



Conservation



Access



Recreation

*Annual
Report
1994-95*



NRA

National Rivers Authority

**Guardians of
the Water Environment**



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Designed and produced by RPG Advertising Limited.

Printed by Cotswold Printing Company.

Introduction

This report records our recreation and conservation activities during 1994/1995. We have produced this report following the Code of Practice on Conservation, Access and Recreation, under Section 18 of the Water Resources Act 1991 and taking account of guidance notes from the Department of the Environment (DoE) Standing Committee.

We carry out a large number of projects every year on our own or with different organisations. We cannot describe all of these projects in any detail, so we have chosen some good examples of the type of work we do.

We also provide information about the number of our sites and how we use these for conservation or recreation. We provide this information from a site database which has been developed over the last two years. We will have reviewed all our sites by the beginning of 1996-1997.

We have also included some work done by our Fisheries and Navigation departments.

You will find a list of publications at the back of this report. You can get strategy documents, annual reports and corporate plans, which provide more detail about the full range of our activities, from the Head Office address shown at the back of this report.



More than 34 national ideas and projects, including research and development, involved working with English Nature in 1994-1995. Other important partners include the Wildlife Trusts, RSPB, National Trust and the Countryside Commission.

We also started 279 conservation projects with other organisations.

A handwritten signature in dark ink, which appears to read 'Kevin Bond'.

KEVIN BOND – *Chief Executive*
National Rivers Authority



ENVIRONMENT AGENCY



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Recreation summary

During the year, we have built on the results of our 1993 policy review. We have produced advice and guidance that has helped to develop the skills of staff who work in recreation. We tested out a training course and this has led to a wider range of training opportunities for 1995-1996.

We used our database of recreation sites throughout the year. We will update this information every year and use it to guide policy development and the site management programmes.

Our work has to deal with many interests including flood defence, conservation and recreation. We have produced a site management plan methodology which looks at these different interests. This will be introduced with a training programme in 1995.

We produced a recreation facility design manual and offered training for recreation staff. The manual collected details of the type of riverside and instream facilities we provide on our sites or with other organisations. It will also help provide answers to planning applications or requests for advice from clubs, landowners or the general public. The manual provides a wide-ranging and easy-to-use guide for design, costs, maintenance and how to develop our sites. Our staff have welcomed this and we are using it throughout the organisation.

We revised our highly successful NRA leaflet for canoeists and we created a campaign aimed at new canoeists with the full support of the British Canoe Union (BCU) and the Welsh Canoeing Association (WCA). The leaflet is targeted at the 15 to 25 age range and we produced a tear-off card and poster. This campaign was launched in May 1995 and will provide information about access, environment and safety. It is designed to encourage people to use rivers carefully.

We continue to support the Countryside Recreation Network (CRN). This provides a way of exchanging information and research and discussing policy. We and the Countryside Recreation Network began to investigate visitor safety in the countryside. This has led us to plan a series of workshops and seminars involving overseas experts.

We are keen to encourage good relations between the different people who use rivers for recreation. In March 1995 we reformed the Angling and Canoeing Liaison Group. The group was chaired by John Wheatley, a member of the NRA board. The group discussed access to rivers and agreed that they should continue to meet, with us chairing the meetings.

The amount of conservation and recreation information for catchment management plans continued to develop. And we have developed a checklist to help conservation and recreation staff. We have produced 41 catchment plans up to now.

Conservation summary

We are developing a classification system for rivers using the River Habitat Survey (RHS) and we have finalised the field methodology. The RHS has provided us with a national computer database, a scheme for putting different river types together in groups and a way of classifying site quality. These have been produced using information from more than 1,500 reference sites throughout England and Wales. We surveyed these sites with the help of the Institute of Freshwater Ecology. We will be surveying an extra 3,000 sites in 1995 and 1996.

We are now working with the River Purification Boards in Scotland and colleagues in Northern Ireland to provide a truly national scheme. Snowdonia National Park has already used RHS to assess hydro-power proposals on small upland streams. We plan to produce a list of river features based on the national database in early 1996.

Conservation staff provide a technical check of what we do. And we have to make sure our quality checking is consistent. We have produced an environmental assessment checklist for more than 60 types of development. This will provide consistency and clear guidance for developers who need to know what effects their plans may have. We will send guidance to organisations before we publish it in early 1996 so they can add any comments.

We reviewed our archaeological responsibilities in 1993-1994 and produced guidelines on archaeology. These guidelines include:

- our duties;
- procedures for consulting other organisations;
- guidelines for our activities;
- a draft brief for field archaeological services;
- and guidance on using the archaeological databases.

We have promoted this document within our own organisation and included it in the 1995 Conservation Directory. It also provides the detail we need for the archaeological part of our environmental appraisal.

A report from our research and development programme has pointed out, from more than 1,000 freshwater plants and animals a short-list of 76 species of special importance to the NRA. This includes rare species and species which cause problems.

We will include several of these species in the UK Biodiversity Action Plan. We are represented on the Biodiversity Action Plan Steering Group and provide information on species and habitat action plans. For example, we are working with the Countryside Council for Wales and English Nature to produce a management strategy for allis and twaite shad. These are two types of rare fish.

The common alder tree is under attack from a fungal disease. This tree is important to streams and rivers in many areas of the country. We are working with the Forestry Authority, by carrying out surveys to assess how many trees have this



RSPB

**In 1994-1995
conservation staff looked
into more than 9,000
applications for land
drainage, fisheries, discharge
and abstraction purposes.**

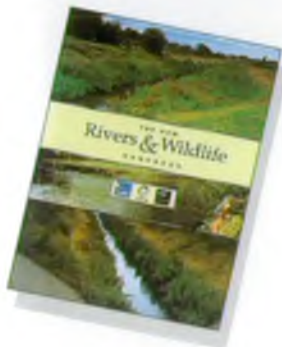


Common Alder
Alnus glutinosa(L)

We received conservation advice on all of our projects needing an environmental statement. We finished 438 new capital works during the year including improvements to conservation.



RSPB



Conservation staff looked at almost 9,000 planning applications.

disease. We have also produced a publicity leaflet. The effects of the disease, which affect the roots of alders, could ruin the landscape and also cause serious problems for river banks. We think that up to 20,000 trees may be affected in central and southern Britain. And certain areas in south east Wales have been badly affected.

Several foreign types of plant have been introduced into Britain and these have now grown up along river banks. These include giant hogweed, Japanese knotweed and Himalayan balsam. The sap of giant hogweed can produce severe blisters on the skin. Each spreads rapidly along rivers and can push out British plant species. In September 1994 we published a small booklet for spotting these plants which gives advice on how to deal with them.

Cormorants and other fish-eating birds are continuing to create intensive media coverage. We are pleased that the licensing authorities have taken up recommendations from our research and development report *Fish-eating birds: assessing their impact on freshwater fisheries* published in 1994. We are now continuing a £1 million multi-project research and development programme led by the Ministry of Agriculture, Fisheries and Food (MAFF) and the Department of the Environment (DoE) and we will be represented on the steering group.

In June 1994, Sir David Attenborough launched *The New Rivers and Wildlife Handbook*. This is a joint publication between ourselves, RSPB and the Wildlife Trusts. Demand for this handbook, which is known as the river engineers' bible is high and it is now being reprinted.

We are continuing to do background work on classifying and managing wetlands. The research and development department have finished a project on wetland classification carried out during 1994-1995. We helped to write the guidelines on water level management plans published by the Ministry of Agriculture, Fisheries and Food (MAFF). Each of our regions will prepare plans as part of a four-year programme. We will give priority to wetland Sites of Special Scientific Interest (SSSIs).

In 1994 regulations for implementing the European Union Habitats Directive were confirmed. This was the most important conservation legislation since the Wildlife & Countryside Act was passed in 1981. This will have major effects on our activities. And after talking with English Nature, Department of the Environment and the Ministry of Agriculture, Fisheries and Food we produced guidance notes for our staff. In March 1995, the Government published a list of candidate sites for Special Areas of Conservation (SACs) which included areas we either partly own or have an interest in. We have a major responsibility for helping to protect river, wetland and some coastal SACs from 1998 onwards.

Navigation

We manage over 800 kilometres of inland river navigations with approximately 40,000 boat registrations which involve over 550,000 people.

In 1994-1995 Anglian Region did a survey of all its registered boat-owners to find out what they needed. This survey will help to provide facilities on the region's waterways.

John Wheatley, (NRA Board Member) chaired a meeting with representatives from national user and trade organisations. This national navigation users forum will now meet regularly and will be an important way of consulting and involving those who use our navigations.

In 1994 we proposed a detailed review of navigation finances. During the year this review became an in-depth analysis of all aspects of our finance and activities. We have now carried out most of this review.

We run separate boat registration and licensing schemes on each of our regional navigations. This creates a number of problems such as differences in charging periods and types of boats. Investigations during 1994-1995 revealed that if we made more than minor changes to improve the service or develop a more efficient administrative system it would mean changes to navigation legislation. We have developed a scheme on which a consultation will be based in 1995. We will use this to develop any proposals before seeking changes to legislation.

In February 1995, the Department of the Environment published a consultation paper on our navigation responsibilities and British Waterways responsibilities. This continued a review which began in 1991. Our response was based on advice from Regional Rivers Advisory Committees and approved by our Board in June 1995 before we presented it to the Department of the Environment.

The Water Resources Act 1991 provides us with byelaw-making powers over navigations which are not controlled by any other organisation. In 1993 a jointly-funded three-year project recommended that we should use these powers on the River Wye (Welsh Region), so we could control the use of the river for the future. We were supported by a range of local authorities and organisations when we advertised a speed limit byelaw in 1994. Since that time attempts have been by other parties to re-enact legislation which could allow weirs and locks to be built on the River Wye. If this happened it would change the river and would affect all of our activities. Various pools, riffles and rapids that make this river so important to canoeists, fishermen and wildlife would disappear. We are now thinking about adopting navigation authority responsibilities in order to ensure the balanced use of the river.

During the year, we and British Waterways continued to develop our joint working relationship. In June 1994 we arranged a highly successful seminar for all inland navigation authorities and more than 40 delegates were there. This was the first time a seminar had been arranged and the Minister for the Environment, Robert Atkins MP gave his approval. A similar event is planned for 1995.



10.5 million people visit our navigations to walk, ramble and sightsee. Lock sites are especially popular.



At a joint NRA and British Waterways boat show stand at Earls Court in January we announced a new cashless payment system for navigation facilities. We are now introducing the system by replacing old coin-operated systems. This new system could be the basis of an industry standard.

We shared resources and experience with British Waterways on two research projects. The first project was market research to find out levels of safety awareness amongst users. We tried to find the best way of getting safety messages across. Alongside this work we got the support of the Royal Yachting Association (RYA) to develop a boat-handling course for inland waterways. The public will be able to take this course in 1995.

We started a research project to look into why people go boating. We looked especially at the effect any increase in licence charges would have on people going boating. We are now using this information in a promotional campaign to encourage new people to go boating. We will need more detailed and original market research to develop a better understanding of how the price of boating affects who will go.

We also developed training modules for boat safety standards and the scheme will start in 1998.



Fisheries

In March 1994 we introduced two-tier licensing. This is made up of a trout and coarse fish licence and a salmon and sea trout licence which is valid for all types of fish. Before we introduced the two-tier licence we got the views of people from organisations and our own advisory committees. We also introduced two new short-term licences, an eight-day and a one-day licence.

In 1994-1995 17,000 post offices in England and Wales sold rod licences. As well as this, about 300 bankside outlets still sell them. Our National Rod Licence Administration Centre in Warrington looked after the administration of all licence agents. We also produced a leaflet giving anglers information on what their licence money pays for. This leaflet is given out by the post office when an angler buys a rod licence.

We continued our review of net licensing in 1994-1995 with a discussion paper in October 1994 called "*Net Licences for Migratory Salmonids – Options for Future Structure and Duties*". We sent the document to a wide range of people and organisations who are interested in salmon and sea trout. We asked for people's comments by 31 January 1995 and produced a paper which we presented to the Regional Fisheries Advisory Committees in March 1995.

The results of a research and development project *The Socio-economic Review of Angling* were published in February 1995. We produced a report, *National Angling Survey 1994* from this research which summarised the main points. The research showed that there are 2.9 million anglers (sea and freshwater) aged 12 and over in England and Wales. It also showed that at least 13% of freshwater anglers fished without a rod licence.

The survey also asked for anglers' views on how we could make more people buy a licence including anglers having to display their licences when they are fishing. The survey showed that 65% of freshwater anglers thought that displaying licences would stop people fishing without one.

We carried out a review of the coarse fish close season in 1993-1994. We sent out our proposals in June 1994 along with our reasons for changing the byelaws. We advertised these changes in the national and angling press and we received objections to the byelaws up to the end of October 1994. We sent our proposals to Ministry of Agriculture, Fisheries and Food and the Welsh Office in December 1995, and on 13 March 1995 the byelaws were confirmed. These byelaws introduced a close season from 15 March to 15 June on all rivers and streams. They got rid of the statutory close season on all lakes, ponds, and reservoirs (except in the Norfolk Broads and certain Sites of Special Scientific Interest (SSSI)) and left the season the same for canals.

During 1994 we stocked about 5.9 million salmonid and 1.2 million coarse fish into rivers throughout England and Wales. Most of these were for rivers where we are doing work and improvements. You will find an example of this is in this report under "River rehabilitation schemes".

We published our yearly publication *Salmonid and Freshwater Statistics for England and Wales 1993* during 1994-1995.



During the year, we checked over 237,000 rod licences. We prosecuted 5,057 people for licence offences. 4,668 of these were successful and resulted in fines of about £182,000 which went towards covering the legal costs of these prosecutions. In a number of cases people were sent to prison. 991 more prosecutions were made for byelaw and other offences and 933 were successful, resulting in fines of over £42,000.

We did fisheries surveys over 9,000km of river.

We have made over 200 fishery habitat improvements this year, including the building of over 50 fish passes and screens.



River rehabilitation

A number of rivers in England and Wales have been too polluted for anything to live in them in the past. These rivers also face pressure from other areas such as new developments in industry, housing and agriculture. Parts of most rivers have also been straightened to act as flood channels, so they do not provide good habitats for wildlife. Since we began in 1989, we have done a lot of work to improve the water quality in these rivers. Now there are a large number of rivers which can support fish and other wildlife.

During 1994-1995 we started a number of restoration or rehabilitation projects to improve the habitat and landscape of rivers and educate the public. This work benefits the local community so everyone can enjoy using the river.

We have chosen three projects to describe the type of work we do together with other organisations who have a role to play in managing rivers.

RIVER ROTHER ENVIRONMENTAL IMPROVEMENT SCHEME

The River Rother is in the middle of the southern Yorkshire area of our Northumbria and Yorkshire Region. In the past, the Rother has hit the headlines as being the dirtiest river in Europe. This is caused by very poor water quality and a lack of important habitat for wildlife. During the period from 1978 to 1981 the river was straightened and diverted. This meant it had hardly any natural habitat features.



Recently the water quality in the river has recovered and we have chosen a section to work on in the Rother Valley Country Park. This land is one of the largest areas of reclaimed industrial land used for recreational purposes in Europe. Obviously if we improved this section it would benefit a large section of the local community.



We introduced new features into the channel such as weirs, bays and off-channel pools. And we changed the river corridor habitats in general. By developing these features, it will encourage more fish in the river and provide better fishing for local anglers. It will also improve walking by the river and bird watching.



We began work in January 1994 with Rotherham Borough Council. The first phase of the work involved creating large bay areas to provide off-channel fish refuges. These are areas where fish can go when the river is running very high or if it is polluted. To help the recovering fish population we released 2500 roach and 2500 chub into the river. These were believed to be the first fish to live in this section of the River Rother for over a century.

We also built a lumpstone weir which increases the amount of air in the water and makes the river run faster in this slow-moving section. This has also helped remove layers of built-up sediment, leaving gravel beds, which will provide spawning areas for fish.

Phase two involved creating a backwater area which was separated from the river by an island. This will help provide quiet areas for fish to spawn in and young fish to develop. This area will also improve conditions for nesting and feeding waterbirds.

We are already seeing the benefits from this work. The fish population is thriving. A range of waterbirds have been seen and swifts, martins and swallows are feeding over the shallow water below the weir.

We have spent about £60,000 on installing new features. And about 50 hours of conservation staff time were involved. A third stage, which we are planning at the moment will involve improvements to the river channel and wetland habitats. We will do this with Yorkshire Wildlife Trust.

RIVER FROME RESTORATION PROJECT

A recent study revealed that the River Frome which drains land in and to the north of Bristol, has suffered from the pressures of new developments, agriculture, industry and changes in bankside management. This has meant the water quality is poorer and wildlife has suffered.

The River Frome restoration project is a new project in which many organisations have acted together to improve the quality of this river environment.

We chair the River Frome liaison group. The other members of this group are North Avon District Council, Kingswood District Council, Avon County Council, Bristol City Council, the Community Forest Team and the Wildlife Trust for Bristol, Bath and Avon.

We carry out work from an action plan, which we have produced and funded. So far, work has been done by North Avon District Council. This includes developing and putting up signs for the Frome Valley Walkway and the building of a reedbed alongside the river.

We have also installed boulder weirs, created bays, planted trees and installed interpretation boards along the Frome Valley Walkway. And we have reached an agreement with a landowner on taking less water from the river to maintain the river flow.

We and Avon County Council have installed a dipping platform for local schoolchildren to use.

The action plan also include Bristol City Council's plans to repair three miles of riverside footpath. And North Avon District Council aims to develop the Frome Valley Walkway. We will help negotiate with local landowners.

We have given £50,000 to this project with similar amounts being raised by the other organisations. We have produced a leaflet explaining the project and there has been a lot of publicity and positive support from the local community for the scheme.



RIVER ALT REHABILITATION PROJECT

The River Alt runs from the urban areas of north Liverpool, through Knowsley Borough, the more country areas of Sefton and into the Irish Sea. The river suffers from poor water quality and a straight channel with few natural habitat features. At first this project considered a range of possible sites over the whole of the catchment. St. Helens Groundwork Trust did a feasibility study on 15 sites. From this study we realised there were two schemes which needed more work. The cost of one scheme was £150,000. To encourage other organisations and local groups to carry out work on the river we set aside £50,000 for grant-aid projects.

This project is linked to the Alt 2000 Campaign which is an organisation representing voluntary groups, local authorities and ourselves. It is dedicated to improving the environment of the River Alt.

One of the schemes involved deculverting 200 metres of the River Alt situated in public open space in Liverpool. The land is owned by Liverpool City Council. In the first 8 kilometres of its length, about a quarter is culverted. A lot of this river is next to housing or in areas about to be developed. This project was designed to make a more even balance.

We created a new channel made up of meanders, wet ledges, an island and stone weirs. And we also planted a lot of trees. We planted areas with a wild grass and flower seed mix. This will provide extra wildlife habitats in a city area. We have also provided three benches so people can appreciate the scenery. And the work may also create improvements in water quality and flood defence.

We set aside £50,000 to encourage volunteer groups and the local community to come up with small projects that will benefit the river environment. We sent out information on the grant aid scheme to voluntary environmental groups, local authorities, the Groundwork Trust and Alt 2000. We encouraged people to apply. From these applications we received a number of projects which we have chosen to give grants to. The following are examples of these projects.

British Trust for Conservation Volunteers (BTCV) created a reed bed and board walk in derelict land next to Fazakerly Brook. The work included planting shrubs and wild flowers to attract butterflies and other insects. The public can also visit the site. At another site they have improved the habitat value of the River Alt by planting trees, grasses and wetland plants. We have also created a footpath which will improve access for the public. BTCV also started two other projects which involved planting riverside plants and creating footpaths.

Knowsley Metropolitan Borough Council provided some of the funding to landscape the sub station at Lordens Road and create a mural. The funding went towards planting shrubs and putting up railing.

Knowsley Ranger Service improved access for disabled visitors and created better footpaths to allow more people to go to a wetland area.



The City of Liverpool Environmental Services created a nature trail next to the River Alt in Croxteth Country Park. They also provided some of the funding to repair an old ice house.

St Helens Groundwork Trust have improved an old wetland area for wildlife. Their project will include wetland and woodland planting, creating scrapes, water control structures and new footpaths.





Managing wetlands

Wetlands are facing more and more pressures from agricultural drainage. This type of habitat is very important for nature conservation and provides habitat for many plants and animals. These plants and animals are often red data book species.

The best way to manage wetlands and carry out improvements is to work with other organisations. The following three projects highlight the work needed to restore wetlands and how to do this by working in partnerships.

ANGLESEY WETLANDS STRATEGY

In 1993 a Royal Society for the Protection of Birds (RSPB) study highlighted the damage that had been done and was still happening to a number of wetlands on the Welsh island of Anglesey. This study showed that a lot of reedbeds had disappeared in the last ten years. It also showed evidence of severe pollution problems in several shallow lakes. Wetlands are one of the most important natural features of Anglesey. However because they have got smaller Anglesey has lost the bittern as a breeding bird.

In 1993 we, the RSPB and the Countryside Council for Wales (CCW) set up the Anglesey Wetlands Strategy. This was a partnership to save the wetlands in Anglesey. Since 1993 the project has been joined by the Agricultural Development and Advisory Service (ADAS), Farmers Union of Wales and the North Wales Wildlife Trust. We have spent around £120,000 on the project.

We have made a lot of progress in saving wetlands at the following sites.



We are also continuing to explore ways of using aeroplanes to provide an overview of both coastal and river corridor habitats.

We carried out around 650 kilometres of this kind of survey during the year.

MALLTRAETH MARSH SSSI

The RSPB bought a 150 hectare site of grassland after a study of the surrounding land was done by us and the CCW. We paid for a series of bunds and sluices which allowed water to be held on the site to allow new reedbeds to grow. We are also doing experimental work to look at the best way of establishing reedbeds.

CORS ERDDREINIOG SSSI, NATIONAL NATURE RESERVE

We designed and funded the building of a large concrete sluice across the river. This sluice was designed to raise water levels across a large area of fen damaged by previous drainage.

PLAS BOG, FORMER SSSI

We designed and funded surveys to see if we could restore and expand reedbeds within the floodplain. Because river bed levels have been reduced the area does not flood as much. The RSPB bought the land, and plant and water management is planned for next year.

CORS Y BOL MIRE

This used to be the largest acidic mire on Anglesey but it was drowned by the creation of Llyn Alaw. Our staff recognised the possibility of restoring it during a routine river corridor survey. We talked to landowners and they were interested in a restoration project. We used a large hydraulic excavator floating on willow branches to get rid of vegetation and surface peat. This was so we could re-create reedbeds. Depending on funding, we will restore more reedbeds and mires next year.

AFON CEFNI

Within the Malltraeth Marsh SSSI, the main watercourse, the Afon Cefni, was canalised last century with parts of the original river staying as meander segments. We have spent two years de-silting 2.5 kilometres of river bed to restore all the river plants, invertebrates and birds.

LLYN GARREG LWYD SSSI

This is Anglesey's largest surviving reedbed (30 hectares). We employed a specialist contractor to use a 'Glencoe amphibious vehicle' to cross the reedbed to remove willow cut down by a chainsaw gang. Although there is no threat from scrub encroachment, we have planned to return with the vehicle to cut ditches through the reeds. These ditches are vital for breeding bittern.

The Anglesey Wetlands Strategy is a good example of how a project allows organisations to provide funding, exchange information and build up experience.

NARBOROUGH BOG

Narborough Bog is the largest natural reedbed in Leicestershire and was in danger of drying out. Birds that used to breed on the site such as sedge and reed warblers were no longer doing so and wetland plants were changing, with dry-land species taking over the site. A number of reasons have added to this change. The most important reason was that a feeder stream was diverted away from the bog.

The site runs alongside the River Soar and supports many species of wildlife including the plant meadow rue and birds such as reed bunting, willow warbler and sparrowhawk. The peat on the bottom of the reedbed is at least 6,000 years old. This interesting mixture has led to the site being designated as a Site of Special Scientific Interest. The site is owned by the Leicestershire and Rutland Trust for Nature Conservation and is managed as a nature reserve. Because the site is close to the City of Leicester, it is extremely popular with local wildlife enthusiasts.

We changed the direction of the old feeder stream by re-cutting its route back into the bog. The extra water flowing into the site will give the bog and its wildlife new life. We spent £10,000 on the work done on the feeder stream. We will carry on working on the site during 1995-1996.



RSPB



RSPB



Developing watersports

During 1994-1995 we helped many different watersports in the development of their activity. We have chosen canoeing as a watersport we have assisted. We have outlined two projects. The first project shows how we can help as a land owner and the second shows how working with other organisations produces a successful result.

CANOLFAN TRYWERYN

We own the land on which Canolfan Tryweryn, the National White Water Centre is based, on the Afon Tryweryn near Bala within the Snowdonia National Park. The site is a mixture of woodland and river. Canoeing and rafting take place on the upper part of the river.

This site hosted the 1994 World Cup finals for wild water racing and it is one of the major canoeing sites in Europe. It is also one of a few permanent slalom sites anywhere in the world.

The site is managed for us by the Welsh Canoeing Association. It is successful because of its position below Llyn Celyn dam, a reservoir which forms part of the Dee regulation system. We can regulate the flow and releases from the reservoir to help make the course ideal for white water events.



Over the last few years we have done work on the site to prepare for the 1994 World Cup and also for the 1995 World White Water Racing Championships. The work we have funded, designed and carried out has involved hydraulic excavators to 'tweak' the channel to make it reach world-class levels. We have moved river boulders to cope with problems of the bank wearing away caused by high water flows. This will protect footpaths and spectators. We have built platforms for spectators and TV and improved access for emergency vehicles.



Our staff have also been trying to deal with the needs of wildlife and recreation needs. We have made a trail from a footpath running along the river and returning along the former Great Western railway track. This path is called the Otter trail. The path includes information signs, waymarkers, picnic tables and a supporting trail guide.

This work has involved improving the footpath. As a final touch we built a new bridge across the river to finish the trail. The information boards and leaflet are mainly about otters, migratory fish, river ecosystems, woodlands, plants and the railway. This project cost us £8,000.

We have also contributed £10,000 towards the cost of access for people with disabilities and landscaping the new centre building at Canolfan Tryweryn.

STONE CANOE SLALOM

In a project costing £25,000 we, Stafford and Stone Canoe Club, Stone Town Council and a private landowner have revamped an old canoe slalom course on the River Trent at Stone. The course has a long history and still hosts national slalom events throughout the season.

The project included rebuilding of groynes using blockstone to create eddies and areas of faster water. Access and egress points for the course wore away so these were rebuilt using natural sandstone to tie in with the materials of a nearby bridge which is also a listed structure. We have provided stone steps at three points along the course. We have terraced the main river entrance area below the bridge and landscaped it to allow easy access for beginners. We installed new stanchions to support the slalom gate. And we resurfaced footpaths and planted native trees and shrubs.

We have bought a canadian canoe, which carries our logo, and newcomers especially local children can use it to learn to canoe. We will also use new start and finish banners, carrying our logo, at all future events.





Community-based river projects

We support a number of river-based projects with a large number of organisations who are interested in the river environment. These projects mix recreation and conservation with managing rivers and encouraging local communities to become part of the project. One of the best known and most successful projects is the Medway River Project. This project demonstrates how successful community involvement can be.

MEDWAY RIVER PROJECT

The Medway River Project is a partnership approach to managing rivers, based on 52 kilometres of river in the heart of Kent.

This was set up in March 1988 funded by ourselves, Kent County, Maidstone Borough and Tonbridge and Malling Borough Councils and the Countryside Commission. It originally dealt with the 33 kilometre Medway navigation. In April 1994 the City of Rochester joined, and the project area now includes 19 kilometres of tidal river. Local industry and landowners also fund the project through sponsorship and management agreements.

The project aims to manage and improve the landscape and wildlife of the Medway valley, from Tonbridge to Rochester by encouraging community awareness and action. During 1994-1995 volunteers from 28 community groups took part in 152 activities, giving a total of 1,630 days of action for the river environment.

These activities included the following.

Using natural materials and traditional techniques to restore and protect the riverside path by creating riverine habitats. The project has gained a national reputation for the success and size of its work in this area.

Litter wardens (volunteers from the local community) made 133 visits to the riverside path and removed 243 bags of rubbish. We have taken on six extra wardens to cover the project area and the volunteers have won their third Queen Mother's Birthday Award from the Tidy Britain Group.

Yalding Fen Educational Nature Reserve was opened to schools in May 1991. It recently greeted its 1000th pupil. Zeneca agrochemicals help manage the reserve with the Kent Trust.

During 1994 over 400 pupils from 13 schools made 15 visits to the reserve. All schools receive a free copy of the teacher's pack, and volunteer wardens help give out field equipment. In the British Trust for Ornithology (BTO)/Zeneca Bird Challenge, volunteers recorded a total of 87 species of bird, including sparrowhawk, long eared owl and snipe. This means the fen is second in the small inland mixed habitat class. The reserve also won best community and education project in the British Trust for Ornithology (BTO)/Zeneca Bird Challenge and highly commended in the Aylesford Newsprint Environment Awards for Kent Business.



One of the project's main aims was to re-establish a continuous footpath along the 33 kilometres of Medway Navigation. In March 1995 the 2.8 kilometres missing link, in the middle of the navigation, was declared a public footpath. Work to open the footpath involved local volunteers building three new footbridges and a board walk and clearing brambles and nettles.

The project has begun a detailed survey of providing access for disabled visitors throughout the Medway Valley. Volunteers, many of whom are disabled, have surveyed the riverside path, looking at points of access and improving other areas such as getting rid of unnecessary stiles. From their reports we will prepare a detailed programme of work lasting over the next 3 to 5 years. We are already designing and planning facilities and access for disabled anglers. We are working with Maidstone Victory Angling Society and Kent County Council to do this.



River management

The following two projects show how our different functions work together for the benefit of the environment. Both projects are excellent examples of how we can carry out essential flood defence work in a way that is sensitive to the environment. Engineering staff will carry out conservation work and make improvements in carrying out their main area of work.

SOUTH LAKE OBSERVATORY, SLIMBRIDGE

We dug the south lake of the Slimbridge Bird Reserve in 1994 to produce earth embankments which we now use to defend against floods along the River Severn. These defences were an important project and were brought in over three years.

We carried out this work by talking to the landowner, the Wildfowl and Wetlands Trust and English Nature. But because of the amount of work, we did disturb some of the birds. However, most of the work was carried out in the summer months to avoid the most important time for birds who spend the winter there.

The south lake was dug three years ago and has become an increasingly important wetland area in winter and spring for many species of migrating birds. A number of these birds are new to Slimbridge. The lake provides a number of different wetland habitats, including deep water, marshland and a man-made experimental cliff to attract nesting sandmartins.

We carried out mitigation work including improving a number of ditches, changing water levels, creating shallow scrapes and improving habitat in dragonfly pools and kingfisher banks.

We have drawn up a management agreement with the landowners for the future to consider the possibility of improving the salt marsh on the river side of the floodbank.

We also provided a bird observatory at the site costing £32,000. The observatory was set in an earth bank and had a turf roof to help blend it into the landscape and insulate the building. The hide was designed so that everyone can enjoy the view. It has windows suitable for a wide range of heights, seating, and bays for wheelchairs. The hide has been in use since Boxing Day 1994. We have had lots of comments from bird watchers that this hide must be unique because there are no draughts and they manage to keep their hands warm!

Inside the observatory there are displays and information boards to explain about the environment of the lake and the work of ourselves and the Wetlands and Wildfowl Trust.

The observatory was officially opened by Lord De Ramsey, Chairman of the Environment Agency Advisory Committee in May 1995.



OUSE WASHES BIRD OBSERVATORY

A similar project was carried out in our Anglian Region. We and the Wildlife and Wetlands Trust (WWT) built a £75,000 extension to the Welney Observatory on the Ouse Washes on the Cambridgeshire and Norfolk border.

The Ouse Washes are a storage reservoir for flood waters in the Great Ouse river system. They store water between the Middle Level and South Level barrier banks until the tide levels drop and the water can be released to the sea.

The observatory is at the Trust's centre near Downham Market. The extension was funded jointly by us and WWT following major flood defence improvements for the Ouse Washes and Barrier Banks. We also aim to protect and conserve the Washes so that they stay an internationally important wildlife site and continue to protect the fens from flooding.

The observatory will improve birdwatching facilities on this nationally important 384 hectare site. At the same time, visitors will be able to view a special exhibition we have produced with the WWT which traces the history of the fens and Ouse Washes.



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Access

River corridors are attractive to people as well as wildlife although access to rivers can sometimes be difficult. We work with other organisations to improve the links from towns into the countryside along rivers. We also act as "honest broker" to encourage the shared recreational use of rivers.

The following project is an example of how we and other organisations have worked together to provide better access to the River Severn.

SEVERN WAY

We have finished about 75 miles of the Severn Way footpath between Shrewsbury and Tewkesbury. We will finish the last 20 miles, upstream of Worcester by October 1996 and this will provide an important link to other sections of the Severn Way. We hope that this footpath will form an unbroken riverside path from Shrewsbury to the Severn estuary in the near future.

The Severn Way is supported by the Countryside Commission and local authorities who will maintain the route in future. Once the path is in place local authorities will develop walks, based on the Severn Way.



The original proposal for the Severn Way was to create a route between Shrewsbury and Gloucester. However, after we received positive comments, we are now considering extending the Severn Way through Wales to Plynlimon. We now see this as an action in our Upper Severn Catchment Management Plan. We have had some difficulties creating the route in Wales. But, depending on funding we may be able to overcome these by 1998. When we finish the footpath we will try to award it the status of a long-distance footpath.

We have spent £36,000 on the building of the footpath and have worked with Hereford and Worcester County Council, Shropshire County Council and the Countryside Commission.

HAFREN FOREST: SOURCE OF THE SEVERN

We, Forest Enterprise Wales, Montgomery and Radnor District Associations for the Disabled, Powys County Council and Menter Powys, Llandiloes Town Council and the Countryside Council for Wales have put together a leaflet called *Hafren Forest: Source of the Severn*.

The forest, takes its name from the Afon Hafren (River Severn) which rises in a deep blanket-peat bog, 1.25 kilometres outside the forest. The river then runs very quickly on its course to the Bristol Channel passing through pine and spruce woodlands planted in the 1930s. The forest is a carefully-managed working forest with felling, thinning and replanting continually taking place. The forest is a popular attraction with visitors. We have created a number of trails through the forest and alongside the river.

We have designed the Cascade Trail with the help of less able walkers for visitors with walking difficulties. It is easy to follow and is ideal for all ages.

Blaen Hafren Falls Trail follows the banks of the Severn until it crosses the 'First Severn Bridge', a short distance from its junction with the Afon Hore.

The 'Source of the Severn Trail' is a slightly harder trail and climbs steeply to around 620 metres. The trail goes to the top of Pen Pumlumon Arwystli which has spectacular views of the area.

The 'Severn Break-Its-Neck' walk hugs tight to the river and passes through beautiful woodland. The 'Severn Break-Its-Neck' bridge is the latest in the forest (opened in Summer 1994) and was designed and put up by Forest Enterprise engineers. We contributed £3,000 towards the cost of the bridge. From the bridge you can look into the gully down which the Severn thunders over its first and only waterfall.

CANOEIST'S GUIDE TO THE RIVER SEVERN

Along with the British Canoe Union (BCU) we have produced a 'Canoeist's Guide to the River Severn'. The guide outlines where you can get access on the upper parts of the river and the navigation controlled by British Waterways. We have listed access and egress points together with campsites and local facilities.

We also provide a code of conduct which aims to encourage people to use and enjoy rivers safely for many types of activities.

The guide aims to follow the success of the River Wye handbook and you can get it from our Severn-Trent offices. We spent £6,000 producing the leaflet. The local knowledge was provided by local members of the BCU.



Sites we own

We own or lease a large number of sites of different sizes and uses. Many of these sites were purchased a long time ago to get access to the river for river work or because they surrounded working structures. As well as investing in on-going maintenance we invested in several sites to develop them for use by the general public. The project below shows the type of work we do.



BARMBY BARRAGE

The tidal barrage at Barmby-on-the-Marsh is on the Yorkshire River Derwent where it meets the River Ouse. The barrage was built in 1975 to supply water. It keeps out the tide from the lower 23 kilometres of the River Derwent and also controls water levels in the Derwent to make sure there is enough water for drinking water supplies.

We own the barrage site and recognised that it had great possibilities for becoming a recreational facility. We set up a team which got together to develop ideas for the site which would improve the site and especially access for the disabled. We discussed this with English Nature as the river and the floodbanks are a Site of Special Scientific Interest. We also invited a member from a local disability group to help develop these ideas and find the problems of disabled access.

We have developed the following facilities at the site.

We have built three fishing platforms to provide fishing facilities for disabled people visiting the site. However, anybody can use the platforms but we will give priority to people with disabilities. We have designed the platforms to fit two people on them comfortably. So that if a disabled person needs help then a friend can fish too. Any fishing on the site is free to the public.

We have installed a bird hide with access for the disabled overlooking a wetland area. The wetland area floods naturally over the winter and supports many kinds of wildfowl and wading birds. Many birds have bred at the site. The most successful are a breeding pair of little ringed plover. With permission from English Nature we also changed their interpretation boards so that they could be used in the hide.



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We have developed three picnic areas around the site and provided picnic tables (two for disabled people) and barbecue facilities to encourage people to come and eat by the river. We have also added a number of litter bins and dog hygiene bins to keep the site tidy.

We have updated the toilets at the site for people with disabilities. And we have also provided a hard-surface car park.

The barrage also controls access for navigation from the lower parts of the River Derwent to and from the River Ouse. Walking is also popular along the tops of the flood banks. And the TransPennine Trail (Liverpool to Hull) runs through the site.

The site was officially opened on Friday 24 February 1995 by Lady Masham. We are promoting the site as an educational resource centre and are encouraging school visits. The project has cost us £40,000 up till now and is very successful.





Planning for recreation

We reported last year on the success of the North of England Watersports Study. This study was carried out by two of our regions and the Sports Council. This project demonstrated the value of collecting information on how many people take part in watersports and where they do this. This will help policy makers plan for managing water recreation in the future. We have carried out a similar project in our Thames region. This project started in 1992 and we published the final Strategy document in 1995.

THAMES RECREATION STRATEGY

The River Thames is one of the most popular rivers for leisure activities. It runs from the Cotswolds into the heart of London, so it is an attraction for a large number of people. Anyone can use the river and it is managed to a high standard by our Thames region. About 30,000 boats are licensed on the river every year and we believe over 10 million visits are made to lock sites. Because so many people use the river a number of organisations have become aware that the river needs to be managed more carefully. We need to make sure that the countryside is protected. And we need to manage the different uses of the river.

In 1992 we and the Sports Council started a three year project to prepare a strategy for the River Thames. This project had the following aim.

To produce a strategy for the River Thames which makes the best use of leisure activities at the same time protecting the landscape, wildlife and historical value of the river.



This strategy involved employing a Project Officer who was responsible for doing the research and talking to anyone involved. The study spent a long time discussing the present situation and the needs of the main groups such as local authorities, local clubs, commercial operators, RSPB, London Rivers Association and the governing bodies of the different sports that use the Thames. We asked several questions about priorities and received the same answers again and again. These answers included:

- access to the river;
- information;
- conflict between users;
- environmental protection and awareness;
- and leisure facilities and financial resources.

From these priorities we produced a number of policy statements.

The following organisations and agencies will be responsible for the strategy.

- Sports Council (Southern, South East and Greater London Regions)
- Regional Councils for Sport and Recreation
- Riparian Local Authorities
- Port of London Authority
- The Governing bodies of Sports and Local Clubs.

The strategy aims to provide better information and communication. We hope to educate, encourage and influence people who use and manage the river to make the best possible decisions for the environment and recreation.

The next stage is to make sure that we and local authorities use these policies. Although it might seem sensible for one organisation to take on the responsibility, the best way to make sure these policies are carried out is to convince everyone involved to use the strategy every day.

The strategy will become a major part of our 'Catchment Planning' process which co-ordinates all the issues about the water environment and puts them into action plans.





Species conservation

OTTERS

We have produced an Otter Management Strategy and a management action map see figure 1. The map covers England and Wales and is based on river catchments. We continue to support otter surveys often with specialist groups. These groups include the Wildlife Trusts and commercial sponsors. We have chosen three of our regions to demonstrate this work.

SEVERN-TRENT

We have supported a River Severn otter and rivers project since 1990. Worcestershire Wildlife Trust employed a project officer. The project is also supported by British Telecom, Severn-Trent Water, Fuji Hunt Ltd and Purac Rosewater Ltd. We supply the largest part of the funding for the project – about £40,000.

Otter populations in Wales have been getting bigger and are beginning to move down the Rivers Severn and Teme. The project has concentrated on finding rivers where improving the habitat would encourage otters to return to the Midlands. We have started work, with the agreement of local landowners and planted trees and improved rivers. We have built 30 artificial otter holts. And have done work to look at the possible threats from pollution to otters. We have analysed eel tissue from the River Severn for Polychlorinated Biphenyls (PCBs), organochlorides and heavy metals. We have also given advice on the threat to otters of new road schemes.

After three years we found signs of otters on the River Avon. We thought it would take otters 10 years to return to this river. It is now clear that they have moved up the Avon as far as the Coventry area as well as being found in tributaries of the River Severn below Tewkesbury. We have drawn up a River Severn otter conservation strategy 1994 to 1999 to protect and encourage otters in the Severn catchment.

SOUTHERN

We support the Hampshire and South-East otters project with the Hampshire and Isle of Wight Wildlife Trust. We provided most of the funding for a Project Officer who the Trust employs for £22,700 a year. The project is managed by a group of officers from each County Trust and English Nature as well as ourselves. The funding we provide pays for the Project Officer's salary, use of a vehicle and a small working budget. The Trust provides accommodation and technical support. Our conservation budgets fund certain improvement work.

We have done a survey of the whole of Southern Region. We have found otter populations in six river catchments. We do not think any of these populations are large, so they are quite vulnerable. The main problem seems to be a lack of good habitat, but other factors such as pesticides in eels are causing problems. So from the survey we identified a number of schemes we could work on.



We have produced and sent out an otter leaflet. The leaflet gives information on otters and mink, including practical information on habitat improvements and the reasons for the otter's decline. This leaflet has been very useful in raising the profile of this important species and providing information to the public.

We have analysed eel tissue from the rivers Itchen and Arun to see if they are contaminated. But our results show there are no harmful substances present.

In 1993 we released three captive-bred otters into a Southern river. We radio tracked these (under Home Office licence) and found important information about territory, movements and lying up sites. The tracking continued for 6½ months – the longest tracking of otters in the wild yet reported. This tracking suggests the released otters have bred successfully.

We have improved several habitat sites. This involved the planting of native trees and shrubs the building of four chamber holts and five log-pile holts to increase the number of secure lying-up sites.

We created an island to replace an ugly flow deflector built from corrugated iron. This major project included planting and creating three of the artificial holts. As well as providing secure lying-up sites, this island has narrowed a wide section of river and improved river flow. The island is 100 x 5 metres long and cost £32,000. It was built by traditional methods.

We built a tunnel under a vital but dangerous road crossing where many otters had been killed. This was particularly successful because we found fresh droppings and footprints showing otters were using it within 48 hours of it being built.



WELSH

Our Welsh Region have started a joint initiative with CCW and Dwr-Cymru Welsh Water – the Otters in Wales Project. This project will put in place a conservation strategy for otters in Wales.

The Otter Volunteer Task Force, part of the project, gave talks and presentations to a number of Wildlife Trusts so they could recruit and train new members. They also attended the Snowdonia Wildlife Forum and West Glamorgan Network Seminar where they introduced the Otter in Wales Project and the work of the Otter Volunteer Task Force.

The Task Force wrote the Otter and Habitat Survey Methodology and arranged a number of training courses with the following organisations;

- Forest Enterprise;
- Gwent Outdoor Centres;
- Groundwork Ogwr (Ogmore valley);
- North Wales Wildlife Trust South Gwynedd;
- North Wales Wildlife Trust North Gwynedd;
- North Wales Wildlife Trust Clwyd.



The task force are setting up a database to record sightings. And they are looking into the best computer software. They are already collecting and preparing information.

The Otters in Wales Project was launched at the Welsh Wildlife Centre in Cigerran. A video has been produced which includes film showing the underground view of an otter holt. Otters interest many people and the project has attracted a great deal of interest from the press. The project has also provided information to the BBC Natural History Unit which will be included in a natural history series. The project has also worked with French otter conservationists to set up the LutrAtlantic Project under the Atlantis 2 programme.



RSPB

BARN OWLS

Barn owls are probably one of the best known, and most rarely seen, birds of the British Isles. Numbers of these beautiful birds have been declining for many years as most of their traditional nest sites have been lost. A high percentage of barn owls in England and Wales are found within 1 kilometre of streams or rivers. The rough ground alongside rivers provides excellent hunting grounds. In a number of our Regions we have been working with the Hawk and Owl Trust to encourage local barn owls to breed. A large number of nest boxes have been put up near rivers.

As part of the Medway River Project, we and local landowners are trying to make sure that there are enough nesting and hunting habitats to support local barn owls. The rough grassland, fens and hedgerows within the Medway Valley are ideal for the field vole – the barn owl's main food.

We put up nest boxes on poles in hedgerows and field margins, well away from points where the public can get to. These boxes are in pairs, as it is very likely kestrels will take up one box. The other box will stay available for barn owls. Kestrels will not allow another breeding pair of their own kind so close.

Using this pole box system on the River Rother in Kent has increased the barn owl population from 1 to 15 pairs in just three years.



Archaeology

Our conservation duties include protecting, improving and managing archaeological sites. The following project shows how we carry out these duties.

LUGG MEADOWS BOUNDARY STONES PROJECT

In the middle ages, land was owned by a large number of people who each owned a strip of land. The Lugg Meadows, part of the floodplain of the River Lugg and the Lugg Rhea, were an important piece of land in those days because they provided hay to feed the animals in winter. These meadows are naturally rich in wildlife and are home to many species of plants including snake's head fritillary and the rare narrow-leaved water dropwort. The meadows are managed today as they were in medieval times. Between Candlemas (February 2nd) and Lammas (August 1st) the meadows are shut up for hay. All the owners of the land have a right to take their cut of the hay from their own strip of land. On 1 August the meadows are opened to commoners, some of whom are owners, to graze their stock. Because of this fences cannot be put up to mark out the owned strips, so stones known as dole stones were placed at the boundaries.

The Lugg Meadows area is the biggest of 14 Lammas meadows in the UK and is the only one where they still follow the medieval management system. The Meadows also have the greatest number of surviving dole stones which, together with some more recent posts, still mark the strip boundaries.

The historical interest of the site was quite new to us. Before this, the only conservation was nature conservation and there have been very few opportunities for us to meet our other conservation duties.

We started this project with the Hereford Nature Trust who did a lot of the ground work. We funded most of the work, spending £10,000 on this project. The project was approved by English Nature and the Archaeology Unit of the City of Hereford were in charge of some of the work. Since then the Trust have done similar work. We are currently involved with the Hereford and Worcester County Archaeologists doing some paleo-environmental work on the site.

The project is made up of a detailed survey of the ground to find all the historical features. We then did a survey of the underground features by ground radar (other techniques were also tested). Archaeologists then dug up these features and found cairns (piles of stones) which probably represent a much older way of marking the strips. Many of the stones and posts date from the 1800s and some have initials on them and are dated. The Trust has left its own mark on the meadows with 20 new dole stones. 19 of these carry the initials and date 'HNT 1994'. These stones mark the strip under Trust ownership.

We hoped this project will raise the profile of this important site in the eyes of a number of authorities who will make sure the site is protected and survives.



SITE INFORMATION

Region	Recreation			Conservation		
	Sites in use	Sites to be used in the future	Total	Sites in use	Sites to be used in the future	Total
Anglian	168	265	433	75	367	442
North West	20	11	31	24	7	31
North/Yorks	25	227	252	17	229	246
Severn-Trent	43	11	54	34	21	55
Southern	123	208	331	138	218	356
South Western	47	1	48	39	11	50
Thames	50	14	64	40	17	57
Welsh	23	2	25	20	3	23
TOTAL	499	739	1238	387	873	1260

TYPES OF SITES

Asset*	210
River	506
Stillwater	82
Woodland	57
Moorland/Heath	2
Grassland	518
Wetland	85
Estuary	36
Coast	69

* an asset is defined as a structure or building

LAND-BASED ACTIVITIES

Activity	Type of Access			
	RESTRICTED	PERMIT	OPEN	TOTAL
Bird watching	1	2	106	109
Cycling or mountain biking			35	35
Horse riding			18	18
Model boating	1		2	3
Motor sports			2	2
Orienteering			1	1
Jogging or running			44	44
Hunting or shooting	7		2	9
Walking	2		380	382

Restricted access is available for club members only or for groups organised by local authorities.

Permitted access is open to everyone but a charge is made.

Open access is free for everyone.

WATER BASED ACTIVITIES

Activity	Type of Access			TOTAL
	RESTRICTED	PERMIT	OPEN	
Boating	13	7	54	74
Canoeing	13	9	48	60
Coarse fishing	36	66	58	160
Sea fishing	1	2	8	11
Game fishing	11	24	9	44
Jet skiing	2		2	4
Sailing	6	1	7	14
Sub aqua		1	1	2
Swimming			3	3
Water skiing	2		2	4
Windsurfing	5	1	4	10
Rowing	4	1	21	26

Restricted access is available for club members only or for groups organised by local authorities.

Permitted access is open to everyone but a charge is made.

Open access is free for everyone.

Note: we may or may not own the fishing rights at these sites.

DESIGNATED SITES

National trail	38
Regional trail	20
Country park	3
National park	10
Area of Outstanding Natural Beauty	98
Heritage coast	4
Site of Special Scientific Interest	183
National Nature Reserve	5
Local Nature Reserve	18
RSPB reserve	2
Ramsar site	28
County trust reserve	15
Special Protection Area	29
Site of Nature Conservation Interest	126
Scheduled Ancient Monument	18
Listed building	4
Site of Special Archaeological Importance	10
Site of Industrial Heritage Importance	1

RIGHTS OF WAY

Public footpath	315
Bridleway	37
Permissive path	44

FACILITIES ON OUR SITES

Facility	Number of sites	Suitable for the disabled
Footpaths	307	60
Car parks	66	15
Picnic sites	24	11
Information and visitor centres	9	4
Interpretative boards	32	14
Toilets	33	10
Viewing points	12	6
Play grounds	1	
Cycle trail	15	3
Campsite	12	1
Fishing lodge	1	
Fishing platform	238	43
Club house	8	1
Nature trail	7	1
Bird hide	13	4
Boat hire	2	
Slipways	16	
Moorings	167	18

Leaflets and publications

HEAD OFFICE

Conservation

Conservation Technical Handbooks;

- 1 River Corridor Surveys
- 2 River Landscape Assessment
- 3 Otters and River Habitat Management

1995 Conservation Directory (*for NRA staff only*)

A Guide to Identifying Freshwater Crayfish in Britain and Ireland

Guidance for the Control of Invasive Plants near Watercourses

Conservation Strategy

Fisheries

Fisheries Statistics 1989

Fisheries Statistics 1990

Fisheries Statistics 1991

Fisheries Statistics 1992

Fisheries Statistics 1993

Fisheries Technical Reports:

- 1 Sea Trout in England & Wales
- 2 Sea Trout Catch Statistics
- 3 Sea Trout Literature Review
- 4 Sea Trout Gene Banks
- 5 National Anglers Survey 1994

National Rod Fishing Licences leaflet (1994-1995)

Fisheries Strategy

Navigation

National Navigation Leaflet

14 day free visitor licence flyer

Boat Safety Scheme – technical standards (*produced with British Waterways*)

NRA Emergency hotline sticker for Boaters

Oil Care for Boaters

Navigation Strategy

Recreation

Have Fun, Have a Care – information for river canoeists (*leaflet, poster and plastic card*)

Water Wisdom

Recreation Facility Design Manual (*for NRA staff only*)

Recreation Strategy

ANGLIAN REGION

Fisheries

Fisheries Byelaws

Guide to Fishing Clubs – Great Ouse, Cam and Fenland Waters

Guide to Freshwater Fishing in Norfolk and Suffolk

Guide to Fishing Clubs – Northern Area

Your Complete Guide to Fishing in the Anglian Region – Rivers & Stillwaters
(*produced with Angling Times*)

Conservation

Conservation in Anglian Region

East Anglian Salt Marshes

Rivers Environmental Database System

Coastal Wildlife Survey

Recreation and Navigation

Waterways – A code of conduct

NRA – Navigation in the Anglian Region

Navigation Notes – Advice to boat owners

Navigation – The Anglian Experience

River Stour Navigation, A brief history 1705 to the present day

Map – Navigation in the Anglian Region

NORTHUMBRIA AND YORKSHIRE

Conservation

Water Weed Control – take care to protect the aquatic environment
Farming and Wildlife Advisory Group / NRA River Corridor Project Flyer
Pond Booklet
Ure/Swale Conservation Documents
Floodbanks in Flower
Otters and Eel netting in Northumbria & Yorkshire Region

Fisheries

Angling Guide – Northumbria only
Kielder Salmon Hatchery
Buyer Beware Poached Salmon
Angling Clubs in Yorkshire
River Angling in Yorkshire
Stillwater Angling in Yorkshire
NRA Yorkshire's Catch – Fisheries, Recreation, Conservation and Navigation Magazine
Rod Fishing Byelaws – Northumbria & Yorkshire

Recreation

Northumbria Canoeist's Access hotline card
Hazard Warning – Rubbish in River
Barmby Barrage Amenity Site

NORTH WEST REGION

Conservation

Conservation and Rivers
Bassenthwaite Lake – Home Sweet Home
Silt – and its effects on the river
When did you last see an otter in the North West?

Fisheries

Fishing Guide to NRA North West
Protecting & Improving Fisheries in the North West of England

Recreation

Spending a Penny on Windermere Could Cost You a Fortune!

SEVERN-TRENT REGION

Conservation

Provision and Maintenance of Nest and Roosting Sites on River Bridges
Operations and Protected Species
The Water Environment – Our Cultural Heritage
Our Cultural Heritage (*produced with English Heritage*)
Coed Cymru – Riverside Trees
Dredging and Archaeology
River Severn Otters Project – bringing otters back to our rivers
Water Plants
Conservation Designations

Fisheries

Environment of Fish
Fish and Fisheries Biology
Monitoring and Control of Fish Stocks
Construction and Desilting of Still waters
Fisheries Habitat Improvement
Management of Specialist Stillwater Coarse Fisheries
Management of Stillwater Trout Fisheries
Trout Farming
Predator and Pest Control in Fisheries
Useful Information for Angling Clubs
Fishing Guide 1994 – 1995
Fisheries News – magazine
Angling Contest Waters

Recreation and Navigation

Navigation in the Severn-Trent Region

NRA Recreation Sites

Canoeist's Guide to the River Severn

River Avon Users Guide

The Severn Bore

The Trent Aegir

SOUTHERN REGION

Conservation

Ponds and Conservation

Managing Aquatic Plants

Otters

Spotting the Otter

Fisheries

Fishing in the South

Freshwater Fish of the Southern Region

Buyer Beware of Poached Salmon

News Reel for Anglers (*bi-annual newspaper*)

Fisheries information leaflets – 19 various subjects

Recreation and Navigation

Guide to the Medway Navigation

The Medway Navigation

Boating on Sussex Rivers

Harbour of Rye

Rye Harbour Byelaws

Medway River Project

Guide to the Harbour of Rye

SOUTH WESTERN REGION

Conservation

Rivers Information – Conservation

Pond Pack

Wildlife Along Rivers

Somerset Levels and Moors Water Level Management and Nature Conservation

Somerset Levels and Moors Water Level Management and Nature Conservation Strategy

River Corridor Surveys

Pollarding

River Tone

Otters and their Conservation

Fisheries

The Guide to Angling in South West England 1994-1995 (*published by Westcountry Tourist Board with the NRA*)

Angling Guides: Avon and Dorset, Somerset, and Bristol Avon

Buyer Beware Leaflet

Recreation

Rivers Information – Recreation

Rivers Information – River Canoeing Code

THAMES REGION

Conservation

Dredging and Archaeology

Fisheries

Angling Guide

Fisheries Byelaws 1978

Guide to River Thames – Lock and Weir fishing

Navigation

River Thames Handbook
Cruising on the River Thames – A Boating Guide
Thames Launch Safety Specification
Locks and Weirs on the River Thames – how do they work?
Navigation Levels of Service
Power Operation of Locks on the River Thames
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Enjoying the Waterside, Amenity & Recreation in the NRA Thames Region
The Thames Barrier, The Eighth Wonder of the World
Thames Path – National Trail (*with Countryside Commission*)
Hurley Walks
Pinkhill Meadow Nature Reserve
Abingdon Riverside Walk
The Rivers Walk
The Thame Path
England's River – the attractions, wildlife and people
England's River – the sporting and leisure life of the River
Enjoy Oxford's Waterways
Camping beside the River Thames
A Guide to the River Thames, Lock & Weir Fishing
A Recreation Strategy for the River Thames
A Recreation Strategy for the River Thames – an overview

WELSH REGION

Conservation

Conservation and Recreation: The Wye Challenge
Conservation & Rivers
Tryweryn Otter Trail

Fisheries

Juvenile Salmonid Monitoring Programme Report
Rewards for Tagged Fish
Buyer Beware of Poached Salmon
Rod Fishing Byelaws 1995
River Wye Angling Guide
Angling Guide for the Rivers Dee and Clwyd 1994-1995
Fisheries Technical Reports;
1 Usk Salmon – Recommendations for Action
2 Spring Salmon – A review of factors affecting the abundance and catch of spring salmon from the river Wye and elsewhere, and proposals for stock maintenance and enhancement
3 Resident Brown Trout – A management strategy, implementation and progress report
4 Welsh rivers – stocking and taking stock – proceedings of the joint NRA Welsh Region Welsh Salmon and Trout Angling Association (WSTAA) seminar
5 Dee Stock Assessment Annual Report 1992
6 Dee Stock Assessment Programme Report 1993

Recreation

Canoeists Guide to the River Wye
Access on the River Usk, Sennybridge to Usk
River Wye Handbook
River Wye Code of Conduct
Calender of Major Events on the River Wye

Glas-y-Dorlan magazine

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The NRA is committed to the principles of stewardship and sustainability. In addition to pursuing its statutory responsibilities as Guardians of the Water Environment, the NRA will aim to establish and demonstrate wise environmental practice throughout all its functions.

