



ENVIRONMENT  
AGENCY



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# Conservation, Access and Recreation

Annual Report 1997/98

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# Introduction

In its second year, the Environment Agency has been successful in integrating the work of its predecessor organisations and has taken an increasingly holistic approach to environmental protection and enhancement.

In the fields of conservation and recreation, this has meant greater opportunities for partnerships and much closer liaison with, and ownership by, local communities in environmental projects. As a result, we have published many Local Environment Agency Plans (LEAPs), which have provided valuable information and acted as a catalyst for action throughout England and Wales. During the year, we have also responded to EU legislation and the UK's commitment to habitat and species protection and biodiversity.

Though it is not possible to describe in detail within this report, all the Conservation and Recreation projects the Agency completed in 1997/98, we have selected a few from each of the Agency's eight regions that typify the range of work undertaken. The Agency would like to thank all its project partners for their support, commitment and involvement, and we look forward to working with many of them in the future to create a better environment for us all.

A handwritten signature in black ink, appearing to read 'Ed Gallagher', located below the introductory text.

Ed Gallagher  
Chief Executive

# Conservation summary

In 1997/98, we continued to consolidate a number of issues relating to statutory obligations and promoted conservation both internally and externally. For example, our Action Plan for Conservation was published in January 1998, setting out the role of the Agency's conservation function, key issues and targets for delivering our objectives. Conservation is a natural focus for the Agency, since enhancing biodiversity is one of the themes in our environmental strategy. This, in turn, forms the basis for priorities and resource bids in our corporate plan. This focus does not mean, however, that we are neglecting our landscape and archaeological responsibilities.

Implementing the EU Habitats and Birds Directives represents a major obligation for the Agency and forms a substantial part of the workload for our conservation and other staff. We completed the scoping phase of the corporate initiative to review all our existing authorisations, permissions and consents currently considered to be affecting Special Protection Areas (SPAs) as well as those Special Areas of Conservation (SACs) submitted to Brussels for approval. This involved close cooperation with English Nature and the Countryside Council for Wales (CCW), initiated by a joint workshop held in York in April 1997. We are now determining which of the many thousands of Agency authorisations require a more detailed appropriate assessment, so we can decide whether to confirm, modify or revoke them, as required by the Directive.

On 23 June 1997, our Chief Executive signed a Concordat with English Nature setting out how, working in partnership, we will help to: deliver the Government's strategies for biodiversity and sustainable development, ensure the protection, and where necessary, enhancement of Sites of Special Scientific Interest (SSSIs), and promote practices and projects in relation to wetland, marine and terrestrial habitats and their wildlife that will benefit biodiversity. A detailed joint ventures programme underpins the Concordat and helps to consolidate partnership at national, regional and local levels. A major joint initiative, involving CCW, is producing conservation strategies and consenting protocols for all river SSSIs in England and Wales. Good progress has been made, although the aim of establishing a 'one-stop shop' for individual activities for which landowners require consents from both the Agency and the statutory conservation organisations, has proved legally unworkable.

One big water resources issue has been the impact of over-abstraction on wetland SSSIs. We have now agreed, with English Nature, which wetland SSSIs in England have a known over-abstraction problem as a result of public water supply demand or some other cause, those where the cause of habitat deterioration is

unknown and requires further investigation, and those where Agency-authorised abstractions are having no impact. This list will be published late in 1998 and will form the basis of joint action to alleviate the problems on a priority basis.

Conservation strategies and objectives have played a major role in determining which rivers and wetland SPAs, SACs and SSSIs were included in the Agency's national environmental programme submission to the Secretary of State 'A price worth paying'. Drawing up the list of 100 priority sites involved close cooperation between Water Resources, Water Quality and Conservation staff within the Agency, and with English Nature/CCW staff. The programme sets out the case for improving the special conservation interest of those river, wetland and coastal sites that will need expenditure during 2000-2005 to alleviate water abstraction and sewage pollution problems. Continuing the wetland theme, we funded a full-time secondment to English Nature to co-ordinate a bid for European Environment funding (LIFE) to protect EU designated Natura 2000 network of SAC river sites in the UK. The application will be submitted, with full DETR support, to the European Commission in January 1999. Work continued on water-level management plans for wetland SSSIs, with 92 plans completed by the end of March 1998.

The Agency continues to help implement the UK Biodiversity Action Plan. We are the contact point for chalk rivers and have a specified role for 30 other species or habitats, including being a lead partner for 15 species. We undertook 96 projects specifically to implement biodiversity targets, involving more than 50 different organisations. We spent £126,000 on biodiversity-related R&D projects and, in all, we estimate that Agency expenditure on biodiversity projects to be £850,000 in 1997/98.

We were pleased to add the Isle of Man to our national survey of rivers as part of our River Habitat Survey project. The feasibility study on an interactive CD-ROM version of River Habitat Survey for schools was completed and is now being developed to the pilot stage. Our report on the national survey River Habitat Quality is now available on the Agency's web-site.

In conjunction with Agency Fisheries colleagues, we published a handbook Freshwater fisheries and wildlife conservation: a good practice guide; other national publications included River Life from Source to Sea, Understanding river bank erosion, and an updated leaflet produced jointly with the Forestry Commission on Phytophthora, the disease affecting alder trees.



# Recreation summary

This year, the Recreation Function Action Plan was published and work commenced on the projects listed within it. Although all activity was carried out within tight financial constraints, the Agency was nonetheless able to deliver significant benefits for recreational users of the water environment. At the same time, environmental improvements delivered by the Agency were of benefit to everyone's enjoyment of the outdoors.

We have been working hard towards a Memorandum of Understanding between the Agency, Sports Council and Countryside Commission. The Memorandum will set out joint objectives and how they can be achieved through work programmes following the principles of sustainable development and equal opportunities. The Memorandum will be signed in 1998.

An early product of this collaborative approach was the joint publication by the three bodies of 'Sporting and Challenge Events in the Countryside' (Guidelines for Organisers). This aims to ensure that such events are organised in such a way as to minimise their impact on local people, the environment and other recreational users. The Countryside Commission has also worked with the Agency to produce 'The Countryside Commission and Leaps'. This document highlights the areas of concern to both organisations and shows how the Commission's perspective can be fed into the LEAP process, strengthening the role of both organisations in environmental management.

One of the year's major successes was the launch of the Severn Way. The Agency co-ordinated and helped to fund this footpath trail alongside the entire 350-kilometre length of the River Severn from source to sea. The trail is the result of a partnership with seven local

councils and the Countryside Commission. The route is easily accessible by train and bus throughout much of its length, so it is easy to walk in stages. In years to come, the trail should help many people to enjoy a walk beside Britain's longest river.

Work has continued within the Angling and Canoeing Liaison Group. The group includes representatives of canoeists, anglers, landowners and land managers, and is chaired by the Agency. Recent effort has focused on the production of an Access Guide, which will provide advice on the negotiation of access agreements between landowners, canoeists and anglers. We plan to publish this in 1999.

The methodology for the production of recreation and conservation site management plans on Agency land was published and distributed to operational staff. Plans using the methodology are now being produced and are proving to be effective in balancing environmental and recreational needs.

The Fieldfare Trust was commissioned to undertake research and to provide advice on how the Agency's Recreation Function can effectively discharge its statutory duties towards disabled people. The results of the study should be available in 1998.

It has long been recognised that recreational objectives are best achieved by having at least one full-time Recreation post in each region. To achieve this, some restructuring has been carried out where necessary. As a result, a number of additional Recreation posts were created and these will be filled during 1998. As part of the recruitment and training process, an appropriate in house training course has been devised. Entitled Recreation: From Duty to Delivery, the course was offered for the first time in autumn 1998.





# Navigation summary

The increase in boat licence charges was held at inflation rates once again for 1998. The decline in boat registrations compared to the previous year reflects the sensitivity of boating to the economic climate and a highly competitive leisure market.

The Agency continued to work towards a simplified licensing arrangement across navigation authority boundaries and initiated a trial arrangement with British Waterways (BW). Under this reciprocal agreement, vessels registered with one authority were allowed to visit (for a short period) the other authority's navigations without additional charge.

This arrangement was consistent with our strategic aim to create an integrated waterways network. However, although the agreement appeared to satisfy some boaters, many more BW-registered craft visited Agency navigations than there were Agency-registered craft travelling in the opposite direction. As this was a "free" arrangement, parties lost income and BW had to recompense the Agency for its greater loss. The trial was not repeated in 1998/99. The issue is under review and a solution, that is acceptable to boaters, but does not adversely affect the licence income of the Agency or BW, is still being sought.

The Agency has continued to market and promote its waterways. Its twice yearly newsletter, River Views, has continued to prove popular. We had our own stand at the London Boat Show as well as the Inland Waterways Festival.

In addition, the Agency has worked with others such as BW, the British Marine Industries Federation (BMIF) and the British Tourist Authority on a number of initiatives:

- ◆ River Boat 2000, an innovative competition seeking designs for an environmentally sympathetic, affordable family river cruiser;
- ◆ commissioning original research into hire-boating holidays and the hire-boat industry on Agency navigations;
- ◆ publishing Waterways Britain, which promotes the inland waterways network to overseas markets.

The Agency became the owners of Escargot UK, the prototype of a pedal-powered, two-berth, river cruiser. This has proved an ideal test-bed for environmentally friendly boating ideas and was a popular attraction at boating events. We also helped to organise and fund Eco Boat 97, Britain's first environmentally friendly boat show, held on the Norfolk Broads.

An Action Plan to improve recreation, tourism and conservation on the River Ancholme was hailed as a success. The river is an Agency navigation for 27 kilometres between the Humber Estuary and Snitterby in Lincolnshire. In partnership with the Rural Development Agency, North Lincolnshire Council and the Countryside Commission, we have funded and implemented a number of projects that have provided positive improvements for boaters, anglers, countryside visitors, walkers and cyclists.

The River Thames at Henley played host to the Inland Waterways Association and BMIF's National Waterways Festival and Inland Boat Show over the August Bank Holiday 1997. The event was a huge success, attracting more than 600 boats from all parts of the inland waterways system and more than 30,000 visitors. The Thames also celebrated the anniversary of when King Richard the Lionheart 'sold' the rights of conservancy on the Thames to the Corporation of the City of London. So started 800 years of management, responsibility for which today rests with the Environment Agency.

To assist boaters and other visitors to our navigations, a comprehensive programme of signage renewal was carried out. A detailed Signing Guide encourages a consistent approach to the new installations, using concise wording and simple symbols. A leaflet, A Boater's Guide to Navigation Signs, was produced to help boaters to understand and recognise the signs and symbols they will encounter on our rivers.

The Agency has continued to play a key role in the Association of Inland Navigation Authorities (AINA). Good progress was made towards the production of a Strategy for the UK's Inland Navigations, which should be published in 1998.

We have played an active role in the DETR Review of Navigation, especially in Anglian Region where we responded to the consultation document Anglian Waterways Regeneration Strategy, which was produced by BW. As the Agency is committed to the future promotion of waterway recreation and regeneration within the framework of integrated river management, it consequently opposed the recommendations made by BW. The outcome of the Review is expected in 1998/99.

## Facts and figures

Some 33,000 boat registrations were issued by the Agency in 1997/98.

Registration checks showed 99.8 per cent compliance.

A total of 38 offenders were prosecuted and fined, and a further 916 were issued with formal cautions or warnings.

The Agency's review of its navigation assets has produced valuable data, which has caused concern because of the gap between the costs of maintenance and the capital funds available. Work is continuing on the development of an Asset Management Plan and on addressing the funding issues.





# Fisheries summary

Our vision for fisheries is that all waters in England and Wales will be capable of sustaining healthy and thriving fish populations, and everyone will have the opportunity to experience a diverse range of good quality fishing.

We continued to protect and maintain the current status of fisheries. Where the need was identified, and resources allowed, we undertook enhancement works to benefit fisheries. Fisheries habitat improvements were completed at 327 sites during the year. Improvements to benefit both coarse and salmonid fisheries included construction of fish passes, cleaning of spawning gravels, creation of riffles, pools and bankside improvements and fish stocking. Fish were restored to 122 kilometres of river following water quality improvements, and 2.9 million fish were stocked out to rivers.

All our work takes account of the costs and benefits in all fisheries aspects. During 1997, we commissioned research into the economic value of fisheries in England and Wales. The studies will evaluate the capital value of salmon, trout, coarse and eel fisheries, and examine the value to the local community of the recreational and commercial use of these fisheries.

The 1997 rod licence marketing and enforcement strategy proved successful, with the number of licences sold increasing by 2.4 per cent to 1.2 million, and income rising by 10 per cent to £13.5 million. The increase in income was mainly due to the increase in coarse and trout licence duties, which were increased by £1 to £16 during 1997. Most of the extra income was used to improve coarse and trout fisheries. The contract to sell rod fishing licences from Post Offices expires in 1999. During the year, we tendered for a new contract to take licences sales into the new Millennium.

We consulted on phase II of the national fisheries byelaw review during 1997 and advertised the new byelaws in March 1998. It is proposed to seek Ministerial approval during 1998 for implementation in 1999. The following issues were advertised:

- ◆ otter guards on eel fyke nets
- ◆ eel and elver catch returns
- ◆ regulation of removal of fish by rod and line
- ◆ fishing for crayfish and their use as bait
- ◆ trolling and trailing from boats
- ◆ unattended rods
- ◆ minimum rod length
- ◆ exemptions for Agency work.

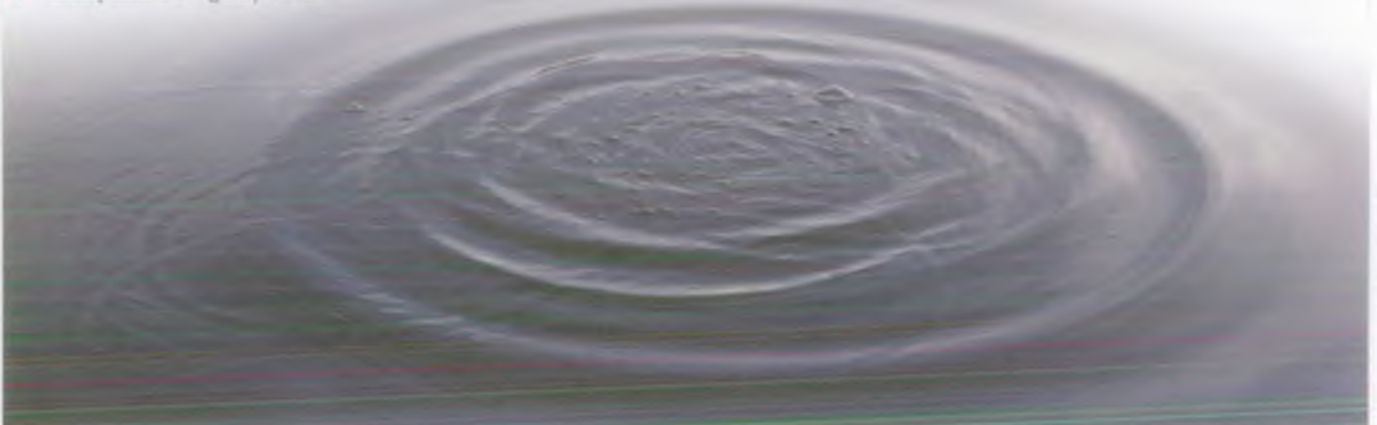
The byelaw proposed during phase I of the review, which set out the design for keepnets and landing nets, was approved by Ministers in March 1998, following consideration by the European Commission. The review of the position of the close season on canals continued.

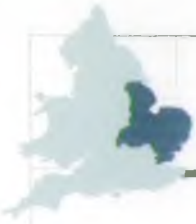
Four regions currently have no close season on canals in the whole or part of their area. We commissioned a study that investigated the effects of angling on fish and other wildlife during the close season. We will also review the effects of angling during the close season on other canal users before submitting a proposal to introduce consistency to Ministers. All responses from the consultation on the Fisheries Action Plan were collated and included, where appropriate, in the final version published in December 1997. We consulted on a first draft of the Coarse Fish strategy during 1997/8 and six coarse fishery management advisory booklets were also produced during 1997.

National centres for coarse and salmonid fishery science were established during 1997. The centres act as the focus for fisheries science and research in the Agency and ensure that management decisions are based on sound technical information. The Centres were involved in the following studies. The use of synthetic pyrethroid sheep dip has caused widespread damage to rivers. A tiny quantity can pollute hundreds of metres of water, killing fish and other wildlife. We produced guidance for farmers on the use of these chemicals and will monitor high-risk areas.

Research continued into the effects of endocrine disruptors on fish populations. Results from phase I of the study suggested that these compounds, which may enter our rivers in sewage discharges, have resulted in sex changes in some species of fish. Phase II will look at the consequences on fish populations. During the year, we consulted on a strategy proposing how the Agency and others should deal with this problem.

We also continued to contribute to the MAFF-led research into the effects of cormorants on fish populations. The results will be published in 1999.





# Anglian Region

## Trees get new lease of life

Willow trees are common to many river valleys and a feature of many floodplains and watercourses in lowland Britain. One characteristic of the willow is its fast-growing habit, and the white willow (*Salix alba*) of the Ouse valley is no exception. Some of the Ouse valley trees are about 150 years old and were last pollarded at the end of the First World War, about 80 years ago. Pollarding is a traditional technique, which entails removing all the branches from the tree leaving a stump about 6 feet high. The stump soon starts to grow new branches and, after a few years, the tree achieves its former stature. If pollarding is not carried out periodically, branches become so top heavy they often split the trunk, eventually killing the tree. The resulting debris often creates a potentially dangerous flood-water obstruction. Pollarding is sensitively carried out in stages by the Agency to achieve maximum benefit to the trees while minimising the impact on the landscape and wildlife.



◀ ▲ Pollarded Willows in the Ouse Valley



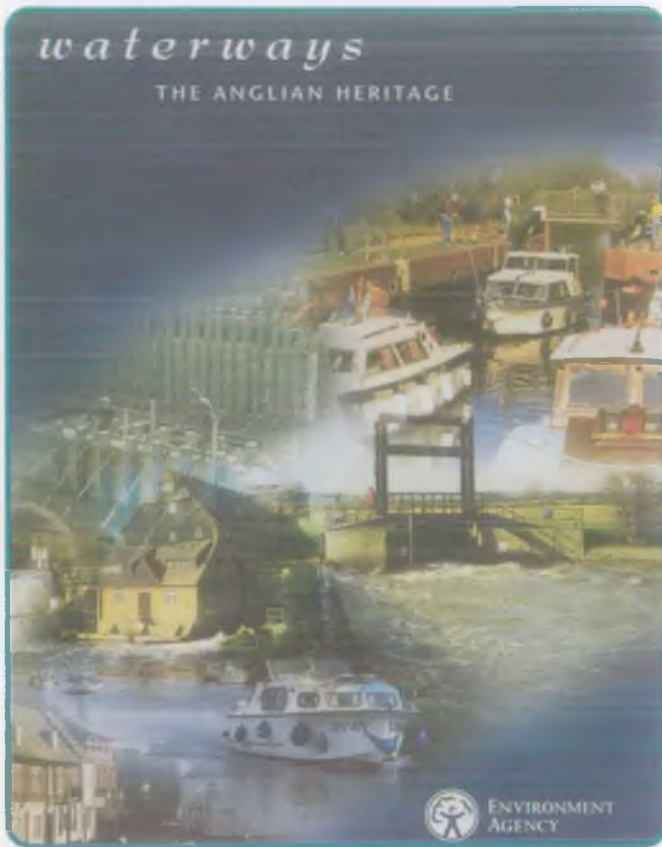
## Anglers access improvements

Essential flood-defence work on the river Ancholme created an ideal opportunity to help anglers with better access to the bank. The section between Castlethorpe bridge and the M180 motorway has resulted in 45 new custom-designed angling pegs. The work was carried out in a joint project with Scunthorpe Angling Association and continues the theme of similar schemes at sites such as Scabcroft, Horkstow and Brigg Leisure Centre. The platforms create a stable base for anglers and reduce the danger of slipping into the river. In a similar scheme the Agency also helped to provide fishing platforms on the Maud Foster Drain following discussions with Boston Angling Association.



▶ Newly created angling pegs on the Castlethorpe section of the River Ancholme





## Navigation review on the Nene and Great Ouse

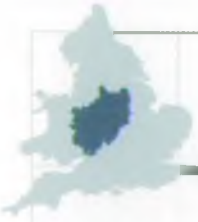
Since 1991, there has been an ongoing review of the management structure of navigation. The previous Government's waterways minister decided that although there was insufficient evidence to support proposals for a single navigation authority, there was some merit in the principal authorities, British Waterways (BW) and the Agency, exploring a closer relationship in certain instances for the benefit of users and the environment. Those instances would be piloted by a report on the Nene and Great Ouse in Anglian Region, where the Agency is currently the navigation authority. The BW-produced report has been completed and the current waterways minister wanted wide consultation on the options outlined within it. In an effort to form a balanced view, regional and area Agency staff then consulted with river users and facility providers, the overwhelming majority of whom are connected with recreational boating. A series of 'Issues' papers were published to keep interested people fully informed. In a written response to the minister, the Agency rejected the BW proposals and reconfirmed that the great environmental advances gained in recent years by employing the principle of Integrated River-Basin Management still has widespread support. As a consequence, we advocated a wider choice of options for management of the navigation including a proposal that the Agency should retain full operational control of the two river systems. Meanwhile, we will continue to strive for sensible promotion and development of an integrated navigation network through the Association of Inland Navigation Authorities (AINA).

## Better information for river users

A pack of booklets has been published describing the rivers Welland, Ancholme, Glen, Stour, Great Ouse and Nene. The pack contains a users-guide to the navigations of the Anglian region as well as individual river maps, lock details, facilities, waterway byelaws and

other useful information. The guide is designed for both new and existing users of the six navigations in the region for which the Agency is responsible. The pack should help users enjoy the 500 kilometres of the region's relatively uncrowded waterways, which flow through some of the most admired rural landscapes in the country.





# Midlands Region

## Encouraging otters to the River Idle



Creating an otter holt on the River Idle 

During the 1980s, flood-defence modifications to the River Idle resulted in a highly regulated system with little tree and plant cover. Subsequent tree-planting schemes on Agency-owned land have tried to redress the natural balance. In more recent years, there has been some evidence that a small number of otters have returned to the catchment. A lack of suitable cover would probably restrict any further expansion of this core population and so a scheme was devised to create some artificial holts.

Some of the fast-growing riverside willow trees were pollarded, and the logs used to construct a framework for the holts. These were subsequently covered in soil and the surrounding area planted with dog rose and bramble. A further pipe and chamber holt was created on a river berm previously used for hay cropping. The project has provided a firm foundation for the otters to return to the river and the Farming & Rural Conservation Agency is considering Countryside Stewardship applications to further improve the habitat.

## Bow brook rehabilitation project

Over the last 20 years, the Bow Brook, which flows from Redditch to the river Avon, has suffered a reduction in channel volume and ecological value. This is partly due to over-abstraction, below-average rainfall and excess nutrients entering the system. As well as the influence of sewage effluent and the impact of urban runoff, the falling ecological value is also due to diffuse agricultural pollution and excessive stock poaching of the banks, which consequently has increased the sediment loading.

Several stretches of the brook were identified as being in need of urgent improvement. With the aid of sympathetic landowners, the Agency has implemented a number of rehabilitation projects to reinstate natural features and improve habitat diversity and physical structure. More than 4000 metres of riparian buffer strips have been fenced off to reduce erosion and stock poaching, to allow a richer bankside and river-corridor habitat to develop. Meanders and bankside areas have been planted with trees and shrubs, and cattle drinks were excavated to control stock access to the brook. Several kilometres of the brook have been sensitively re-engineered to reinstate a self-cleansing channel. Work has involved partial desilting of the weed-choked, over-engineered channel and excavation of 20 on-stream pools and areas of slack water to improve fish-holding capacity. Finally, a low-cost Best Management Practices leaflet has been published in conjunction with the Farming and Wildlife Advisory Group (FWAG) and mailed to 500 landowners in the catchment.



Fencing controls farm stock and reduces erosion 



Art in the countryside adds to the Tame Walkway 

## Tame Walkway improvements


During 1997, an ornamental 'duck gate' was designed and installed alongside the River Tame in Sandwell Park, which forms part of the Walkway. The new artistically designed gate replaces some rather unattractive palisade gates. The object of the project was to help give a sense of identity and place to the walkway and to promote its image as a safe and easy route for pedestrians, cyclists and wheelchair users. It is aimed at encouraging both leisure users and local commuters. The design of the gate also takes into account the surrounding landscape and helps to develop the environment.

The various characteristics of the gates, such as colour, materials and design, will be followed through with similar structures throughout the length of the Tame Walkway which is designed to provide better public access alongside the river. In doing so, opportunity is also taken to inform the public of local issues such as nature conservation, litter and pollution.

## The Severn Way is opened by Minister

Britain's longest riverside walk the 'Severn Way' was officially opened in 1998 by waterways minister, Angela Eagle MP and Agency Chief Executive Ed Gallagher, at Worcester racecourse. The 350-kilometre footpath follows the course of the Severn from its source at Plynlimon in Wales to the estuary at Bristol. The path was created as a result of the productive partnership of six local authorities led by the Agency. All aspects of the project, from feasibility and design to waymarking and marketing, were tackled by the partnership, which consists of Powys, Shropshire, Gloucester and Hereford and Worcester County Councils and Bristol City and South Gloucester District Councils. The path helps local people and tourists alike explore the towns and villages, heritage and history along the Severn valley, while passing through superb countryside. The principle of sustainability has been a key feature of the project from the start, and local public transport links make the route easily accessible for large numbers of people.



Waterways Minister Angela Eagle MP and Agency Chief Executive Ed Gallagher at the Severn Way opening ceremony 



# North East Region

## Yorkshire Dales millennium project

The Environment Agency, Yorkshire Dales National Park, English Nature, Forestry Authority and Yorkshire Rural Community Council were all committed funding partners who enabled the Yorkshire Dales Millennium Trust (YDMT) to be set up. With this funding support, the YDMT made a successful £4 million bid to the Millennium Commission for a Millennium Partnership for the Dales. With matched funding, the resources for the projects totaled £8 million. The Trust has now entered its second year and the Agency remains a partner, continuing to support the YDMT in initiatives to improve riverside paths, crossings and wildlife habitats. Targets for the Trust include habitat improvement works to woodlands, grasslands and moorlands, and the planting of new broadleaved woodlands. Other benefits include the creation of otter habitats, improvements to public rights of way, and village improvement schemes to restore traditional features such as dry stone walls, field barns and village halls. We will also be working with local schools to create nature conservation areas and environmental education centres.



△ Yorkshire Dales Millennium project River Ure, Aysgarth Falls (middle falls).

## Kilnhurst collaboration

The Kilnhurst Riverside Group was formed in November 1995 with the support of the Environment Agency, Groundwork Dearne Valley, the local authority and local and national businesses. Its purpose is to develop and manage the riverside and associated land for recreation and amenity of the local community. The scheme follows a basic pattern of developing and increasing safe access to the Agency's land, but there are many innovative threads woven into the project. The use of living willow as an erosion control measure for riverbanks and for the construction of angling platforms. Through the development of traditional willow-weaving skills, an environmentally sustainable method of bank-erosion control has become a well used alternative within the area, as has its use for building fishing platforms. The idea has been taken up by other local angling clubs as an example of best practice in sympathetic bank protection.



Bank erosion control for North East Region for the Kilnhurst Project ▷ △





## The Northumbrian Rivers Project

The Environment Agency took the lead in developing the Northumbrian Rivers Project, which will link habitat improvements for fish and other wildlife with landscape and heritage enhancements to promote the sustainable economic use of these resources to the benefit of the rural economy. The Farming and Wildlife Advisory Group (FWAG) are the lead partners for the implementation phase. Other partners include the Tyne Riparian Owners and Occupiers Association, Northumbria National Park, Northumberland Estates, Forest Enterprise, the Ministry of Defence and Northumbria Tourist Board. The Project received support and major funding from the European Guidance and Guarantee Fund (EGGF) and the UK

△ Northumbrian Rivers Project River Coquet at Thropton, showing fencing and willow planting.

Government, as part of the Northern Uplands Objective 5b Programme. Improvements in the quality and diversity of habitats within river corridors will target species identified as important through national and local biodiversity initiatives. These include fish such as salmon, sea trout and trout, and other wildlife including otters, water voles and freshwater mussels. Landscape enhancement works involving, for example, tree planting will improve the overall quality and amenity of the area. This environmental gain can then be translated into economic gain via an increased demand for river-based leisure activities such as angling and wildlife tourism. This will, in turn, increase the demand for farm-based accommodation, as well as providing opportunities within the rural economy as a whole.

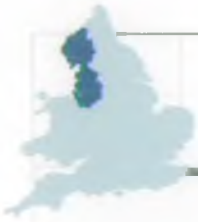
## River Skerne restoration

Old maps show that the River Skerne in Darlington once meandered freely within a wide floodplain. Over the past 200 years, it has undergone straightening and deepening for flood control and drainage. Industrial tipping has raised the floodplain while housing development, gas, sewer and electricity supplies have encroached within the river corridor. The restoration of a two kilometre reach of the river was carried out under the umbrella of the River Restoration Centre. The Environment Agency managed the scheme in collaboration with Northumbrian Water, Darlington Borough Council, The Countryside Commission and English Nature, with support from many other organisations and the local community. Physical restoration of river features was accomplished by meandering the river's course, where space permitted, by cutting a new channel and filling the old. Re-profiling the riverbank to more natural shapes has helped to lower the floodplain land and to enable the storage of water in times of high flow.

To improve the ecological value of the river, the project re-routed sewer systems and riverside outfalls were created. Shallow wetlands on the lowered floodplain introduced river features that encouraged natural processes and created new habitats. Water quality has greatly improved and there are signs of an increase in the numbers and varieties of both flora and fauna. Project monitoring has shown that there is widespread public support for the scheme.



△ River Skerne Restoration River Skerne at Darlington after installation a new meanders.



# North West Region



Work underway restoring Skinburness Borrow Pits 

## Skinburness and Overton Borrow Pits

At a village called Skinburness on the Solway estuary in Cumbria, an Agency flood defence scheme to protect the village and agricultural land from tidal inundation involved the construction of earth flood embankments. The material came from nearby agricultural land and left two large holes or borrow pits that soon filled with water.

However, more works were needed to turn them into attractive and valuable wildlife habitats. The edges of the pits were shaped to form areas of shallow water and small islands. These areas were then planted up with common reed and other native marginal plants. The banks were planted up with 850 native trees and shrubs. The area is already attracting wildlife including shelduck, mute swans, common snipe and dragonflies.

We also completed a similar coastal-defence scheme at the villages of Overton and Middleton on the Lune estuary in Lancashire. Earth for

the floodbanks was won from adjacent agricultural land, thus creating two lakes. Both have been planted up with reeds and other native aquatic marginal plants. The banks on three sides have been fenced to keep cattle out and more than 600 native trees and shrubs have been planted. Cattle are allowed to graze on one side which will keep the shore open, allowing wading birds from the adjacent estuary to continue feeding at high tide. The lake has an island and several very shallow areas where wading birds such as oystercatcher, redshank and dunlin have been seen feeding and roosting. Its proximity to the internationally important Lune estuary, which is part of the Morcombe Bay Special Protection Area (SPA) and a candidate Special Area for Conservation (SAC) combined with the shallowness of the lake and new planting, have made this a very valuable site for wildlife.

## Rural land use and sustainability

The Sustainable River Management Project aims to introduce and implement better land-use practices by identifying catchment issues and tackling them at source. Activities described collectively as 'rural land use' can have major impacts on river systems. Overgrazing of the riverbanks can cause erosion and serious loss of bankside habitat; erosion also alters the structure of the river making it wider, shallower and featureless. Overstocking and certain arable practices can cause loss of soil into the rivers. Sedimentation can smother aquatic plants and soil can carry contaminants such as fertilizers, pesticides and sheep dips into the water system. To tackle such problems at source, the project aimed to influence farming practices. Target catchments were selected in each Area of the North West and the Agency collaborated with the Farming and Wildlife Advisory Group (FWAG) acting as a conduit to the farming community. FWAG visited farms in the target area and produced a confidential farm-wide report. This highlighted farming practices that may affect the river, and suggested alternatives. FWAG also assisted with grant applications and explored



△ FWAG advisor, Doug Hill, points out river bank erosion

△ Bank erosion makes the river overwide, shallow and featureless

alternative funding to ensure an uptake of best practice advice. To help get the message across, promotional events such as workshops and farm walks were organised. More than 50 farmers attended such events and they proved an excellent way of promoting better practice. The catchments targeted were the rivers Ehen, Upper Ribble and Weaver and to date the project has resulted in 31 Countryside Stewardship agreements. Geomorphological techniques are being used to monitor the reduction of sediments entering the watercourses as plants recolonise the riverbank. The Sustainable River Management Project is producing real improvements to river habitat and they are set to continue as workshops and farm visits raise awareness of the effects of farming on the river.

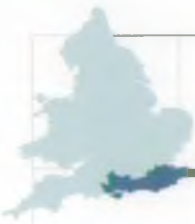


## Prescot Brook Rehabilitation

This project improved the water quality, appearance, public access and habitat diversity of the Prescot Brook and its surroundings. Prescot Brook is a mainly urban stream near Liverpool and in the past it has been extensively culverted. It is also badly polluted by ochre, an iron oxide that smothers the streambed and colours it bright orange. The project included the creation of a reedbed to treat ochre pollution. The reeds take up the ochre into their leaves and so the water that flows into the stream is clear. Stone cladding of the culvert headwalls improved their appearance and the provision of a new footpath and viewing platform added to the facilities. A new wildlife pond and marsh area was excavated to complement the existing fishing pond, and the planting of trees, rushes and wildflowers along the river corridor created new habitat areas. The local community and two schools were kept involved throughout; this included approximately 100 local school children assisting with the wildflower planting. Despite vandalism problems, both during and after the construction phase, the project has been judged a success. The new reedbed has visibly reduced the amount of ochre in the brook, the refurbished headwalls look far more attractive and are less obtrusive than the previous concrete structures, and the footpath is used extensively by the local community. Prescot Brook River Rehabilitation was the result of a partnership between the Agency, North West Water Limited and Knowsley Metropolitan Borough Council.



△ The Prescot Brook Interpretation board



# Southern Region

## Cridmore Bog Restoration

Cridmore Bog is a wetland Site of Special Scientific Interest (SSSI) close to the headwaters of the River Medina on the Isle of Wight (IoW). Following concerns over falling water levels, a project was undertaken to reinstate the bog's hydrological integrity and safeguard this SSSI's ecological interests. The work involved moving the River Medina back to its original course to enable bog and river water levels to be controlled independently. With the help of four small sluice structures, water levels in the bog can be raised, significantly reducing water loss. At the same time, improvements were made to the River Medina by reinstating in-channel features such as meanders, pools and riffles. New bank profiles were created to mimic natural physical features. A fixed sill was installed into the river to ensure that flood waters spill onto the bog before any damage occurs to adjacent arable land. This project was achieved through a partnership involving the landowner, English Nature, IoW County Council and the IoW Area of Outstanding Natural Beauty (AONB) Project. Interestingly, during excavations a series of late Neolithic or early bronze-age fire pits were uncovered. These were spotted by Agency staff, who invited the County Archaeologist to investigate. Further tests, including carbon dating, confirmed the pits are between 3,600 and 4,300 years old.

Restoring alignment of the River Medina ▷



◁ Sussex area manager, Peter Midgley (right) launches the Rother Valley Walks with Lord Renton (left) and Sir James Scott, chairman of the partner organisations



## Rother Valley Walks

To help promote enjoyment of the countryside and the use of public transport, the Agency worked with the Sussex Downs Conservation Board and the East Hampshire AONB to develop a series of river valley walks. The boundaries of the three organisations meet along the course of the River Rother. The partnership developed a series of 14 circular walks of between four and nine miles. Each starts and finishes either at a bus stop or train station and together run the length of the river. The walks often follow the river or cross on some of the old stone bridges but in places offer more distant views of the valley. A series of leaflets has been produced to show each walk. Walk 1 starts at Selbourne, the birthplace of Gilbert White, passing close to the source of the river. Walk 14 starts at the train station in Pulborough, following part of the disused railway track and on to the Swan Inn in Pulborough. The walks mostly use existing rights of way, but also use land within the Countryside Stewardship Scheme and some local access agreements with landowners. The partnership of the Downs Board, East Hants AONB and the Agency funded the production of the leaflets as well as works to make the route passable. The walks were launched with a trip on an open-top 1960s South Downs bus.



## Camber Sands Boardwalk

Camber Sands is an immensely popular beach resort on the East Sussex coast, attracting up to 20,000 visitors a day in the height of summer. The dune system at Camber acts as a sea defence, protecting the village of Camber from flooding. The site is also significant in terms of its nature conservation interest and is designated in part SSSI and Site of Importance for Nature Conservation (SINC). In the past, the popularity of the site with holidaymakers resulted in the creation of many informal paths across the dunes, causing severe erosion of the dune system. This project presented an opportunity to both improve visitor access and protect the dune system from further

damage. A series of new linked boardwalks provided better access to the beach and other facilities at the resort. Additional fencing was installed to protect the fragile dune system. One particular feature of the scheme is a roll-out section of boardwalk constructed from the latest vandal-proof recycled plastic. This allows easy access across the dunes for people with impaired mobility and families with young children in pushchairs. By directing visitors to specific paths across the dune system, other more fragile areas are protected from damage by users. The Agency's own Direct Works team carried out the improvements which were jointly funded with the Rye Bay Countryside Project and Rother District Council.



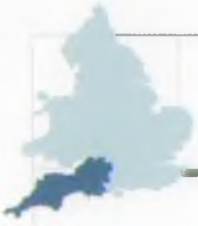
△ Access for all at Camber Sands



## Ouse Valley Project

The River Ouse is one of the largest Sussex rivers and flows through the valuable landscapes of the High Weald, Low Weald and South Downs. The aims of the project are to conserve and enhance the nature conservation, landscape and amenity value of the Ouse valley. By working closely with farmers, landowners and parish councils, the appointed project officer encourages and supports land management that helps landscape, wildlife, heritage and recreation use of the valley. With such projects, partnerships are often the key; in this case the Agency and Sussex Downs Conservation Board have ensured integration of policy and operation and succeeded in attracting addition funds from other organisations including Lewes District Council, English Sports Council, Countryside Commission, English Nature and East Sussex County Council.

△ Ouse Valley Project Officer, Jason Lavender



# South West Region

## ▽ A soft engineering approach to bank erosion



## Huntspill Management Plan

The Agency has a considerable landholding on eight kilometres of the River Huntspill in Somerset, in connection with its flood defence function. Much of the land is part of a national nature reserve. A management plan has been developed to enable the Agency to become an approved body to manage the nature reserve for conservation purposes, while enhancing its recreation use. Regrading the banks and planting with reeds and willow has repaired bank erosion problems on some sections of the river. As well as providing a soft engineering solution to the problem, these linear reed beds and bankside willows also provide sheltered areas for fish fry. In an effort to enhance the specific habitat needs of otters, an artificial holt has been included in the scheme. The adjacent grasslands are being managed to encourage a large population of the short-tailed field vole, which is the favoured food of the barn owl. The installation of owl boxes, with help from the Hawk and Owl Trust, has resulted in the successful raising of young barn owls. Access for canoeists during the angling close season has been agreed, resulting in increase in recreational use.



## Stour Valley Project

Several partners, including Dorset County Council, North Dorset District Council and the Dorset Wildlife Trust, have been working on a group of projects to improve access to and enhance the amenity value of the Stour valley. The Agency has contributed to the provision of footpaths, cycleways, a footbridge, tree planting and the construction of a lake at Stour Meadows in Blandford, which is a new amenity adjacent to a commercial area. Other contributions include the provision of interpretation boards throughout the valley, and an artificial otter holt at Sturminster Newton Riverside Meadows. Working with the local canoe club and school, a canoe access point has been provided at Blandford.

◁ Lazy, hazy days – summer on the Stour



## The Tamar Trail

The Tamar Valley Discovery Trail has been developed by a partnership between the Tamar Valley Countryside Service, Cornwall and Devon County Councils, several district councils, the Countryside Commission, various footpath groups and the Agency, with assistance from many other sources. The project has established a 30-mile trail through a designated Area of Outstanding Natural Beauty, which includes the Tamar and Tavy estuaries with their tidal mudflats and salt-marshes. The River Tamar is the boundary between Devon and Cornwall, and the trail crosses from side to side as it passes through the broad-leaved woodlands, which are an important feature of the valley. Also included are circular routes, which allow the visitor to explore some of the local villages. Environmental benefits include hedging, tree planting, orchard development and the production of farm conservation plans. Socio-economic benefits include the promotion of local produce and support for local transport. The path runs from Plymouth to Launceston, using existing public footpaths and new permissive paths.

△ Calstock Viaduct, an impressive backdrop to a section of the trail with Access negotiated by the agency



△ View of the estuary from the Tamar Trail

## Habitat Management Projects

Several projects were undertaken in the region to restore, protect and improve habitats by fencing and associated works. In the Yarty valley, in collaboration with the Somerset Wildlife Trust, spring-line mires at Yarty Moor, Jan Hobbs Nature Reserve and Bishopwood Meadows, have been protected by scrub clearance, fencing and hedge restoration that allows controlled grazing by cattle. As well as improved habitat, there are educational and recreational benefits as school parties and volunteer groups frequently use these areas. At Chudleigh Knighton Heath in South Devon, the Devon Wildlife Trust with support from the Agency, MAFF (via the Countryside Stewardship Scheme) and Teignbridge District Council, installed fencing on common land (which required DETR approval) to allow controlled cattle grazing. This is leading to a reversal from scrub back to wet heathland. A further benefit is improved public safety, with the cattle being denied access to the highways. Also in association with the Devon Wildlife Trust, the Agency has contributed to grazing management on the Culm grassland at Volehouse Moor Nature Reserve in North Devon. Similar work has been done in collaboration with Dartmoor National Park at several sites on Dartmoor. Scrub clearance and fencing schemes have been carried out to improve pasture habitat.

▽ Traditional hedging at Jan Hobbs Nature reserve





# Thames Region

## Berks, Bucks And Oxon water vole project

In order to arrest and reverse the drastic decline in the water vole population in the central part of Thames Region, the Agency initiated the Berks, Bucks and Oxon Water Vole Project. The Agency's funding partners were Thames Water and British Waterways and enabled a project officer to be appointed for three years. The task involves data gathering and some surveying across the three counties, in order to verify and map all recently recorded water vole sites. The officer will also advise the three funding partners on site-specific water vole conservation measures and habitat enhancements, aimed at preserving the remaining largely urbanised populations and encouraging their expansion back into rural areas. The project is being hosted by Berks, Bucks and Oxon Naturalist Trust, the Wildlife Trust for the three counties, following in the footsteps of the highly successful Upper Thames and Cherwell otter projects. This project has already attracted much publicity and volunteer support and will go a long way towards helping to implement the UK Species Action Plan for water voles in the region.



△ Lending a helping hand to water voles



◁ The final result with the old Abbey wall in the left of the picture

## The Cornmill Stream project

The Agency undertook a structural condition survey on Cornmill Stream at Waltham Abbey which is the site of a Scheduled Ancient Monument. The report concluded that engineering works were needed to ensure the stability and longevity of the retaining wall, structures and adjacent footpaths. As the watercourse forms the west boundary of the 14th-century Augustian Abbey, interest in the proposals escalated. Epping Forest District Council and Lee Valley Regional Park Authority contributed towards the project. The scheme benefits were upgrading an area of high recreational use and improving fishery management via new weir structures. The work

involved the reconstruction of retaining walls including a 14th-century flint wall, and an old weir was replaced with one of adjustable design. The public footpath was improved using existing materials wherever possible. During the work, the Museum of London Archaeology Service monitored the scheme and quantities of 13th-century pottery, some medieval and more recent artefacts, including peg tiles and a 19th-century sword were recovered.

## London Stone information panel

On the bank of the River Thames at Staines stands a historic landmark, The London Stone. It was erected in 1285 by The Corporation of London to mark its control of the river downstream to the estuary. In partnership with the Borough of Spelthorne, an information panel, advising visitors of the past history of the stone and its surroundings, was designed and commissioned. The background to the panel depicts a Lord Mayor ceremonially visiting the stone, and insert panels give details of the old Staines Bathing Club and Ashby Brewery, who used the stone as an emblem on their beer bottles. As the panel was to be permanently located out of doors in a public area, the design incorporated a number of features to help resist vandalism, as did the lectern on which it is mounted.



△ The London stone information panel at Staines

## Otmoor / RSPB wetland creation project

The Agency has embarked on a major collaborative project with the Royal Society for the Protection of Birds (RSPB) to create wetland habitat on land recently purchased by the Society at Otmoor, Oxfordshire. Otmoor was an extensive wetland on a clay basin, in the floodplain of the River Ray. Once common land, much of the area was enclosed under the Parliamentary Enclosures Act in the 1830s leading to the 'Otmoor riots'. Subsequent drainage schemes and agricultural improvements have radically changed the nature of the land. Parts of the Otmoor basin have been bunded out of the floodplain and pump-drained for arable agriculture, and it is one of these blocks of land (totalling about 106 hectares) which is being turned into wetland habitat to benefit a wide range of flora and fauna. The Agency has provided funding of more than £120,000 for the first phase of the works, with the RSPB providing £60,000 over and above land purchase costs. Our landscape, conservation and engineering staff produced designs in conjunction with the RSPB and managed the construction process, using the local firm that installed the original



△ Aerial view of the Otmoor Basin



pump-drainage scheme 25 years ago. The work entailed constructing half of the storage lagoon, which will be planted up as a reedbed, and includes internal mere and dyke features. The second half of the lagoon will be constructed in phase two as well as a number of features within the new wet grassland site. When completed, the storage lagoon will be used to top up the dykes and this in turn will maintain the desired amount of wet features creating breeding habitat for wading birds such as snipe, redshank and lapwing. In addition, it is hoped that the storage lagoon/reedbed will eventually attract rare breeding birds such as bittern and bearded tit. The site is adjacent to Otmoor SSSI, which comprises the last remaining area of valuable wetland habitat in the Otmoor basin. The scheme will therefore complement this site and consolidate Otmoor's role as the most important site for breeding waders in the Upper Thames catchment.

△ The New Lagoon takes shape



# Environment Agency Wales

## River Ogmore enhancement

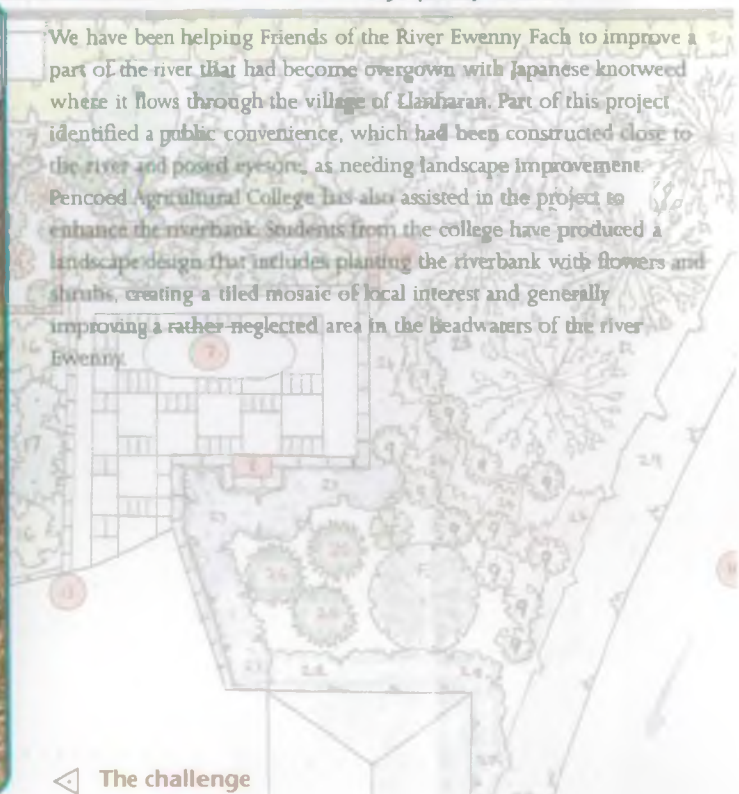
For several years, we have been trying to improve the River Ogmore. Extensive modifications to the riverbank and channel have had to be carried out to reduce the risk of flooding where the river flows through Bridgend. We have made significant progress over the past two years, in creating a more diverse river channel for local residents and visitors to the town centre as well as for the animals that depend on this river corridor. In collaboration with Bridgend County Borough Council and the Ogmore Angling Association, we have reinstated one weir and constructed three new weirs to create deeper water where migratory salmon and sea trout can rest. The weirs have been designed to enhance the river landscape and enrich this urban area with the sound of tumbling water. We have used specially designed slabs to camouflage unsightly sheet piles; these also provide cover for fish as well as resting areas for wildfowl.



The recently constructed weir at Bridgend ▶

## Llanharan community project

We have been helping Friends of the River Ewenny Fach to improve a part of the river that had become overgrown with Japanese knotweed where it flows through the village of Llanharan. Part of this project identified a public convenience, which had been constructed close to the river and posed eyesore, as needing landscape improvement. Pencoed Agricultural College has also assisted in the project to enhance the riverbank. Students from the college have produced a landscape design that includes planting the riverbank with flowers and shrubs, creating a tiled mosaic of local interest and generally improving a rather neglected area in the headwaters of the river Ewenny.



◀ The challenge

**New wetland habitat  
at Castle Meadows** ▷



## Lower Usk wetland creation

The final phase of a programme of habitat creation/restoration in the Usk catchment took place in the culmination of a two-year collaborative project at Castle Meadows, Abergavenny. New wetlands were created on the site in addition to tree management and the provision of recreational facilities. Tony Lewis, Chairman of the Wales Tourist Board, officially opened the site in May. The Agency also worked in partnership with the Llanover Estate, a major landowner in the Lower Usk Valley and the Countryside Council for Wales. A new wetland was created on the Estate and a wetland SSSI was restored through vegetation management. Financial and technical assistance was provided to the Gwent Wildlife Trust, which enabled completion of a feasibility study into creating a major wetland site on the Lower Usk.



**Tony Lewis, chairman of Wales Tourist Board opens  
the new wetland site at Abergavenny** ▷

**Construction of the new bridge at Tryweryn** ▽



## Signs and safety enhancements at Canolfan Tryweryn

The Environment Agency and Welsh Canoe Association are continuing to invest in safety for visitors to Canolfan Tryweryn, the white water and rafting centre near Bala in North Wales. A series of new initiatives includes the removal of a dangerous old pipe bridge structure that represented a considerable hazard to paddlers. Dangers of canoeists being drawn into the pipes has been eliminated and a single-span bridge has been erected in its place, resulting in a significant improvement to safety and a dramatic 30 per cent increase in the length of river available to canoeists. The Agency replaced competition judges' huts and hopes to further enhance the landscape with appropriate native tree planting next autumn. Site interpretation is being dramatically improved for visitors and locals alike, with the installation of new bilingual signs in Welsh and English. Signs were made in Gwynedd by local craftsmen in slate, and promote the partnership between the Environment Agency Wales and the Welsh Canoe Association.

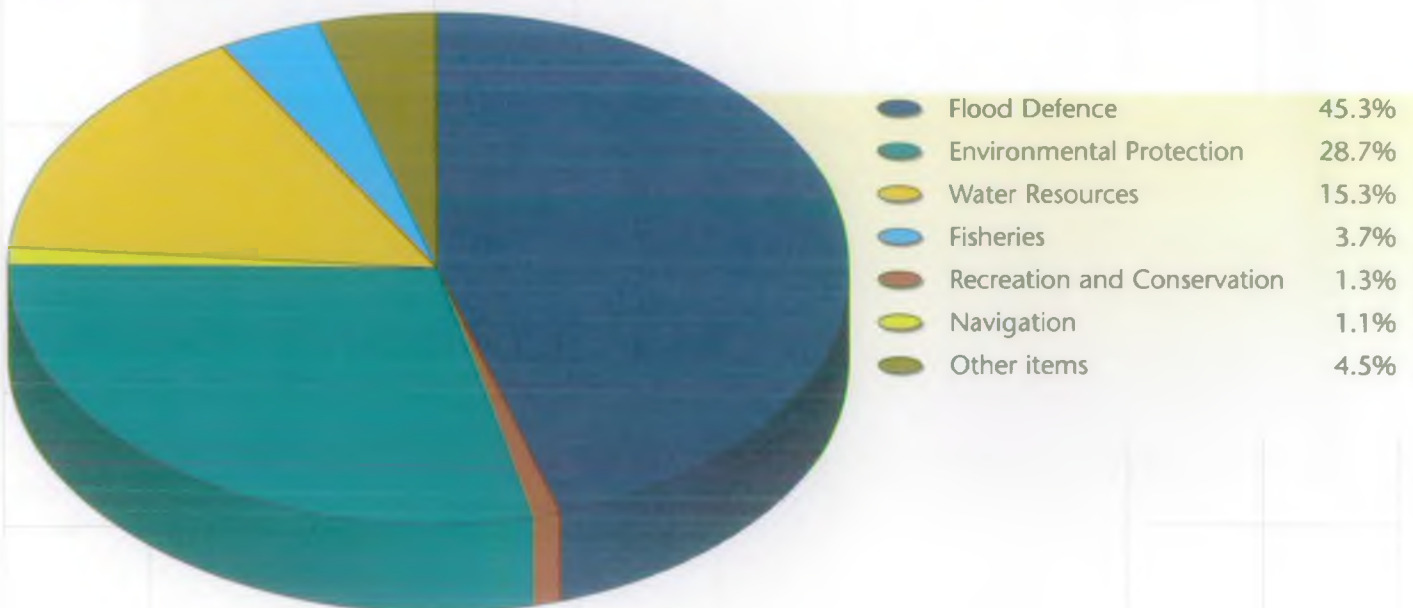
# Report Data

## Projects completed

The following indicates the number of Conservation and Recreation projects undertaken by each region and highlights those undertaken in collaboration with other organisations.

	No. of stand alone projects	No. of collaborative projects	Total number C&R projects
Anglian	30	62	92
North East	6	22	28
North West	7	14	21
Midlands	2	25	27
Southern	15	56	71
South West	8	14	22
Thames	35	43	78
Wales	6	39	45
<b>Total</b>	<b>109</b>	<b>275</b>	<b>384</b>

## Agency expenditure

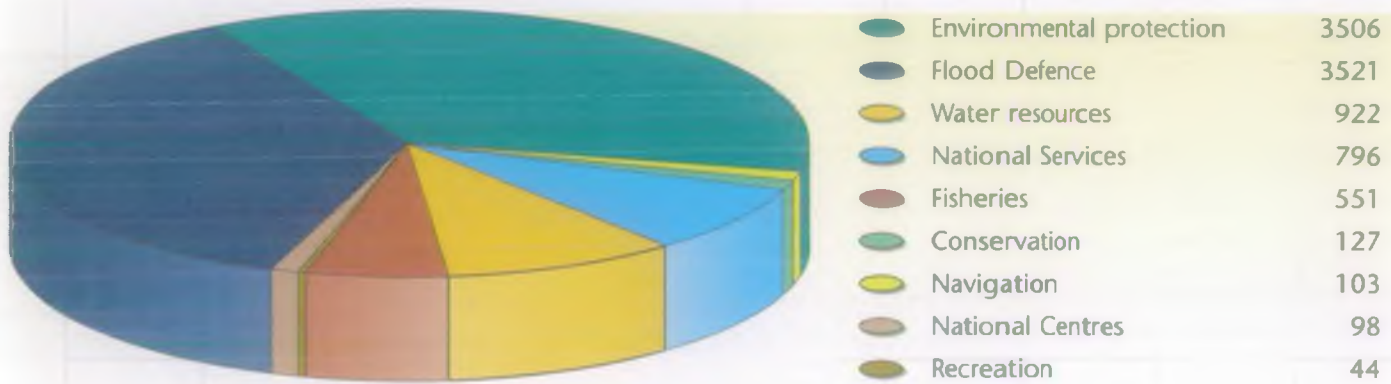






# Report Data

## Staff Levels



## Conservation Screenings

No. of planning applications, Agency consent applications and capital works screened for conservation and recreation implications plus completed River Habitat Survey Sites.

	Screened planning applications, Consents and capital works	No. of River Habitat Survey sites completed
Anglian	2,764	592
North East	2,659	2
North West	2,947	3
Midlands	4,220	131
Southern	2,131	300
South West	4,391	105
Thames	2,887	0
Wales	3,501	260
<b>Total</b>	<b>25,500</b>	<b>1,393</b>



# Site Information

## Agency Site Information

	Recreational Sites		Conservation Sites	
	In use	Future use	In use	Future use
Anglian	168	265	75	367
North East	44	3	35	2
North West	204	233	136	329
Midlands	19	12	24	7
Southern	71	82	35	35
South West	46	1	38	11
Thames	57	10	40	17
Wales	24	1	7	9
<b>Total</b>	<b>633</b>	<b>607</b>	<b>390</b>	<b>777</b>

## Number of Capital schemes incorporating conservation work

	CAPITAL WORKS incorporating Conservation
Anglian	11
North East	55
North West	23
Midlands	6
Southern	6
South West	33
Thames	6
Wales	23
<b>Total</b>	<b>163</b>



# Site Information

## Designations on Agency sites

National Trail	44
Regional Trail	23
Country Park	4
National Park	11
AONB	30
Heritage Coast	2
SSSI	128
SNCI	85
NNR	7
LNR	11
RSPB Reserve	2
Ramsar Site	29
County Trust Reserve	17
SPA	29
SAM	8
Listed Building	5
SSAI	6
SIHI	1

## Rights of way on Agency sites

Public footpath	400
Bridleway	43
Permissive path	116

## Number of Capital schemes incorporating conservation work

	Number of sites	Suitable for disabled
Footpaths	477	67
Car parks	71	14
Picnic	22	9
Information/visitor centre	8	4
Interpretation boards	45	22
Toilets	40	12
Viewing points	15	7
Playground	2	
Cycle trail	18	3
Campsite	13	1
Fishing lodge	1	
Fishing platform	238	42
Clubhouse	9	1
Nature trail	7	1
Bird hide	12	3
Boat hire	2	
Slipways	18	
Moorings	177	18



# Leaflets and Publications

produced by the Agency

## Head Office

### Conservation

River Habitats in England and Wales – River Habitat Survey,  
Report No. 1, March 1996  
A Guide to Identifying Freshwater Crayfish in Britain and Ireland  
Guidance for the Control of Invasive Plants near Watercourses  
Conservation Action Plan  
Phytophthora Disease of Alder  
River Life (from Source to Sea)  
Hormone Disruption in Wildlife  
Pond Heaven: Creating a pond  
Conservation, Access and Recreation Annual Report 1997/98

### Fisheries

Fisheries Management booklets:

- Water Plants
- Useful Information for Angling Clubs
- Stillwater Coarse Fisheries
- Fisheries Habitat Improvement
- Environments for Fish
- Desilting Stillwaters

Freshwater Fisheries & Wildlife Conservation  
National Rod Fishing Licences leaflet (1998 –1999)  
Catch and Release – a guide to careful salmon handling leaflet  
Fisheries Action Plan  
Buyer Beware Poached Salmon  
Anglers and the Agency

### Navigation

Navigation newsletter – River Views  
Navigation Function Action Plan  
The Environment Agency Navigations  
A Boaters Guide to navigation signs on Agency navigations

### Recreation

Have Fun, Have a Care – information for river canoeists  
Recreation Action Plan  
Conservation, Access and Recreation Annual Report 1997/98

## Anglian Region

### Fisheries

Fisheries Byelaws  
Your Complete Guide to Fishing in the Anglian Region – Rivers &  
Stillwaters (produced with Angling Times)  
Angle: A magazine for anglers

### Conservation

Conservation in Anglian Region  
East Anglian Salt Marshes  
Rivers Environmental Database System  
Coastal Wildlife Survey

## Recreation and Navigation

Waterways – A code of conduct  
Navigation in the Anglian Region  
Navigation – The Anglian Experience  
Map – Navigation in the Anglian Region

## North East Region

### Conservation

Understanding River Erosion – from a Conservation perspective

### Fisheries

Angling Guide for North East Region  
Catch – A magazine for anglers  
Fisheries Byelaws – North East Region

## North West Region

### Conservation

Sustainable Rivers  
Conservation in the North West  
River Valley Initiatives  
Conservation and Recreation Annual Report 1997

### Fisheries

Catch – A magazine for Anglers  
Fisheries Byelaws summary  
Fisheries in the North West  
Fisheries Annual Report 1997

## Midlands Region

### Conservation

Conservation work in the Midlands region

### Fisheries

A Guide to Rod Fishing Byelaws  
Fisheries News  
Fishing Guide – Midlands Region  
River Soar and Wreake Angling Guides

### Recreation

The Severn Way  
The Severn Bore and Trent Aegir 1998  
Recreation Sites – Midlands region  
Hafren Forest Walks

# Leaflets and Publications

produced by the Agency

## Southern Region

### Conservation

New Life for Hermitage Stream  
Green link

### Fisheries

News Reel for Anglers newspaper  
Fisheries information leaflets – 19 various subjects

### Recreation and Navigation

Guide to the Medway Navigation  
The Medway Navigation  
Harbour of Rye  
Guide to the Harbour of Rye  
Rivers of the New Forest  
River Hamble fact file  
River Arun fact tile

## South West Region

### Conservation

Safeguarding Somerset Levels and the Moors  
Preventing the spread of crayfish plague in the South West

### Fisheries

Angling Guide – Get Hooked  
The Hampshire Avon – Safeguarding the future of your fishery  
The River Tone and the Riverside Development (Hankeridge Farm)  
Hurn Weir Fish Pass

### Recreation

The By Brook

## Thames Region

### Conservation

Pinkhill Meadows Nature Reserve  
Invertebrate Animals of the Tidal Thames  
River Ash Enhancement Project

### Fisheries

Fisheries Byelaws 1998

### Navigation

A User's Guide to the River Thames  
Cruising on the River Thames – A Boating Guide  
Locks and Weirs on the River Thames – how do they work?  
Narrowboats on the Thames – useful Hints and Tips  
Thames Navigation Byelaws  
The Thames Navigation General and Licensing  
Byelaws – An Introduction  
The Royal River Thames  
Thames Region Fact File – Navigation

### Recreation

Beane Valley Walk  
Ver Valley Walk

Hill's Meadow Riverside Trail

Thames Down Link

England's River: the attractions

England's River: the sporting and leisure life of the River

Camping beside the River Thames

A guide to the River Thames, Lock and Weir Fishing

Thames Region Fact File – Recreation

## Environment Agency Wales

### Conservation

Freshwater Fisheries and Wildlife Conservation – a good practice guide (with CCW and English Nature)

Allis and Twaite Shad – A conservation message

Tryweryn Otter Trail

### Fisheries

Glas-Y-Dorlan (regional fisheries magazine)

Environment Agency Salmon and Trout Catch Statistics (1997)

Catch and Release – A Guide to Careful Salmon Handling

Rod Fishing Byelaws – A Guide to Anglers

Angling Guide for the Rivers Dee and Clwyd 1996 – 1997

Maerdy Salmon Hatchery

Stocking of Trout Waters – guidelines for angling clubs and fisheries owners

Freshwater Fisheries and Wildlife Conservation guidelines

Fisheries Habitat Improvement (series of 6 booklets)

Fishing Wales – produced in collaboration with Wales Tourist Board

Welsh Coarse Fish Strategy – Implementation Plan

### Recreation

Canoeists guide to the River Wye

Calendar of major events on the River Wye, 1998

## MANAGEMENT AND CONTACTS:

The Environment Agency delivers a service to its customers, with the emphasis on authority and accountability at the most local level possible. It aims to be cost-effective and efficient and to offer the best service and value for money.

Head Office is responsible for overall policy and relationships with national bodies including Government.

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Fax: 0118 950 0388

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Fax: 01222 798 555



For general enquiries please call your local Environment Agency office. If you are unsure who to contact, or which is your local office, please call our general enquiry line.

**ENVIRONMENT AGENCY  
GENERAL ENQUIRY LINE  
0645 333 111**

The 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water.

**ENVIRONMENT AGENCY  
EMERGENCY HOTLINE  
0800 80 70 60**



**ENVIRONMENT  
AGENCY**