrounding area is the responsibility of Cornwall Council. Locally, the Friends of the Fowey Estuary organise and advertise year round talks and walks around the estuary, highlighting the flora and fauna and natural ecology of the area. Lostwithiel and Fowey both have tourist information centres, where information on accommodation, places to visit and information on surrounding towns and villages may be sought. There is also a Youth Hostel at Golant.

The development of green sustainable tourism needs to be a priority. Many encourage promotion of the Fowey Estuary as a whole, as this may result in the boosting of the local economy. Fowey, Lostwithiel and the villages around the estuary are popular tourist destinations, particularly with yachts people, and many return year after year. The Eden Project has played an important role in bringing tourists to the area; the estuary area has taken some advantage of this and has seen an increase in year round tourism.

### 14.2 Water based recreation

The demand for water-based recreation is increasing and the extensive use of private transport by visitors and local people puts areas under stress at peak times of the year. The beauty and relative shelter of the Fowey Harbour makes it an attractive area for boating of all kinds, the most popular being sailing. Much of the harbour cannot be used over large parts of the tide, resulting in congestion of the lower harbour, especially in the area around Caffa Mill, where the car ferry to Bodinnick is located. The pressure on Caffa Mill has eased since the purchase of Penmarlam (Mixtow) by Fowey Harbour Commissioners and the improvements for boat storage and launching.

Rowing and canoeing activities extend along the whole of the river, and sub-aqua diving takes place by permission of the Harbour Master. The Harbour Authority upholds the six-knot speed limit, a byelaw made under statutory powers. This precludes activities such as water-skiing, jet-skiing, parascending and speed racing within the estuary, allowing the environment to be protected and the peace and quiet maintained. Boat trips are available, both around the Harbour entrance and along the river at low and high tides. A ferry between Fowey and Mevagissey also operates in the summer season.

The moorings in the estuary are controlled and maintained by the Harbour Authority. The number of moorings and their positions are constantly under review but the areas remain constant. There are approximately 1500 moorings in the estuary, with more available for visiting yachts. Numbers of visiting craft is annually in excess of 7000 and the facilities are constantly reviewed to ensure they are sufficient. The moorings in the Harbour are fixed, and anchoring is discouraged. This limits the detrimental effects on marine habitats, particularly in the *Zostera* beds, where the disturbance is limited to around the mooring blocks and chains.

The Harbour is not ideal for swimming due to the numerous leisure and tourist craft. There are a few small beaches in the lower harbour, with Readymoney Cove being the only beach designated under the EC Bathing Waters Directive. In summer months, Readymoney is closed to boating and has a floating platform for swimmers to swim out to. Past problems with sewage and associated health problems have been alleviated since the completion of the sewage system under South West Waters Clean Sweep programme.

### 14.3 Land based recreation

Land based recreation generally takes the form of walking or rambling. The recreational use of the Heritage Coast that stretches from Gribbin Head to Portnadler Bay near Looe is fairly moderate considering the proximity to the tourist centres of Fowey and Looe. There are several well-known footpaths in the area, for example the Saints Way, the South West Coastal Path and those promoted by the National Trust such as Hall Walk. A new footpath was built and opened in 2001 in Ethy Woods, which are owned by Forest Enterprise, and it is now possible to walk from Lerryn to St. Winnow along the edge of the estuary. The path allows access for disabled visitors and is well used.

### 14.4 Interpretation

Interpretative strategy is an ongoing process, reflecting the changing needs of visitors, the estuary environment and information available. Each interpretative method should be updated according to its longevity and should be maintained to a high standard.

Proposals to improve the interpretative information available around the estuary were initiated in 1999, with several objectives. These objectives were to provide information panels, interpretative panels, a visitors guidebook to the estuary and a leaflet promoting tourism and leisure use of public transport in the area. The projects outputs and strategies reflect the main elements of existing tourism strategies for the area. The project was run by a partnership between the former Falmouth-Fowey Countryside Service, Restormel Borough Council, Caradon Countryside Service and LEADER. The project has filled major gaps in the existing visitor information network for the Fowey Estuary, thereby assisting the development of tourism.

Currently, there are sufficient information and interpretation boards in the estuary as a result of the above objectives being achieved (Figure 5). It would not be acceptable to have a plethora of boards, but maintaining the high quality and standard of the boards is desirable. Consultation with the Partnership and interpretative strategy is encouraged to maintain standards and avoid duplication.

The Fowey Town Forum have installed nine new boards through the Heritage Lottery Funded, Fowey Harbour Heritage Project, these boards outline the maritime history of the estuary. As outlined in Section 8.2

**Visitors Guidebook to the Fowey Estuary** - Published in 2000, this comprehensive guidebook has proved popular.

**Figure 5: Summary of Interpretative facilities**

**Fowey Harbour Heritage Project Interpretation Panels**

Fowey	Main Car Park
	Caffa Mill Car Park
	Readymoney Beach
	Town Quay
	Whitehouse Quay (ferry slip)
	Whitehouse Beach
Polruan	Main Car Park
	Coal Wharf by quay
Bodinnick	Ferry slipway

**Other Interpretative Panels around the Estuary**

Lostwithiel	Main Car Park
	Railway Station
	Restormel Castle
Lerryn	Car Park
Saints Way	At the end of the footpath

## Section 15. Access

### Guiding Principle

To maintain and extend the accessibility of the estuary for all, where possible, without compromising the nature and landscape conservation interests

The towns and villages around the estuary are served by narrow winding access streets, which can become congested in the summer months. The west side of the river is accessed by the B3269, entering Fowey via the dock road at Caffa Mill, where Cornwall Council controls the car park. Access to Fowey from St. Austell is via the A3082. The main Pay & Display car park for Fowey is situated at the top of Fowey and there is another near to Readymoney Beach and St. Catherine's Castle. There are two short stay car parks on Town Quay and Albert Quay. Lostwithiel is served by the A390 and has a large free car park. Access to Polruan is along narrow winding roads through Lerryn and Penpoll or from Looe. There is limited parking in Golant, and at Pencarrow Head and Coombe Farm there are National Trust car parks for users of coastal footpaths. Parking in Fowey becomes more difficult in summer with the rise in visitor numbers.

### 15.1 Footpaths

The nature of the landscape around the Fowey estuary affords limited access to the foreshore in many places. Footpaths are widely used and some form circular walks (Section 14). The Countryside Access section at Cornwall Council has the responsibility of maintaining public rights of way around the estuary.

### 15.2 Ferry services

There are two ferry services operating across the Harbour, and these have been in operation since the communities there were established. A car ferry operates between Fowey and Bodinnick, and a passenger ferry operates between Town Quay and Polruan.

A privately owned water taxi service was established in 1988, ferrying passengers between their yachts and the shore. The operator worked closely with the Harbour Master in setting up this service and the Harbour Commissioners gave their support and encouragement. Those on permanent moorings as well as those visiting the harbour use this service, which is safer than dinghies or small tenders in poor weather. It also reduces the pressure for landing arrangements and landing areas.

There is a ferry which runs between Fowey and Mevagissey during the summer months; this is operated by a private company.

### 15.3 Launching and landing

There are numerous launching and landing points within the Plan area. These vary in size and accessibility and some may only be suitable for small craft (Tables 1 and 2). This table does not include private launching sites. The public landings are mainly quays, steps or ladders. There are several slipways around the estuary available for use by the public. Some access points in the upper estuary are limited due to the tidal range, these are indicated by '\*'.

The relatively poor access to the Harbour and estuary area has probably contributed to its unspoilt nature. Care should be taken when considering the improvement of roads and access points to ensure this unspoilt nature is maintained. The Harbour Commissioners will liaise closely with the local authority's Highways Section and Parish Councils to ensure that the best facilities and access are made available within the environmental objectives of the plan.

Table 1: Launch & Recovery Points

\* indicates the access point is limited according to the tide

	LOCATION	SIZE OF CRAFT	NOTES
A	LOSTWITHIEL *	DINGHIES CANOES	SMALL SLIP TO NORTH OF RAILWAY BRIDGE
B	LERRYN *	20-25 FT SHALLOW DRAFT CANOES	NO MADE UP SLIPS - LAUNCHING FROM FORESHORE
C	ST. WINNOW *	LARGE CRAFT	BY ARRANGEMENT SOME LIFTING EQUIPMENT
D	GOLANT *	UP TO 25 FT	LIMITED PARKING TIDAL AREA QUAY & SLIP
E	MIXTOW *	UP TO 15 FT	DIFFICULT ACCESS LAUNCHING FROM FORESHORE
F	MIXTOW / PENMARLAM	UP TO 30 FT	SELF LAUNCH, WITH ASSISTED LAUNCHES BY ARRANGEMENT. CONCRETE SLIP AND SPECIALISED BOAT HANDLING EQUIPMENT
G	BODINNICK	DINGHIES CANOES	FERRY SLIP
H	FOWEY-CAFFA MILL	ALL TRAILER CRAFT	SELF LAUNCHING CAN BECOME CONGESTED LIMITED PARKING
I	FOWEY- NORTH STREET YARD	DINGHIES SMALL CRAFT	ACCESS THROUGH ONE-WAY SYSTEM SAILING CLUB ALSO USE FACILITY



*Boat launching at Penmarlam Boat Park*



**Table 2: Landing Sites**

\* indicates the access point is limited according to the tide

	LOCATION	FACILITIES	NOTES
J	READYMONEY COVE	BEACH	LIMITED ACCESS
K	BERRILLS YARD	PONTOON, FRESH WATER, SEWAGE PUMP-OUT FACILITY, WASTE OIL & BATTERY COLLECTION POINT	SHORT STAY FACILITY OWNED AND CONTROLLED BY FHC
L	STEP ASIDE	STEPS	LITTLE USED DESIGNATED LANDING
M	ALBERT QUAY	PONTOON, STEPS, LADDER, FRESH WATER	SHORT STAY, INSIDE BERTHS FOR SMALL CRAFT/ TENDERS. OWNED AND CONTROLLED BY FHC
N	TOWN QUAY	2 SETS OF STEPS & LADDERS SLIP AT LOW WATER	FERRY LANDING POINT FOR LICENSED PASSENGER BOATS. SELF-DRIVE HIRE BOATS. OWNED AND CONTROLLED BY CC
O	INCHES QUAY	HISTORIC LANDING FOR FERRY	TIDAL RESTRICTIONS ROCKY LANDING
P	WHITEHOUSE QUAY	SLIPWAY, SMALL STEPS IN CORNER	TYING UP RESTRICTED - FERRY LANDING POINT IN SUMMER CAN BE UNSAFE IN BAD WEATHER
Q	POLRUAN QUAY	PONTOON, SLIPWAY, STEPS, LADDERS PLACED SEAWARD	STEPS USED EXTENSIVELY BY PASSENGER FERRY- CLEAR ACCESS REQUIRED
D	GOLANT *	SLIPWAY, QUAY, STEEL AND CONCRETE WALKWAY	MANAGED BY GOLANT QUAY USERS ASSOCIATION ACCESS TO FRAPES
F	MIXTOW / PENMARLAM *	STONE QUAY AND SLIPWAY	BOAT STORAGE AND LAUNCHING FACILITY, AVAILABLE ALL YEAR OWNED AND CONTROLLED BY FHC
G	LOSTWITHIEL *	STEPS AND LADDERS	

## Section 16. The Management Programme

### Guiding Principle

Maintain a flexible effective management plan for the Fowey Estuary and update it regularly to reflect the constantly evolving needs of the environment and its users

Estuaries are dynamic systems and conditions are continually changing as a result of natural processes and human activities. Consequently, an effective management plan for an estuary must retain certain flexibility so that modifications can be made in relation to environmental change and changes in human activities. The plan is intended for onward management and will be dependent on the continual review and updating of the programme in light of new information. These reviews will take place to assess the effectiveness of actions being taken.

The management of the estuary needs to be considered as a rolling programme of liaison and action, rather than a one-off, all embracing management plan. It is inevitable that differences in opinion and emphasis will exist, but it must be ensured that the Fowey Estuary provides optimal benefits for our present needs and those of future generations.

### 16.1 Implementation

Management plans can take two forms. A prescriptive format would set out a means for resolving a particular issue. Alternatively, the Plan can provide a framework, which is geared towards providing a stimulus. Resolution of issues is achieved through collaboration. It is intended that this Plan will be a combination of both forms.

In the tables that follow, **PROPOSALS/OBJECTIVES** are put forward as a means of resolving issues identified in the consultation process. Each *proposal/objective* has a Guiding Principle that sets out the aims. Practical measures that could be undertaken in order to resolve issues are indicated under the heading **IMPLEMENTATION** and specific **PROJECTS** are outlined. **PRIORITY** gives an indication of progress of various Proposals/Objectives whether they are high, medium or low priority. It is intended that high priority proposals will be carried out within 1-2 years, medium priority proposals within 2-5 years and low priority proposals within 5-10 years. It may be necessary at times to review the feasibility of these targets.

These proposals are not exhaustive and should be added to as the plan progresses and goals are achieved. With the input from topic groups and other individuals the proposals could be expanded upon and added to. Many of the targets set in the management programme are being achieved already.

The **ORGANISATIONAL INVOLVEMENT** highlights the organisations, both statutory and non-statutory, likely to be involved in carrying out the proposal. The group is not exclusive and indicates a lead body only to act as a focal point to aid information gathering and co-ordination of efforts.

It is anticipated that the plan will be carried forward through the continued co-operation of bodies involved in the management group. Many of the organisations involved in managing the Estuary and the surrounding land have their own objectives, priorities and timetables. Differences between the priorities and the programme set out in the plan and those of other interests have been identified and discussed through the consultation process. As and when new issues are highlighted and as issues currently highlighted are resolved, the necessary information will be incorporated into the Management Plan.

## 16.2 Funding

Some of the proposals within the plan will require some funding, for example, some survey work, publication of information, etc. Many of the proposals do not require vast amounts of money. It is envisaged that many of the proposals may be met through joint funding from the relevant organisations.

## 16.3 Monitoring and Reviews

It is intended that there will be regular reviews of the Management Plan and an annual action plan developed to target effort and funding to high priority or relevant projects and it is hoped that the majority of the proposals will be implemented within the next ten years.



*Lostwithiel Bridge at High Spring Tide*

These objectives and proposals are a guide to the future activities and targets of the Fowey Estuary Partnership. The organisational involvement is necessary to identify those in the best position to achieve the targets. The lead body is underlined.

## SECTION 5 MANAGEMENT POLICIES

**GUIDING PRINCIPLE: TO PROVIDE A FRAMEWORK FOR CO-OPERATION AMONGST ESTUARY USERS, STATUTORY AGENCIES AND OTHER ORGANISATIONS TO SUSTAIN AND MANAGE THE RESOURCES OF THE FOWEY ESTUARY**

OBJECTIVE/PROPOSAL	IMPLEMENTATION	ACTIONS/PROJECTS	ORGANISATIONAL INVOLVEMENT	PRIORITY
Develop a management framework to facilitate the delivery of the FEMP	Co-operation of relevant authorities and interest groups when conducting projects in the FEMP area  Stronger framework for exchanging information	Review of current Estuary Partnership Advisory Group membership  Work alongside and aid delivery of strategic documents such as the Cornwall Council Maritime Strategy	<u>Fowey Estuary Partnership</u>  <u>Fowey Estuary Partnership</u>	Ongoing
	Develop Annual Action plan to guide projects, partners and funding		Estuary Officer	Annual
<b>Support estuary officer role</b>				
Encourage on-going public participation and involvement in estuary management	Encourage and support the programme of events organised by the Friends of the Fowey and VMCA		Fowey Estuary Partnership, through the Friends of the Fowey Estuary and VMCA	Ongoing
Identify future funding to support the work of the FEP	Continue to explore all avenues of funding		<u>Fowey Estuary Partnership</u>	High
Improve access to high quality, up to date and relevant data for decision making	Update manual of estuary data and promote information sharing when new data is collected.	Source relevant information and digitise to make information available electronically through the FEP website GIS linked information	Fowey Harbour Commissioners, Cornwall Council, Environment Agency, National Trust, Natural England, Imerys, ERCCIS, CAU	High
To assist environmental projects	Provide harbour equipment and staff, if available, for relevant projects		<u>Fowey Harbour Commissioners</u>	Ongoing



## SECTION 6 LANDSCAPE CONSERVATION

### GUIDING PRINCIPLE:

TO PROTECT AND WHERE POSSIBLE ENHANCE THE UNIQUE NATURAL BEAUTY AND DISTINCTIVE LANDSCAPE QUALITY OF THE FOWEY ESTUARY FOR FUTURE GENERATIONS, AND TO PROMOTE THE CONSERVATION OF THE AREA BY RAISING AWARENESS OF ALL ESTUARY USERS ON THE VALUE OF THOSE ASSETS

OBJECTIVE/PROPOSAL	IMPLEMENTATION	ACTIONS/PROJECTS	ORGANISATIONAL INVOLVEMENT	PRIORITY
Conservation of the landscape setting of the estuary	Co-operation of relevant planning authorities in the upholding of existing planning regulations and policies Increase awareness and involvement of the Fowey Estuary Partnership in planning matters Ensure the FEMP and AONB management strategy are linked and the Partnership is represented at the AONB management group	Continue to monitor and respond to planning applications	<u>Cornwall Council</u> , Environment Agency, National Trust, Natural England, AONB <u>Cornwall Council</u> , Fowey Estuary Partnership <u>AONB</u> Cornwall Council	Ongoing Ongoing Ongoing
Conservation of the seascape setting of the estuary	Characterise the estuary seascape	Baseline study of estuary seascape, e.g. photographic audit.	<u>Cornwall Council</u> , Fowey Harbour Commissioners	Medium
Maintenance of natural habitats along the waters edge	Monitoring of natural habitats, providing advice and assistance to landowners	Undertake and assist in surveys of habitats	<u>Cornwall Council</u> , National Trust, Cornwall Wildlife Trust, Woodland Trust, Silvanus Trust, ERCCIS, Fowey Harbour Commissioners, Landowners	Ongoing
Promotion and protection of important geological sites and geomorphological features	Continue to support the RIG site designation of the estuary		<u>RIGS group</u> , Cornwall Wildlife Trust	Ongoing
Promote renewable energy but maintain an awareness of the impact on the estuary landscape and seascape	Continue to monitor and respond to planning applications for renewable energy schemes	Work with the Fowey Renewable Energy Enterprise (FREE) to develop renewable energy strategy for the area	Fowey Estuary Partnership, FREE	Ongoing

## SECTION 7 NATURE CONSERVATION

**GUIDING PRINCIPLE: TO PROTECT, CONSERVE AND ENHANCE THE BIODIVERSITY OF ESTUARINE HABITATS, INCLUDING THE ESTUARINE FRINGE, AND THE WILDLIFE THEY SUPPORT THROUGH CO-OPERATION WITH RELEVANT BODIES AND INCREASED AWARENESS OF ESTUARY USERS**

OBJECTIVE/PROPOSAL	IMPLEMENTATION	ACTIONS/PROJECTS	ORGANISATIONAL INVOLVEMENT	PRIORITY
Regularly review and update the Manual of Estuary Data	Review in tandem with the Estuary Management Plan		<u>Fowey Estuary Partnership</u>	High
Linking of all nature conservation objectives to the objectives and targets of the UK and Cornwall Biodiversity Action Plan	Link to the Cornwall Biodiversity Initiative		<u>BAP Group, Fowey Estuary Partnership</u>	In Progress
Maintenance of nature conservation interests and monitoring	Highlighted in the Cornwall Biodiversity Initiative and EA action plans	Habitat recreation opportunities - moorings best practice management BAP species and habitat surveys	<u>Fowey Harbour Commissioners, Environment Agency, Natural England, Cornwall Wildlife Trust</u>	High - see <u>LEAP</u>
Promotion of existing nature conservation measures within the estuary and development of a co-ordinated approach to further nature conservation initiatives	Identify the need for protected areas and ensure continued protection of County Wildlife Sites already identified	Carry out up to date surveys of habitats - Lostwithiel Marshes - Seagrass beds - Dormouse Surveys in Hail Walk	<u>Fowey Estuary Partnership, Fowey Harbour Commissioners, Cornwall Wildlife Trust, Natural England, National Trust, Voluntary groups, Planning Authorities, Local landowners, ERCCIS</u>	Ongoing
Increase knowledge and understanding of the natural environment	Improve the public awareness of natural estuarine habitats	Support LNR designation at Lostwithiel		Ongoing
Support the management of the VMCA	Update Manual of Estuary data Integrate information for the catchment onto a GIS system	Support VMCA and Your Shore project	<u>Fowey Estuary Partnership, Fowey Harbour Commissioners, Natural England, consultees</u>	Medium
Consider the impact of marine invasive species	Work to achieve the aims and objectives of the VMCA beyond the Your Shore project	Develop strategy for continuation of VMCA	<u>Fowey Estuary Partnership, Fowey Harbour Commissioners, Friends of Fowey Estuary, Voluntary groups</u>	Ongoing
Marine Conservation Zones (MCZ)	Investigate current threat to estuary system and formulate code of conduct to control introduction of marine invasive species		<u>Fowey Harbour Commissioners, Cornwall Port Health Authority, MMO, Environment Agency, Cornwall IFCA, Natural England</u>	Low
Marine Conservation Zones (MCZ)	Current proposal for a MCZ in the Upper Fowey estuary		<u>Fowey Harbour Commissioners, Cornwall IFCA, Angling Interest Groups, Nature Conservation Organisations</u>	Waiting on MCZ designation

**SECTION 8 HISTORIC ASSETS**

**GUIDING PRINCIPLE: TO ENSURE THE PROTECTION, PROMOTION AND UNDERSTANDING OF THE HISTORIC AND CULTURAL RESOURCE OF THE FOWEY ESTUARY AND TO PROMOTE CAREFUL EVALUATION OF ANY PROPOSALS FOR DEVELOPMENT THAT MAY AFFECT THEM**

OBJECTIVE/PROPOSAL	IMPLEMENTATION	ACTIONS/PROJECTS	ORGANISATIONAL INVOLVEMENT	PRIORITY
Encourage the appropriate management of archaeological sites and historic structures	Protect sites and structures from development and activities that will have an adverse effect on them. Seek funding for the repair and conservation of selected sites and structures	Draw up detailed site-specific management prescriptions by carrying out more detailed surveys at specific sites to record their character, degree of survival and condition	English Heritage, Cornwall Archaeological Unit (CAU), Cornwall Council, OCS, Landowners	Medium
Give further consideration to statutory protection of important sites not currently scheduled or listed	Consider in next district-wide reviews		English Heritage	Medium
Increase knowledge and understanding of archaeological sites, historic structures and local history	Where appropriate, encourage increased public access and prepare interpretative information to enhance the understanding of the character, history and importance of sites	Support the work of the Fowey Harbour Heritage Project to develop interpretation for Fowey Investigate historic sites in other communities bordering the estuary e.g. Lostwithiel and Giants Hedge, Lerryn	English Heritage, CAU, OCS, Cornwall Council, National Trust	Medium
Encourage further documentary research into key maritime themes identified in the Fowey Estuary Historic Audit	Primary research of historic documents held by the County Record Office, Fowey Harbour Commissioners and others.	Support work of Exeter University to transcribe Fowey Harbour Maritime logs	OCS, Fowey Harbour Commissioners, Friends of the Fowey Estuary, Landowners	Medium

**SECTION 9 COMMERCIAL ACTIVITIES**

**GUIDING PRINCIPLE: TO SUSTAIN THE COMMERCIAL VIABILITY OF THE PORT OF FOWEY AND TO ENCOURAGE EFFORTS TO ENSURE THAT ALL DEVELOPMENT PROPOSALS BALANCE THE ECONOMIC AND ENVIRONMENTAL NEEDS OF THE ESTUARY**

<b>OBJECTIVE/PROPOSAL</b>	<b>IMPLEMENTATION</b>	<b>ACTIONS/PROJECTS</b>	<b>ORGANISATIONAL INVOLVEMENT</b>	<b>PRIORITY</b>
Support diversification of port trade	Consider proposals which would lead to a diversification of port trade		<u>Fowey Harbour Commissioners</u> , Imerys, other commercial operators, Cornwall Council	Ongoing
Promotion of Fowey Harbour as a destination for cruise ships	Increase the level of promotion of the assets of the area through use of appropriate media	Destination Southwest	<u>Fowey Harbour Commissioners</u> , Tourist Information	Ongoing
Manage Fowey Harbour as a destination for visiting yachts	Investigate the needs of visiting yachts people - moorings, facilities, waste management, WiFi	Maintain and improve existing facilities	<u>Fowey Harbour Commissioners</u> , Town Councils, Tourist Information	Ongoing
Continue to support and aim to improve all commercial activities taking place in the estuary in a way that maintains the environmental quality of the estuary	Ensure lines of communication between commercial users of the estuary and environmental groups are kept open Encourage environmental improvements in commercial activities in the estuary	Continue Fowey Harbour Consultation Group as a means of developing plans with commercial users Work with commercial users e.g. Imerys and local boatyards to improve light pollution, wash down facilities, waste facilities etc.	<u>Fowey Harbour Commissioners</u> , Fishing Associations, private operators Fowey Harbour Commissioners, Imerys, Commercial Operators	Ongoing Ongoing



## SECTION 10 FISHERIES

### GUIDING PRINCIPLE: TO SEEK WAYS OF CONSERVING AND ENHANCING RECREATIONAL AND COMMERCIAL FISHERIES WITHOUT UNDUE DETRIMENT TO THE ENVIRONMENT OR OTHER ESTUARY USERS

OBJECTIVE/PROPOSAL	IMPLEMENTATION	ACTIONS/PROJECTS	ORGANISATIONAL INVOLVEMENT	PRIORITY
Management of aquaculture within the estuary at a sustainable level	Develop a set of guidelines for use when considering the licensing and placement of aquaculture facilities		Fowey Harbour Commissioners, Cornwall Port Health Authority, MMO, Environment Agency, Cornwall IFCA, Natural England, Cornwall Wildlife Trust Aquaculture operators	Low
Conservation and enhancement of natural fish stocks in the estuary	Continue to assess fishery status within the plan area to provide good information for future management	Continue liaison with Fowey River Association	Environment Agency, Fowey River Association, landowners, West Country Rivers Trust, MMO, Cornwall IFCA	Addressed in Catchment Action Plan
Conservation and enhancement of salmon in the river	Consult the draft Fowey Salmon Action Plan and develop partnerships to deliver actions identified with the plan.		Environment Agency, Fowey River Association, landowners, West Country Rivers Trust, DEFRA	Addressed in Salmon Action Plan
Improve the understanding of the Bass population of the estuary	Understanding of current population  Improve public understanding of Bass Nursery Area regulations	Undertake a site survey as a pre-cursor to a population survey of the nursery area  Produce a public information leaflet	Environment Agency, Cornwall IFCA, MMO	Low
Evaluate bait collection activities within the estuary	Investigate the nature and extent of the problem  Initiate discussion between Angling Associations, Cornwall IFCA and FHC to develop appropriate solutions	Survey estuary for crab tiles and scale of bait digging  Produce literature/notice boards, if appropriate, to promote sustainability Further enforcement of current byelaws and policy Look for alternatives to bait-collecting from the estuary Possible introduction of a permit system	Fowey Harbour Commissioners, Cornwall IFCA, Angling Associations and Federations, Golant Quay Users Association, Nature Conservation Organisations	Medium
Work with others to achieve the outcomes of the Marine Conservation Zones (MCZ) designation process	Current proposal for a MCZ in the Upper Fowey estuary		Fowey Harbour Commissioners, Cornwall IFCA, Angling Interest Groups, Nature Conservation Organisations	Waiting on MCZ designation

## SECTION 11 WATER QUALITY AND POLLUTION

**GUIDING PRINCIPLE:** TO MAINTAIN AND IMPROVE WATER QUALITY WITHIN THE ESTUARY FOR THE BENEFIT OF THE NATURAL ENVIRONMENT, AND TO SUPPORT AND PROMOTE MEASURES TO REDUCE POLLUTION THROUGHOUT THE ESTUARY

OBJECTIVE/PROPOSAL	IMPLEMENTATION	ACTIONS/PROJECTS	ORGANISATIONAL INVOLVEMENT	PRIORITY
Promote use of sewage pump-out facilities for yachts	Facility sited at Berrills Yard	Inform yachtsmen of locations of pump-out facilities in neighbouring harbours Work with RYA Green Blue and Surfers Against Sewage to promote scheme in Fowey Harbour	Fowey Harbour Commissioners	Ongoing
Promotion of boat wash down and scrapings collection points	Facilities at Brazen Island and Penmarlam	Inform public of facilities Promote the RYA Green Blue Project Best Practice Advice on antifouling and boat wash down	Fowey Harbour Commissioners	Ongoing
Review trophic status of the estuary	Carry out eutrophication studies of the estuary	Further work from previous studies	<u>Environment Agency</u>	Medium
Maintain environmental standards for the estuary set out in the Water Framework Directive	Work in line with Water Framework Directive	SWW to inform the Estuary Partnership of proposed works to water treatment works, reservoirs etc.	<u>Environment Agency</u> , South West Water	WFD standards to be met by 2015
Maintain EU shellfish and Bathing Water standards			Environment Agency, South West Water	Ongoing
Make information regarding water quality available to the public		Display water quality results for public information		
Investigate impacts of Antifouling and introduction of Marine Invasive species		Study to investigate biofouling and effectiveness of antifouling	Fowey Harbour Commissioners, Falmouth Marine School, Falmouth Harbour Commissioners	Project to start in near future
Promote environmental improvements in Highways infrastructure to reduce impacts of surface run-off of fuel residues and rubber from tyres.		Encourage fuel-traps and other environmental measures to be implemented with improvements to highways and car parks.	Cornwall Council, Highways	Low/Medium
Explore opportunities to reduce light pollution		Fowey town has already had energy saving bulbs fitted to streetlamps	Cornwall Council	Low

**SECTION 12 SEDIMENTATION, DREDGING AND DISPOSAL**

**GUIDING PRINCIPLE: TO WORK TOWARDS A BETTER UNDERSTANDING OF THE PROCESS OF SEDIMENTATION AND TO MAINTAIN DEEP WATER ACCESS IN THE ESTUARY WHILE CAUSING MINIMUM ENVIRONMENTAL IMPACT**

<b>OBJECTIVE/PROPOSAL</b>	<b>IMPLEMENTATION</b>	<b>ACTIONS/PROJECTS</b>	<b>ORGANISATIONAL INVOLVEMENT</b>	<b>PRIORITY</b>
Support review of coastal processes affecting the estuary	Refer to Shoreline Management Plan II, which extends 1km into estuary systems		Corwall and IoS Coastal Advisory Group, LA's and Government organisations, Consultancies	Ongoing
Improve the understanding of sediment dynamics in the Fowey Estuary		Continue involvement in studies of sedimentation in the estuary	<u>Fowey Harbour Commissioners</u> Environment Agency	Ongoing
Assess heavy metal concentrations in estuarine and dredged sediment	Continue sampling of dredged material Initiate sampling in other areas of the estuary	CEFAS sampling as part of FEPA dumping licence	<u>Fowey Harbour Commissioners</u> , MMO	Continual
Investigate the possible reduction of the amount of dredged material	Undertake a sediment survey of the estuary in an aim to assess the dredging requirements	Continue with pre and post-dredging hydrographic surveys to assess most effective dredging programme	<u>Fowey Harbour Commissioners</u> , University projects	Ongoing
Research other means of sediment disposal	Viability study of alternative methods of disposal for dredged material	Involvement in EU-funded SETARMS (Sustainable, Environmental Treatment and Reuse of Marine Sediments) project working with Brighton University	<u>Fowey Harbour Commissioners</u> , Environment Agency, University projects, Consultants	Ongoing
Gain more awareness/monitor pollution from agricultural land	Review pollution pathways into the estuary	Landowners/managers to consider use of drainage ditches. Whole Farm Management Plans.	Environment Agency, Landowners, West Country Rivers Trust	Ongoing

**SECTION 13 LITTER AND WASTE DISPOSAL**

**GUIDING PRINCIPLE: WORK TOWARDS ENSURING THAT THE ESTUARY REMAINS, AS FAR AS PRACTICAL, FREE OF LITTER**

<b>OBJECTIVE/PROPOSAL</b>	<b>IMPLEMENTATION</b>	<b>ACTIONS/PROJECTS</b>	<b>ORGANISATIONAL INVOLVEMENT</b>	<b>PRIORITY</b>
Production of Harbour Waste Management Plan	Necessary for harbour to comply with MARPOL and MSA regulations	Monitor and react to day-to-day marine litter issues in the harbour area	Fowey Harbour Commissioners, Consultees	Completed and ongoing reviews
Improvement of waste reception facilities within Fowey Harbour	Harbour complies with MARPOL regulations	Monitor and review current reception facilities Improve recycling facilities	Fowey Harbour Commissioners, Imerys Fowey Harbour Commissioners, Serco	Ongoing
Provision of sewage disposal facilities for yachts	Provision of a suction to shore facility at Berrill's Yard for sewage disposal from yachts	Maintain and promote facility to local users and visiting craft	Fowey Harbour Commissioners, South West Water	Ongoing
Raise awareness of marine litter		Maintain involvement in Marine Conservation Society, Beachwatch Campaign and survey. VMCA Litter clean of estuary habitats	Fowey Harbour Commissioners, Serco	Ongoing



## SECTION 14 TOURISM AND RECREATION

**GUIDING PRINCIPLE: TO ENSURE THAT IN THE DEVELOPMENT AND PROMOTION OF RECREATION AND TOURISM THE NEEDS OF THE VISITOR ARE INTEGRATED WITH THE NEEDS OF THE COMMUNITY AND SUSTAINING THE NATURAL ENVIRONMENT**

OBJECTIVE/PROPOSAL	IMPLEMENTATION	ACTIONS/PROJECTS	ORGANISATIONAL INVOLVEMENT	PRIORITY
Maintain signing and information for visitors	Recreational Management Plan Interpretative Plan for the estuary as a whole Provision of map-based information in main car park Standardise signs Website and online information	Work with Fowey Harbour Heritage project to develop interpretation in Fowey	Cornwall Council, Fowey Harbour Commissioners, Fowey Town Council, Ramblers Association, National Trust, Leisure Users, Tourist Information, Cornwall Wildlife Trust, English Heritage, OCS, Environment Agency	Ongoing
Encourage sustainable tourism	Baseline study of operators using estuary area and measure sustainability Ensure infrastructure can support level of tourism	Link to CoaST (Cornwall Sustainable Tourism Project)	Cornwall Council, Tourist Information, Fowey Harbour Commissioners	Medium
Encourage visitors to the estuary at public access points to the water	Encourage further public access to the water area in Lostwithiel	Lostwithiel Environment Group project to improve launching and access in Lostwithiel	Lostwithiel TC, Lostwithiel Environment Group, Cornwall Council, Fowey Harbour Commissioners, Environment Agency	Ongoing
Provision of better onshore facilities for estuary users	Assess the need for and provide or improve facilities such as toilets and showers for yachts people	Improved facilities at Penmarlam for yachtsmen Support launching facilities at Caffa Mill	Fowey Harbour Commissioners, Cornwall Council, user groups, clubs and bodies	Ongoing

**SECTION 15 ACCESS**

**GUIDING PRINCIPLE: TO MAINTAIN AND EXTEND THE ACCESSIBILITY OF THE ESTUARY FOR ALL WITHOUT COMPROMISING NATURE AND LANDSCAPE INTERESTS**

<b>OBJECTIVE/PROPOSAL</b>	<b>IMPLEMENTATION</b>	<b>ACTIONS/PROJECTS</b>	<b>ORGANISATIONAL INVOLVEMENT</b>	<b>PRIORITY</b>
Improve access for those with disabilities to points with a view across the estuary	Provision of parking spaces for the disabled Improvement of paths to the outer estuary where possible Provision of information regarding suitable routes		<u>Cornwall Council</u> , Natural England, Ramblers Association, National Trust, Fowey Harbour Commissioners	Medium
Promotion and preservation of existing footpaths	Participation in the Parish Paths Partnership to maintain and promote existing rights of way Promotion of South West Coast Path	Printed information about local circular walks	<u>Cornwall Council</u> , Parish Councils, National Trust Natural England, South West Coast Path Project	Ongoing Ongoing
Improve information regarding car parks	Improve existing car parking arrangements and also information relating to car parks and facilities		Cornwall Council, Parish Councils, National Trust	Medium
Promotion of cycle routes around the estuary	Encourage cycle hire in the area Provision of cycle parks in public areas Investigate possible routes and publicise them, giving an indication of difficulty	Support sustainable transport schemes	Cornwall Council, Town Councils, National Trust	Medium
Maintain safe public access points to the estuary	Maintain slipways and access points for harbour users		<u>Cornwall Council</u> , Fowey Harbour Commissioners	Ongoing



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