



**NRA**

**1995/96**

**ANNUAL CONSERVATION,  
ACCESS & RECREATION  
REPORT**

Environment Agency  
Information Centre  
Head Office

Class No .....

Accession No ..A.W.U.V.....

# ANGLIAN REGION

## ANGLIAN REGION

### RECREATION & CONSERVATION SITES

Table 1.

AREA	RECREATION		TOTAL	CONSERVATION		
	IN USE	FUTURE USE		IN USE	FUTURE USE	TOTAL
CENTRAL	37	13	50	8	41	49
NORTHERN	85	194	279	32	257	289
EASTERN	46	58	104	35	69	104
REGIONAL	168	265	433	75	367	442

Table 1. has been created by data supplied by the Region.

### LEASED ACTIVITIES ON NRA SITES

A number of activities are leased on NRA owned sites these are outlined in table 2. below, together with the number of sites on which these take place.

Table 2. Activities leased

Fishing	73
Moorings	7
Grazing	26
Boating	8

### SURVEYS, MAINTENANCE & MANAGEMENT PLANS COMPLETED ON NRA SITES

190 sites have had habitat surveys undertaken and 7 sites have had management plans written.

## **SITE TYPES**

A site can be classified as more than one type, for instance the site may be wetland but also estuarine.

Table 3. Site Type

Asset eg. structure	56
River	219
Stillwater	12
Woodland	7
Grassland	126
Wetland	25
Estuary	16
Coast	11

## **SITE DESIGNATIONS**

A number of sites within Anglian Region have a landscape, wildlife or heritage designation.

Table 4. Site designations

Regional Trail	6
Country Park	1
AONB	10
SSSI/SAC	33
NNR	2
LNR	2
RSPB Reserve	1
Ramsar	3
County Trust Reserve	11
SNCI	17
SPA	3
SAM	2

## ACTIVITIES - LAND & WATER BASED

### LAND BASED

Activity	Restricted*	Permit*	Open*	Total
Bird Watching			51	51
Cycling			3	3
Horseriding			4	4
Model Boating			1	1
Orienteering			1	1
Jogging/running			14	14
Hunting/shooting	3			3
Walking			101	101

### WATER BASED

Activity	Restricted*	Permit*	Open*	Total
Boating	4	3	7	14
Canoeing	1	1	3	5
Coarse fishing	6	25	38	69
Sea fishing			4	4
Game Fishing		1	1	2
Sailing	1		2	3
Windsurfing	3			3
Rowing			1	1

The different types of access can be defined as;

\*Restricted - where access is limited to only those clubs/associations who have permission to use the site

\*Permit - where access is available to everyone, for the price of a permit or ticket.

\*Open - where access is free for everyone.

## FACILITY PROVISION

Some NRA sites where the above activities take place also have facilities provided by the NRA. Table 5. sets out those facilities available and which of these are suitable for people with disabilities.

Table 5.

Facility	Number of sites	Suitable for the disabled
*Footpath	136	4
Car Park	6	1
Picnic Site	2	
Information/Visitor Centre	2	
Toilet	4	1
Viewing point	2	1
Children's playground	1	
Cycle trail	1	
Campsite	1	
Fishing Lodge	1	
Fishing platform	12	16
Club House	1	
Nature Trail	1	
Bird Hide	1	
Slipways	3	
Moorings	8	

\* Footpaths are not necessarily provided by the NRA they may be a right of way crossing the site.

## RIGHTS OF WAY

On a number of NRA sites, rights of way exist across the site. In Anglian Region there are 87 sites where a public footpath exists, 18 sites where a bridleway exists and 5 sites which have permissive paths crossing the land.

## SITE USAGE.

Table 6. outlines the estimated number of visits made to NRA sites in Anglian Region annually. . Site usage has not been formally measured and these are rough estimates. An estimate has not been made for every recreation or conservation site in use.

Table 6.

No. of visits in a year	No. of NRA sites
1 - 49	25
50 - 99	
100 - 499	3
500 - 999	3
1000 - 4999	1
over 5000	
unknown	103

## **PROJECTS UNDERTAKEN IN NRA ANGLIAN REGION**

The following are examples of projects undertaken by the NRA or in conjunction with other organisations during 1995/96.

### **Northern Area**

We worked with Scunthorpe and District Angling Association, the Parish Council and local residents to maintain and improve an access track, used by local anglers alongside the River Ancholme at Snitterby Carr. This track improves access to a popular match fishing section.

We undertook work with flood defence to stabilise the South Bank of the South Forty Foot Drain near Hubbert's Bridge, to maintain the flood defence standard. In doing so we created 750 metres of wet berm to provide a suitable platform for anglers.

There is a lack of safe white water canoe facilities in the East of England. The feasibility of constructing a canoe slalom at Orton Lock was assessed. A report has been produced from this study.

With Stamford Town Council and South Kesteven District Council we identified the need for improved disabled facilities on the River Welland at Stamford. We created two disabled fishing platforms adjacent to disabled parking facilities and toilets.

Working with the Wainfleet Conservation Area Partnership scheme on the River Steeping we helped to improve angling facilities in the Wainfleet Area. We constructed nine new angling pegs. These were designed with a shallow tread to allow persons with walking difficulties to use the pegs.

We worked with flood defence on an area of the South Forty Foot (Chain Bridge) which needed revetment. We incorporated fifty simple angling pegs to improve angler access into the scheme.

We worked with Scunthorpe and District Angling Association on a number of projects on the River Ancholme. At Brigg we improved the angling facilities with the construction of ten angling pegs. At Scabcroft we helped to create 28 new angling pegs at a popular match fishing area. Together with a landowner we improved the access to a designated car park at Appleby.

Working with Wainfleet St. Mary Parish Council we created a three metre wide, fifty metre long car park area to prevent further damage to a grass verge by vehicles. The car park is adjacent to six fishing pegs.

With Witham and District Joint Anglers Federation and a local landowner we improved angling access to the River Witham at Kirkstead by providing a small area of land for parking and constructing a stile.

In order to attempt to inhibit algal growth on the River Welland we used barley straw "sausages". This will help to improve fishing, boating and improve the general amenity value of the river.



We carried out work on the River Lymn as part of a fisheries habitat improvement scheme which involved the joining of two separate footpaths. This created a permitted footpath (approximately two kilometres long), adjacent to recently finished fisheries habitat improvements.

Working with Lincolnshire Trust for Nature Conservation, English Nature, Humberside County Council and local landowners we restored ageing reed beds by reed cutting and created shallow open water. We also helped to move a power line over the site. The excavation of approximately 2 hectares of open water which is equivalent to 3 kilometres of reed margin for water birds.

Working with landowners, the Countryside Commission and the Farming and Wildlife Advisory Group we removed redundant flood banks and restored the River Long Eau. We also helped with the improved management of Bellau Springs on the Great Eau. This work involved 350 metres of shallow profile river bank, including wet berms, two kingfisher cliffs, 800 metres of stock fencing, two kissing gates and improved public access.

We worked with landowners, the Countryside Commission, the Farming and Wildlife Advisory Group and the County Archaeologist to restore the River Witham and the floodplain. This involved the creation of low profile flood banks, set back from the new river, followed by the removal of the old flood banks. This created 15 hectares of washland (approximately 110,000m<sup>3</sup> of flood water storage). Some of this grassland is under Stewardship. 450 metres of riverside embankments have been removed, improving the riverside management potential and visual amenity. It is planned to follow these improvements with some tree planting.

We have worked with the Brampton Valley Project, the Dragonfly museum and Ashton landowners to improve the habitat for otters. This involved the creation of several reed beds and marshy areas, the construction of a log pile otter holt and extensive tree planting. This will benefit wildlife in general as well as otters.

We carried out work on collaboration with flood defence to re-create 7.3 hectares of fenland habitat. This new washland area called the Maud Foster Fenland provides approximately 70,000m<sup>3</sup> of flood water storage, including a 2.3 hectare lagoon and 5 hectares of wet grassland.

Working with the Glanford Countryside project, the Countryside Commission, local landowners and flood defence staff we helped to re-profile two kilometres of river bank from Castlethorpe to Broughton. This created two km of a 15 metres wide buffer strip under Stewardship, 1.5 km of wet berm habitats (scallops) and 98 new fishing pegs.

We worked with Northampton Borough Council and flood defence staff to clean out Abington Park lake to restore the wetland interest of the site and improve its conservation value.

We worked with flood defence staff to enhance the habitat on the River Ise. This involved the creation of a two hundred metre long submerged berm and a shallow pond.

We worked with the Fenland Archaeological Trust to create an area of fenland, Flag Fen, that resembles that of 3000 years ago. This involved the clearing of invasive plants and further planting of desired plants.

We worked with Fishtoft Parish Council, the Ramblers Association and Lincolnshire County Council to improve the conservation habitat on the Maud Foster Drain. This involved the planting of 25 trees.

### **Eastern Area**

We helped Ipswich Borough Council to create a pond in the Orwell Country Park which would be suitable for local schools to visit. The pond will provide a valuable habitat for wildlife and act as a teaching area for children.

Working with various partners; Suffolk Wildlife Trust, Dedham Vale Project, Waveney Valley Project we contributed to a number of surveys of rare trees and trees in need of management. This helped to provide a detailed programme of required work.

Working with AWS Ltd and Suffolk Wildlife Trust we helped to create a scrape at Cornard Mere SSSI. This would help provide valuable habitat for wildlife.

We provided an information board at Bixley Heath with Ipswich Borough Council.

We undertook tree planting in a degraded area at Harleston as part of the Wensum Valley Project to increase the habitat value of the area.

Fifty children helped to plant trees at Horkesley Lock during National tree planting week as part of the Denham Vale project.

As part of the Denham Vale project we contributed to the development of a Constable Country walks leaflet.

We helped the National Trust install a orientation plinth on the sea wall at Copt Hall.

We worked with the Denham Vale project and flood defence staff to clear ponds at Glemsford Pits SSSI to enhance the conservation value of the ponds.

As part of the Colne Valley project we contributed to the development of a leaflet promoting walks in Halstead.

As part of the Greenways project we opened up a redundant path on the Mill River to provide riverside access.

We worked with Millbridge Parish Council to create disabled access to the river.

## Central Area

In 1994 the NRA acted as a partner with Cambridgeshire County Council in the launch and promotion of a long distance riverside footpath between Cambridge and Ely. A promotional pack was produced including route guides and historic information. During 1995 we undertook another collaborative project with Cambridgeshire County Council which provided a number of kissing gates en route as well as a series of interpretation boards at strategic sites. This project also involved replacing abutments at Holt Fen Bridge over the River Old West which allows access between the two cities along both river banks hence completing a circular long distance walk.

We contributed to the refurbishment of the Prickwillow Museum near Ely, Cambridgeshire. A series of information boards were constructed relaying the history of Fenland and the works of the NRA. The Museum displays a series of working pumping engines which have been responsible for the drainage of the surrounding farmland over the last century. The Museum was officially opened by Lord De Ramsey, Chairman of the Environment Agency on April 28 1996.

A 600 year old moat situated on the bank of the River Hiz in Arlesey now forms the centrepiece of a Wildlife Trust nature reserve. An area of open water of varying depths was created. This work will encourage new reed growth providing habitat for a variety of wildlife including an annual invasion of toads, as well as improving otter habitat in the area. In total over 2000 m<sup>3</sup> of silt and encroaching vegetation was removed. The work was undertaken with collaboration from Ivel Valley Countryside Project and the Bedfordshire and Cambridgeshire Wildlife Trust.

Bury Mead Springs is a nature reserve owned by North Hertfordshire District Council, north of Hitchin. This is the first urban nature reserve project that we have been involved in. The spring fed reed bed - one of the few remaining wetland habitats in North Hertfordshire and home to many breeding warblers and roosting Corn Buntings, was in danger of drying out due to the build up of dead reeds and peat. Reed warblers arrive at the site in Spring from Africa to breed before returning to warmer climes to overwinter. 6,000 tonnes of peat and dead reeds were removed over a 2½ week period to allow the regrowth of a healthy reed bed - improving the stability of habitat and increasing the availability of nesting sites. This project was undertaken in collaboration with English Nature and North Hertfordshire District Council.

The Ely Ouse Catchment Management Plan identified a need to restore the ecological value of the rivers of the Little Ouse Catchment, much of which lies in the Brecklands environmentally sensitive area. At Culford on the Culford Stream a historic lake on the watercourse had been suffering from years of neglect. This meant that the *phragmites* dominated reed bed had dried out leading to an invasion of willow carr and scrub.

The aim of this project was to open up the watercourse and recreate areas of open water. The reedbed has been regenerated, resulting in improved habitat for a variety of species, in particular dragonflies and water fowl. The restored areas of open water add considerably to the landscape attraction of the site and will halt the invasion of terrestrial vegetation. The work has been carried out in partnership with the Suffolk Wildlife Trust and the Culford School. There is particular local interest in the site with a public footpath running adjacent

to the lake. It is hoped that more use of the site can be made for educational purposes in the future.

River habitat enhancement was carried out in collaboration with the Cambridgeshire Wildlife Trust thanks to the Plant Breeding Institute (PBI), Chivers Ltd and a local farmer providing 15,000 sq m of land adjacent to the Rivers Cam and Rhee near Hauxton. Three thousand trees and shrubs were planted. Good cover combined with a good food supply are crucial to the otter. The establishment of riverside habitat is a strategy which in the long term will contribute to the survival and spread of the present otter population in the catchment and perhaps further afield.

During 1995/96 conservation staff surveyed a total of 100 km of river prior to flood defence works being undertaken.

Maintenance on the River Tove had not been undertaken for over ten years. The objective of this project was to create a self sustaining channel that would avoid the need for frequent maintenance whilst preserving conservation and environmental interests. Extensive dialogue and collaboration was needed to overcome the concerns of all those involved, including landowners, the Wildlife Trust, flood defence and conservation. The project involved the introduction of low level berms to enable the retention of an active summer channel whilst restricting in channel vegetation encroachment, and allowing the higher winter/ flood flows to pass unimpeded over the berms once the water levels rose. This also allows an increase in channel carrying capacity for higher flows whilst the conservation interests and natural meandering and vegetation characteristics of the river are maintained.

Dredging of the silt accumulation in the River Cam through Cambridge had been withheld. Dredging during the Summer would have exacerbated the already depleted oxygen level resulting from low flows and high temperatures which would have most certainly resulted in high fish mortalities.

We donated a number of kissing gates to Quy Parish Council for a footpath along Quy water.

We placed bales of barley straw in the Burwell Lode and the Old Bedford / Counterdrain in an attempt to reduce the growth of filamentous algae during the summer. A reduction in this algae is beneficial to angling and boating. The Counterdrain in particular has suffered from extreme growth of filamentous algae which led to a major fish mortality during 1995.

We have been involved in the restoration of an old wind and water powered mill at Little Cressingham in Norfolk. We have so far reconstructed the old mill pond and constructed a water intake system from the Watton Brook. Further minor works are necessary before the mill is fully restored during 1997.

We contributed to the production of a leaflet promoting riverside walks in the town of Hitchen. The leaflet, produced in collaboration with the Countryside Management Service, is aimed at people wishing to explore rivers such as the Hiz, which run through this urban area. The River Hiz is an identified low flow river and has benefitted from habitat enhancement works at nearby Bureymead Springs Nature Reserve and Arlesey Moat.

Following previous capital works, further enhancements were made to the Bourn Brook near Cambridge. A total of 15 mature willows were pollarded. This will be the first phase of an on-going programme of willow management which is needed along the river. In addition, several low level wet berms were created which will encourage a more diverse assemblage of plants to develop along the river margins. Two previously installed stone riffles in the main river were enhanced and an off river pond was created. These works will significantly add to the conservation value of this catchment which is of great importance to species such as the otter.

## **PUBLICATIONS and LEAFLETS**

### ***Fisheries***

Fisheries Byelaws

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

Navigation in the Anglian Region

Navigation Notes - Advice to boat owners

Navigation - The Anglian Experience

Map - Navigation in the Anglian Region

**SOUTH WESTERN  
REGION**





## SOUTH WESTERN REGION

### RECREATION & CONSERVATION SITES

Table 1.

AREA	RECREATION			CONSERVATION		
	IN USE	FUTURE USE	TOTAL	IN USE	FUTURE USE	TOTAL
NORTH WESSEX	23	0	23	21	0	21
SOUTH WESSEX	2	0	2	0	1	1
DEVON	17	1	18	17	3	20
CORNWALL	4	0	4	0	7	7
REGIONAL	46	1	47	38	11	49

Table 1. has been created by data supplied by the Region.

### LEASED ACTIVITIES ON NRA SITES

A number of activities are leased on NRA owned sites these are outlined in the table below, together with the number of sites on which these take place.

Table 2. Activities leased

Fishing	2
Moorings	1

### SURVEYS, MAINTENANCE & MANAGEMENT PLANS COMPLETED ON NRA SITES

26 sites have had habitat surveys undertaken, 1 site has had a management plan written and 1 site has had a maintenance plan written.

## SITE TYPES

A site can be classified as more than one type, for instance the site may be wetland but also estuarine. This information is represented in Table 3.

Table 3. Site Types

Asset eg, structures	18
River	49
Stillwater	10
Woodland	10
Moorland/Heath	1
Grassland	28
Wetland	7
Estuary	7
Coast	1

## SITE DESIGNATIONS

A number of sites within South Western Region have a landscape, wildlife or heritage designation.

Table 4. Site designations

National Park	2
AONB	4
Heritage Coast	2
SSSI/SAC	18
NNR	2
SNCI	1
Ramsar	6
SPA	6

## ACTIVITIES - LAND & WATER BASED

### LAND BASED

Activity	Restricted*	Permit*	Open*	Total
Bird watching			12	12
Cycling			4	4
Horse riding			1	1
Model Boating	1		1	2
Jogging/running			2	2
Hunting/shooting	1			1
Walking			29	29

### WATER BASED

Activity	Restricted*	Permit*	Open*	Total
Boating	4	1	1	6
Canoeing	5	2	6	13
Coarse fishing	12	8	2	22
Sea fishing	1	1	1	3
Game fishing	3	2	3	8
Jet skiing	1		1	2
Sailing	1		3	4
Swimming			2	2
Water skiing			1	1
Windsurfing	2		2	4
Rowing	2			2

The different types of access can be defined as;

\*Restricted - where access is limited to only those clubs/associations who have permission to use the site

\*Permit - where access is available to everyone, for the price of a permit or ticket.

\*Open - where access is free for everyone.

## **FACILITY PROVISION**

Some NRA sites where the above activities take place also have facilities provided by the NRA. Table 5. sets out those facilities available and which of these are suitable for people with disabilities.

Table 5.

<b>Facility</b>	<b>Number of sites</b>	<b>Suitable for the disabled</b>
*Footpath	27	7
Car Park	23	1
Picnic Site	1	
Interpretative Boards	5	
Toilet	1	
Cycle trail	1	
Campsite	1	
Fishing platform	10	9
Bird Hide	2	
Slipways	4	
Moorings	128	16

\* Footpaths are not necessarily provided by the NRA they may be a right of way crossing the site.

## **RIGHTS OF WAY**

On a number of NRA sites, rights of way exist across the site. In South Western Region there are 23 sites where a public footpath exists, 6 sites where a bridleway exists and 4 sites which have permissive paths crossing the land.

## SITE USAGE

Table 6. outlines the estimated number of visits made to NRA sites in South Western Région annually. Site usage has not been formally measured and these are rough estimates. An estimate has not been made for every recreation or conservation site in use.

Table 6.

No. of visits in a year	No. of NRA sites
1 - 49	2
50 - 99	1
100 - 499	2
500 - 999	4
1000 - 4999	4
over 5000	4
unknown	35

## **PROJECTS UNDERTAKEN IN NRA SOUTH WESTERN REGION**

The following are examples of projects undertaken by the NRA or in conjunction with other organisations during 1995/96.

### **Devon**

Working with Forest Enterprise we created a pond at Haldon to increase the open water space within the SSSI.

We worked with South Hams District Council, who undertook a desk study to assess the ecology of the River Avon Catchment. This will help improve our understanding of the catchment and aid our management of the river.

With Somerset Wildlife Trust we undertook gorse clearance on the Yarty Moor Reserve to restore the wetland habitat.

### **North Wessex**

Working with the local authority and the Community Forest throughout the year we undertook phased work concentrating on an investigation into the feasibility of wetland restoration in the Ladden Brook catchment.

We worked with English Nature, RSPB, Somerset Wildlife Trust, MAFF and Somerset County Council on a major wetland restoration funded by ourselves and ESA payments. We have been involved in funding research and monitoring programmes.

### **Cornwall**

Working with Cornwall Farming and Wildlife Advisory Group we undertook a project aimed at enhancing wildlife habitats on farms. The Scheme area lies west of Bodmin and includes the Camel valley above the tidal limit and several tributary valleys. From a basis of two keen farmers, a further 51 have been visited and have agreed to join the Scheme. Over half the landowners have requested a whole farm plan with recommendations for projects to encourage wildlife. Surveys have been completed of the whole area for breeding birds, insects and flora. A survey of the landscapes of the areas was also conducted. From the survey information has come recommendations for future priorities including hedge management, reintroduction of grazing on rough grassland, fencing of woodlands and habitat creation.

Several worthwhile projects have been undertaken already including pond clearance, tree and hedge planting, fencing and scrub clearance. Successful events have been held to involve the community including a barn owl demonstration, a Meadow day and several farm walks. Funding is now being sought for a low key follow-on scheme to continue the momentum gained and conduct monitoring. This will hopefully assess the long term effectiveness of the Scheme.

We worked with some voluntary workers from a wide range of groups including BTCV to establish the cause of swan deaths on the River Fal Estuary.

We have been assisting British Canoe Union (BCU) members to make sure that the effective use of volunteers will achieve better safety standards at a recreation site.

### **South Wessex**

We worked with Wiltshire Wildlife Trust, FWAG and ADAS on the Upper Avon Project stage II. This has involved a number of demonstration site visits. From these we have created three farm walks and a set of leaflets describing the three walks.

With Hampshire Wildlife Trust, local authorities and English Nature a habitat survey was undertaken of Hampshire. This provided valuable information on three river corridors.

We worked with numerous societies and individuals to produce a recreation database. This project involved the setting up of the database and identifying methods of information retrieval and easy means of updating the database.

We produced a report which surveyed coastal areas where we have responsibility. This investigation of coastal sites will help us to review our maintenance program.

We worked with a local community group on a site at Flowe Hole. This enhancement work helped to raise water levels and create a pond.

## **PUBLICATIONS and LEAFLETS**

### ***Conservation***

Pond Pack

Wildlife Along Rivers

Somerset Levels and Moors Water Level Management and Nature Conservation

River Tone

### ***Fisheries***

The Guide to Angling in South West England 1995 - 1996 (*published by Westcountry Tourist Board with the NRA*)

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

Buyer Beware Leaflet

Fisheries Technical reports:

1. The status of spring salmon stocks in Devon and Cornwall
2. Electric fishing monitoring - regional policy
3. Reporting guidelines for catchment overview surveys
4. The Exeter Canal coarse fishery
5. Biological problems associated with IFIM
6. Fisheries targets and their measurement on the Rivers Taw and Torridge
7. Review of fishery regulations on the Rivers Taw and Torridge

### ***Recreation***

The By Brook



**NORTHUMBRIA &  
YORKSHIRE REGION**



## **NORTHUMBRIA & YORKSHIRE REGION**

### **RECREATION & CONSERVATION SITES**

Table 1.

<b>AREA</b>	<b>RECREATION</b>			<b>CONSERVATION</b>		
	<b>IN USE</b>	<b>FUTURE USE</b>	<b>TOTAL</b>	<b>IN USE</b>	<b>FUTURE USE</b>	<b>TOTAL</b>
<b>SOUTH YORKSHIRE</b>	151	146	297	99	220	319
<b>DALES</b>	51	87	138	35	109	144
<b>NORTHUMBRIA</b>	2	0	0	2	0	2
<b>REGIONAL</b>	<b>204</b>	<b>233</b>	<b>435</b>	<b>136</b>	<b>329</b>	<b>465</b>

Table 1. has been created by data supplied by the Region.

### **LEASED ACTIVITIES ON NRA SITES**

A number of activities are leased on NRA owned sites these are outlined in the table below, together with the number of sites on which these take place.

Table 2. Activities leased

<b>Fishing</b>	<b>21</b>
<b>Grazing</b>	<b>238</b>
<b>Mooring</b>	<b>4</b>
<b>Boating</b>	<b>1</b>

### **SURVEYS, MAINTENANCE & MANAGEMENT PLANS COMPLETED ON NRA SITES**

69 sites have had habitat surveys undertaken and 2 landscape surveys have been undertaken, 12 sites have had management plans written and 7 sites have had maintenance plans written.

## SITE TYPES

A site can be classified as more than one type, for instance the site may be wetland but also estuarine. This information is represented in Table 3.

Table 3. Site Types

Asset	5
River	133
Stillwater	38
Woodland	12
Grassland	297
Moorland	1
Wetland	16

## SITE DESIGNATIONS

A number of sites within Northumbria & Yorkshire Region have a landscape, wildlife or heritage designation.

Table 4. Site designations

Regional Trail	4
Country Park	1
Local Nature Reserve	1
Woodland Trust	1
SSSI/SAC	32
NNR	3
Ramsar	11
Country Trust Reserve	4
SNCI	10
SPA	11
SAM	1

## ACTIVITIES - LAND & WATER BASED

### LAND BASED

Activity	Restricted*	Permit*	Open*	Total
Bird Watching			14	14
Cycling			2	2
Horse riding			1	1
Model boating	1			1
Hunting/shooting	8			8
Walking			107	107

### WATER BASED

Activity	Restricted*	Permit*	Open*	Total
Canoeing	1		4	5
Boating	1	1	13	15
Sailing	1			1
Swimming	1			1
Coarse fishing	34	4	31	69
Game Fishing	3	1		4

The different types of access can be defined as;

\*Restricted - where access is limited to only those clubs/associations who have permission to use the site

\*Permit - where access is available to everyone, for the price of a permit or ticket.

\*Open - where access is free for everyone.

## FACILITY PROVISION

Some NRA sites where the above activities take place also have facilities provided by the NRA. Table 5. sets out those facilities available and which of these are suitable for people with disabilities.

Table 5.

Facility	Number of sites	Suitable for the disabled
*Footpath	177	2
Car Park	6	1
Information Centre	1	1
Playground	1	
Campsite	1	
Clubhouse	1	
Nature Trail	1	
Slipway	1	
Toilets	4	2
Cycle Trail	3	
Picnic Site	1	1
Interpretative Boards	8	1
Fishing platform	1	1
Bird Hide	3	1
Moorings	4	

\* Footpaths are not necessarily provided by the NRA they may be a right of way crossing the site.

## RIGHTS OF WAY

On a number of NRA sites, rights of way exist across the site. In Northumbria & Yorkshire Region there are 104 sites where a public footpath exists, 4 bridleways and 74 sites have permissive paths crossing the land.

## SITE USAGE

Table 6. outlines the estimated number of visits made to NRA sites in Northumbria & Yorkshire Region annually. Site usage has not been formally measured and these are rough estimates. An estimate has not been made for every recreation & conservation site.

Table 6.

No. of visits in a year	No. of NRA sites
1 - 49	
50 - 99	
100 - 499	1
500 - 999	1
1000 - 4999	
over 5000	
unknown	285

## **PROJECTS UNDERTAKEN IN NRA NORTHUMBRIA & YORKSHIRE REGION**

The following are examples of projects undertaken by the NRA or in conjunction with other organisations during 1995/96.

### **Northumbria**

#### **Weardale Schools project**

The NRA in conjunction with the Upper Weardale Schools ran a competition to increase the environmental awareness of rivers to school children. The competition coincided with the NRA's 5th birthday celebrations.

#### **Tyne and Wear Watersports Development project**

The NRA contribute together with Tyne and Wear Development Corporation, the Sports Council, the Port Authority and the District Councils to a project devoted to developing watersports on the Tyne and Wear. This is an on-going project and is in its third year. As part of this project a Marine Activity Centre has been built to develop watersports on the River Wear in Sunderland.

#### **Chester-le-Street improvements**

The NRA and Chester-le-Street Council and the Gt. North Forest have together worked to improve the amenity and recreational use of the River Wear at Chester-le-Street in order to create a safe facility for river users and increase recreation and amenity use.

#### **North Northumberland Otter project**

The NRA have continued to be involved in, and have provided funding for, this joint project with the Northumberland Wildlife Trust in the River Till catchment. Survey work has been undertaken to assess the potential for extending the project into the Aln and Coquet catchments in the future.

#### **Tyne Otter project**

This project is supported by English Nature, Forest Enterprise, Northumbria Wildlife Trust, Durham University and Northumbrian Water. The NRA undertook electrofishing surveys to assess otter prey availability. This research contributed to an otter distribution and management plan for the River Tyne.

#### **Farm Conservation advisor**

The NRA and Northumbria FWAG gave advice to landowners on farm conservation. This was done to increase the level of awareness of watercourse management.

#### **Giant Hogweed control**

The NRA have undertaken experimental chemical spraying on the Rivers Tyne and Wansbeck to try to prevent this invasive plant species spreading to other habitats in the catchment.

#### **Chester Burn improvements**

The NRA together with Chester Le Street district council have undertaken landscape improvements as part of a flood defence scheme. The aim of the project is to break the river out of a concrete channel and create a more natural river environment including riffles, damp



margins and fringing deciduous trees.

#### The River Coquet at Thropton

The NRA have undertaken tree planting and fencing as part of this project to slow erosion processes, improve habitat and the fisheries potential of the area.

#### Howden Dene

The NRA in collaboration with Northumberland FWAG, have restored a pond vital for local wildlife at Howden Dene, adjacent to the River Tyne.

#### Riparian Habitat project

The NRA, FWAG and local landowners together worked together to undertake a number of habitat improvements across the Area.

#### Hylton Dene

The NRA and Durham Wildlife Trust have worked to restore a small colliery pond at Hylton Dene in Sunderland which has been identified as one of the most ecologically rich ponds of its size in Tyne and Wear.

#### Coquet / Aln estuary plan

The NRA helped to co-ordinate the planning of work in the estuaries together with Northumberland Coast Project, Alnwick district council, English Nature and *Amble* Development Trust.

#### Blyth / Wansbeck estuary plan

The NRA helped to co-ordinate the planning of work in the estuaries together with Northumberland Coast Project, Blyth Valley District Council, Wansbeck District Council and English Nature.

### Ridings Area

#### Carr Wagon Pond restoration

The NRA prepared and designed the restoration of the above Agency owned pond. This involved some desilting and improvements to restore the pond for angling and to improve the conservation status of an interesting wildlife habitat.

#### Niagara Weir

The NRA and Sheffield Wildlife Action Partnership undertook improvements works on an access path to the River Don, including the reinstatement of stone steps. Some trimming and removal of trees and undergrowth was also undertaken at this site. This work helped to improve the access to the riverside. It also provides an improved view of the impressive archaeological feature of Niagara Weir from an adjacent recreation ground/ playing field. It is hoped that this will then increase environmental awareness.

#### Spurn Heritage

The NRA together with the Spurn Heritage Project helped to collaboratively fund a part time warden to manage and maintain the site at Spurn. The on site warden manages and maintains the little tern colony. This also involves the upkeep and maintenance of trails and

footpaths and the production of information leaflets.

#### River Hull biodiversity project

The River Hull corridor has a high conservation value with special regard to otters, barn owls, water voles and fish. However, the area is intensively farmed and so habitat is limited and awareness poor. The Farming and Wildlife Advisory Group (FWAG) are very active in this area. This project helped to fund a FWAG advisor to specifically target the farming community to promote environmentally responsible farming and conservation, and increase awareness on the wildlife needs and habitat requirements. This advisor also provided project management for the Area Otter reintroduction project.

#### High Eske improvements

This project involved the provision of signage for safety and information to encourage responsible use of this site by the public. Floating logs were also installed to shelter banks from wave action and prevent erosion. A new weir was also constructed to stabilise water levels.

#### North Ferriby tip

Together with North Ferriby Parish Council, Beverley Borough Council and the TransPennine Trail Trust the NRA commissioned a report on the alleviation of the current erosion problems. This was done to further the use of the land for recreation by the local community, riding for the disabled etc. The Wolds Way also passes the boundaries of the tip, as does the TransPennine Trail.

#### Sprotborough Fishing Platforms

This project involved the construction of two angling platforms using willow stakes for erosion prevention, while giving anglers a safe platform for fishing. These will create "living" stances which will grow and mature to provide protection against erosion, whilst providing safe areas for fishing.

#### Eye on the Aire

Together with the Eye on the Aire group the NRA helped to produce educative and interpretative leaflets and a strategy document on condition on the River Aire.

#### Wakefield Groundwork

A detailed study was undertaken on the lower Calder and Aire at Castleford in collaboration with the Wakefield Groundwork Trust. This was done to identify current conditions, ongoing initiatives and potential habitat enhancements. The report highlighted areas for potential environmental improvement projects.

#### Fosse Ponds

The NRA together with Brondesturton Pit Countryside Project constructed a section of boardwalk to complete a circular walk around Fosse Ponds Country Park.

#### Calderdale Riverside Walks

The NRA and Calderdale Metropolitan Borough Council designed and produced instructive leaflets on three riverside walks in Calderdale; Ryburn Valley, Cragg Vale and Calder Water Valley. We also helped to make the walks safe and where necessary waymarked the routes.

#### University of Hull study

The NRA worked with the University of Hull to commission a post graduate to provide detailed research into, and produce a report on the flora of ponds. The research thesis is entitled "The flora of ponds, a basis for their classification, conservation and management".

#### Meanwood Valley Urban Farm

The NRA contributed to the construction of a visitor centre at the farm. Funds have been obtained from the Millennium Commissioners to be matched from local industry and the community. The visitor centre promotes awareness of sustainability and environmental issues.

#### Engine Fields Conservation Ponds

Working with the Friends of Dog Mill Ponds the NRA contributed to this local community group for continued restoration work on two abandoned mill ponds and the surrounding grounds. This will help to provide a valuable local amenity feature and park.

#### Prince's Trust Scheme

The NRA together with Prince's Trust volunteers undertook remedial works and installed new features at Beverley Barmston Drain in Hull. This involved the installation of a disabled ramp and a number of management work undertaken at the site of a previous environmental enhancement.

#### Dearne Study

This project involved the hiring of consultants to produce a report based on an area of the Dearne outlining current conservation/recreation status, future initiatives by external bodies and possible opportunities for Agency-led projects. The report provided information on current and future environmental improvement schemes. A list of possible future collaborative partners was compiled as well as a list of opportunities for schemes. This will help to target resources both within the Agency and from external sources.

#### Scheme design

The NRA hired consultants to produce scheme designs and a manual containing a checklist in order to make the progression of environmental improvements easier.

#### The Drifffield Show

The NRA supported a conservation marquee together with Drifffield Agricultural Society, FWAG and the Hawk and Owl Trust for a day at the Drifffield Show. This exhibition helped to increase the general public's awareness of conservation and environmental issues.

#### Sutton in Craven Conservation Day

The NRA supported a conservation day held at Sutton in Craven by the local wildlife and conservation group to help raise the awareness of conservation and environmental issues.

#### Wold Newton Ponds

Together with Wold Newton Parish Council the NRA helped to remodel a village pond which involved undertaking bank protection work and planting. This increased and improved the habitat for wildlife and plants and helped to increase the recreational status of the pond as a feature within the village.

## **Dales Area**

### **Otters and Rivers**

The NRA has continued to work with Yorkshire Wildlife Trust on an otter and rivers project. Habitat improvements and a number of surveys have been undertaken and awareness of otters has been increased through discussions with landowners. A similar project has been continuing in collaboration with the Durham Wildlife Trust and Northumbria Area of the NRA.

### **North Yorkshire and Cleveland Farming, Wildlife Advisory Groups**

The NRA has continued to work with both the Yorkshire FWAG and the Cleveland FWAG to increase landowners awareness of the river environment and encourage them to make improvements to further conservation through the production of Farm Management Plans.

### **Nidd Landscape Improvements**

The NRA, Harrogate Borough Council and North Yorkshire County Council have continued to collaborate to develop habitat improvements on the River Nidd.

### **Erosion Project**

This project has focussed on the related problems of riverbank erosion, tipping and lack of habitat diversity. Together the NRA, North Yorkshire County Council and Yorkshire Dales National Park have undertaken habitat improvements to restore this area.

### **Heritage Coast**

The NRA, North Yorkshire Moors National Park and various local authorities have continued to maintain a focus to co-ordinate and achieve improvements along a piece of important Heritage Coast.

### **Ripon Rowell**

The NRA worked with the Ramblers' association to create a 50 mile long distance circular countryside trail, the southern stretch of which runs adjacent to the River Ure on its way to Ripon.

### **Wheldrake Ings**

The NRA and English Nature have created a reed bed to provide a breeding habitat for bittern which have been present on the site for many years. The reed bed area is overlooked by three hides to allow public views over the area.

### **Giant Hogweed**

A co-ordinated effort has been made by the NRA, Cleveland CC, North Yorkshire CC, Durham CC and FWAG to survey and control the distribution of Giant Hogweed which was identified as a problem within the Tees Catchment.

### **Middle Swale Habitat Restoration Project**

On a twenty mile section of the Swale, work has been undertaken to improve wildlife habitat. This work has included fencing off approximately eight miles of river and planting with willows and other trees.

### **Ouse Ings Heritage Project**

The NRA has worked with local conservation organisations to look at how to protect the Ings around York. A report has been produced which compiles all the historical, social and natural history information about the Ouse Ings.

#### Selby Waterfront Project

Together with Selby District Council the NRA has improved the water front near Selby by developing a footpath and amenity area. The project involved the community through a two day school event to create willow sculptures which are placed alongside the length of the footpath which is suitable for wheelchairs. Seating is provided on the top of the floodbanks on the site to allow visitors to view the site.

## **PUBLICATIONS and LEAFLETS**

### ***Conservation***

Water Weed Control - take care to protect the aquatic environment  
Farming and Wildlife Advisory Group / NRA River Corridor Project Flyer  
Ponds and Conservation  
Conservation in the Catchment documents - Ure and Swale catchments  
Floodbanks in Flower  
Understanding River Erosion - from a Conservation perspective  
Otters and eel netting

### ***Fisheries***

Angling Guide - Northumbria  
Kielder Salmon Hatchery  
Buyer Beware Poached Salmon  
Keld Head Hatchery  
Angling Clubs in Yorkshire  
River Angling in Yorkshire  
NRA Yorkshire's Catch - Fisheries magazine  
Fisheries Byelaws - North East Region  
Stillwater Fisheries - their creation, development and management\*  
Predators and pest control\*  
Fish and fisheries biology\*  
Water plants: their functional control\*  
Construction and desilting of stillwaters\*  
Fisheries habitat improvement\*  
Environment of fish\*

\* Fisheries advisory booklet series

### ***Recreation***

Northumbria Canoeist's Access hotline card  
Hazard Warning - Rubbish in River  
Barmby Barrage Amenity Site  
The NRA & you - A partnership for the future  
Rivercall - an information guide for river users

# SEVERN-TRENT REGION





## SEVERN-TRENT REGION

### RECREATION & CONSERVATION SITES

Table 1.

AREA	RECREATION		TOTAL	CONSERVATION		
	IN USE	FUTURE USE		IN USE	FUTURE USE	TOTAL
UPPER TRENT	3	3	6	3	3	6
LOWER TRENT	23	6	29	16	13	29
UPPER SEVERN	11	0	11	11	1	12
LOWER SEVERN	9	3	12	5	7	12
REGIONAL	46	12	58	35	24	59

Table 1. has been created by data supplied by the Region.

### LEASED ACTIVITIES ON NRA SITES

A number of activities are leased on NRA owned sites these are outlined in the table below, together with the number of sites on which these take place.

Table 2. Activities leased

Fishing	20
Moorings	3
Grazing	9
Boating	1

### SURVEYS, MAINTENANCE & MANAGEMENT PLANS COMPLETED ON NRA SITES

23 sites had habitat surveys and 18 sites had landscape surveys undertaken. 11 sites had management plans written and 9 sites had maintenance plans written.

## SITE TYPES

A site can be classified as more than one type, for instance the site may be wetland but also estuarine. This information is represented in Table 3.

Table 3. Site Type

Asset eg, structure	10
River	49
Stillwater	14
Woodland	9
Grassland	21
Wetland	13
Estuary	1

## SITE DESIGNATIONS

A number of sites within Severn-Trent Region have a landscape, wildlife or heritage designation.

Table 4. Site designations

National Trail	1
Regional Trail	6
National Park	1
SSSI/SAC	4
SNCI	11
County Trust Reserve	1
SAM	1
Listed Buildings	2
SSAI	3
SIHI	1

## ACTIVITIES - LAND & WATER BASED

### LAND BASED

Activity	Restricted*	Permit*	Open*	Total
Bird Watching		1	14	15
Cycling			4	4
Horseriding			5	5
Jogging/running			17	17
Hunting/shooting	1			1
Walking			25	25

### WATER BASED

Activity	Restricted*	Permit*	Open*	Total
Boating	3	1	2	6
Canoeing		1	1	2
Coarse fishing	6	14	10	30
Sea fishing			1	1
Game Fishing	1	4	3	8
Water skiing	2			2

The different types of access can be defined as;

\*Restricted - where access is limited to only those clubs/associations who have permission to use the site

\*Permit - where access is available to everyone, for the price of a permit or ticket.

\*Open - where access is free for everyone.

## **FACILITY PROVISION**

Some NRA sites where the above activities take place also have facilities provided by the NRA. Table 5. sets out those facilities available and which of these are suitable for people with disabilities.

Table 5.

<b>Facility</b>	<b>Number of sites</b>	<b>Suitable for the disabled</b>
*Footpath	37	17
Car Park	18	5
Picnic Site	6	1
Interpretative Boards	3	1
Toilet	1	1
Viewing point	2	
Cycle trail	3	3
Fishing platform	3	2
Nature Trail	1	
Bird Hide	2	1
Moorings	5	2

\* Footpaths are not necessarily provided by the NRA they may be a right of way crossing the site.

## **RIGHTS OF WAY**

On a number of NRA sites, rights of way exist across the site. In Severn-Trent Region there are 21 sites where a public footpath exists, 5 sites where a bridleway exists and 10 sites which have permissive paths crossing the land.

## SITE USAGE

Table 6. outlines the estimated number of visits made to NRA sites in Severn-Trent Region annually. Site usage has not been formally measured and these are rough estimates. An estimate has not been made for every recreation or conservation site in use.

Table 6.

No. of visits in a year	No. of NRA sites
1 - 49	5
50 - 99	4
100 - 499	6
500 - 999	10
1000 - 4999	7
over 5000	2
unknown	22

## **PROJECTS UNDERTAKEN IN NRA SEVERN-TRENT REGION**

The following are examples of projects undertaken by the NRA or in conjunction with other organisations during 1995/96.

### **Upper Trent**

**HINTS** - this project was undertaken on NRA land and involved the renovation of a weir pool and its feeder stream as part of an ongoing restoration programme to improve the amenity value of this site.

Working with Birmingham City Council on the Yardley Brook, we worked to remove an old concrete channel to form a natural watercourse over a 200 metre stretch. This would improve the habitat and the visual appearance of the brook.

As part of Project Kingfisher, ourselves and Birmingham City Council worked together to create a small pool to improve habitat and act as a silt and pollution trap before water reaches Babbs Mill lake. We were also involved in another project which involved installing a low kick rail to exclude bikes and cars from a site.

Together with Stone Town Council, Staffordshire Borough Council and the British Canoe Union we helped to refurbish an old canoe slalom course. This work involved tree planting and general site improvements.

With the Burton Mutual Angling Society we de-silted an ox-bow lake on the old River Dove, designated an SSSI to maintain its conservation importance but also to improve its value as a fishery.

We created a shore feature on otherwise steep banks which are part of the River Tame and created a pool to improve the habitat along the river.

As part of the Stoke river rehabilitation scheme we created a number of meanders, berms and current deflectors to improve the habitat of the river.

Together with all local authorities in Staffordshire and the Staffs Wildlife Trust phase 1 of a survey of Staffordshire was undertaken. This involved the creation of detailed maps of Staffordshire's habitats.

A habitat biodiversity audit was undertaken of Warwickshire. This audit was funded by all Warwickshire local authorities, districts and councils; including Coventry, Solihull, English Nature and the Warwickshire Wildlife Trust. The audit consisted of maps of all habitats in Warwickshire.

Working with the Groundwork Trust and local landowners we undertook tree planting and landscaping in the Witton Area to improve the local habitat and amenity.

We were involved in some preparatory work for a schools project called Waterwise. This project will be an award scheme for conservation improvement schemes.

We initiated a project called Trees on the Trent with local landowners. This involved three separate schemes between Hanford and Wychnor, to improve the amenity and habitat of the River Trent.

Working with Walsall Metropolitan Borough Council we undertook habitat and amenity improvements in the Goscote valley in the Cartbridge Lane area.

We worked with Solihull Metropolitan Borough Council at Brueton Park to complete some landscape works and do some tree planting to improve the habitat and amenity of the site.

### **Upper Severn**

Working with Wrekin Council and WMD Art we were involved in the Milestone project. This involved installing interpretation points along the River Severn at Ironbridge. These information points will help to raise awareness of the river and act as an educational tool.

Working with Worcester County Council we helped to extend a riverside cycleway as part of the Worcester cycleway. We also contributed to the production of a guide to the cycleway.

With Shropshire County Council we helped to install a mooring for a wheely boat. We also contributed to the provision of a boat designed by the Handicapped Anglers Trust.

We worked with Worcestershire County Council and Shropshire County Council to complete the Severn Way footpath in Shropshire and Worcestershire. This footpath has improved access along the UK's longest river.

With a local landowner we excavated an old floodplain meander to create a wetland habitat from intensively farmed grassland.

Working with the Worcester Nature Trust (WNT) at Upton Warren Nature Reserve we created a wetland area to improve the habitat to a site which also has controlled public access. At Moors Pool we installed a boardwalk. WNT will carry out the long term maintenance of the site and encourage educational visits from local schools.

We were involved with Shropshire Wildlife Trust at Chetmarsh Nature Reserve creating a wetland habitat.

We were involved with Severn-Trent Water and Montgomery Wildlife Trust in the creation of wetland areas along the River Severn valley. These were at Penarth Sewage works, and Dolydd Hafren sites and are part of the Severn Valley Wetlands Project.

Together with the Countryside Commission we commissioned a floodplain land use study. This area around the River Severn and River Vymwy confluence is an agricultural / environmental scheme covering 52 km<sup>2</sup>.

Working with a local landowner we undertook repairs to a bund protecting a "mire" type habitat. This work will help to retain the breeding habitat for redshank and snipe.

We worked with Worcestershire Nature Conservation Trust at Wilden Marsh to manage the wetland to improve its value for conservation. The Trust will take over the long term maintenance of the site.

Together with Worcestershire Nature Conservation Trust, English Nature and the CTY Archaeology we undertook tree clearance around a medieval fish ponds to improve the habitat and protect a SMR as part of Grimley Cultural Landscape Project.

We worked with Dudley and Sandwell Metropolitan Borough Council to install fishing platforms for the disabled at Bumble Hole in the Stour Valley. The access to this site is controlled to protect an important habitat. The long term maintenance of this site will be taken on by the local authority.

With South Staffordshire Council we helped to improve the public access and provide educational facilities along the Wombrook walk way.

At Hoo Brook LNP we worked with Wyre Forest District Council and undertook tree clearance and installed a boardwalk to improve the habitat and the public access to the site.

Working with Worcestershire County Council we helped to install a pond dipping platform on the Laughmerne Brook.

We undertook tree maintenance and planted an orchard with Shropshire County Council at Alverly Country Park to improve the habitat of the Park.

### **Lower Severn**

#### **Three Counties Showground, Malvern**

Following the excavation of a pool last year, a substantial timber structure was erected this year to function as a Water Environment Centre. Integrated into the landscape by earth shaping and planting, this Centre will be maintained and operated in conjunction with the Three Counties Showground Organisers and houses educational display material, pond dipping and other sampling equipment. Pond dipping platforms have now been constructed, reedbed and marginal planting carried out. A water resources demonstration has been installed for the Three Counties Show explaining water saving measures and displaying relevant equipment. Facilities exist for the storage of a small punt. Use has been requested by teaching groups through the Showground organisers and for the training of tree wardens by Hereford and Worcester County Council so far.

#### **Pennyford Weir**

A feasibility study was completed on a weir construction. Designs were drawn up for three small weirs to regulate flows between main and back-channels. Environmental benefits include the protection of spawning gravels, water crayfish habitat and otter habitat. These will control water levels and protect an upstream impounded section and maintain flows through the downstream mill channel throughout the summer months. Bank protection will support vegetation growth and avoid scour and erosion of banks.



### Hewell Grange

The initial project was to return water to a 10 hectare ornamental lake in the grounds of Hewell Grange. A comprehensive environmental assessment of the estate has identified all available sources of water to feed the ornamental lake which formed a focal point in Repton's original landscape design. Working with the Prison Governor, Hereford and Worcester Gardens Trust, English Nature and Hereford and Worcester County Council, we led the working party which made an application for Millennium funding. This £1.9m project would have restored the lake to its former condition. The bid fell at the second stage, but other investigations carried out by water resources indicated a way in which additional water could probably be returned to the lake.

### Otter Project

We gave continued support to encourage the spread of otters through the Lower Severn and Avon as a gateway to the recolonisation of central and southern England. This involved the funding of a project officer.

### Sanitary stations

We helped to fund the maintenance of four sanitary stations on the Rivers Avon and Severn.

### Kingstanley Mill

This project involved the reinstatement of pasture by re seeding. An ADAS report was undertaken to ensure that the satisfactory agricultural standard has been achieved. We undertook this work with the mill owner and Gloucestershire County Council.

### Uckinghall Pond

This involved the reinstatement of an old pond which had become silted up and partially filled twenty years ago with spoil from the M50 construction. It also involved the restoration of streamside wetland habitat by re-grading and re-seeding with wild flowers of the meadow upslope of the pool.

### Leek Wootton Pool

We dredged a large fishing lake and a smaller second pool to improve a threatened aquatic habitat. It also involved the construction of a bypass channel to protect water quality during the excavation. The initial dredging and reinstatement of agricultural land was done to ADAS approved standard and was completed in 1994/95. The reinstatement of the ornamental landscape after the bypass channel was completed in 1995/96. This work was undertaken with Police Headquarters, Warwickshire.

### Arrow Valley Lake

Together with Redditch District Council we undertook a feasibility study to explore methods of creating berms and sheltered margins to protect fish fry around deep lake with no marginal vegetation. A graphic report was produced which put forward options and methods of construction, giving practical advice to a local authority who have now started to carry out the work.

### **Barnrooden**

We undertook a level survey, site survey and a newt survey, preliminary to the preparation of site plans for the reinstatement of an old system of five field ponds and their stream / ditch connections. It also involved the introduction of a new larger area of open water central to the whole site which is being developed as a forest planting of some 100 hectares with inter-linking water bodies and glades. Plans are now being prepared and the Agency awaits funding to proceed to implementation.

### **Abbey Fields, Kennilworth**

Working together with Kenilworth District Council and the Residents Association we undertook a feasibility study on the re-introduction of water into silted up ponds within the landscape of Abbey Fields Park, downstream of Kenilworth Castle. A lot of interest has been shown in the history of water bodies and moat around the castle, now subject of a Millennium bid for funding. The pool in question was known to have been used as a skating lake earlier this century, but it's history is still under investigation as part of the feasibility study. In its present silted up condition, it's habitat value is not great and its appearance is quite unsatisfactory in summer.

### **Stoneleight RASE**

This project was undertaken with RASE, the Otter Project, Flyghts Pumps, Forest Products, Yarningdale Nurseries, Hereford and Worcester County Council and Landline (liner). It involved the construction of a simulated river channel with pools, riffles and conservation pool. The water recirculates around the system by means of underground pipework and flows down the channel. The channel is sinuous and the banks varied, with berms and prolific marginal vegetation alongside unimproved grassland with wild flowers. The area is used to demonstrate aspects of river management such as traditional management of timber, coppicing, pollarding and spiling, structures such as cattle drink and, next year, a fishing platform. A small cabin forms a focus for interpretation and interactive displays such as pond dipping.

The display area is in the Farming and Countryside themed part of the showground and messages of multi-functional relevance are being communicated to a national and international audience. Last year, the display attracted wide interest from press, radio, television, HRH Prince Charles, William Waldegrave (MAFF) and a number of junior government ministers and civil servants.

A conservation reedbed and boardwalk will be installed in 1996 and graphic display panels illustrating the philosophy of river restoration and describing the work of the River Restoration Project.

### **Parish Pride**

This project involved the judging of a competition between parishes in Hereford and Worcester County to select the best environmental projects involving the community. This was a Hereford and Worcester County Council supported by the NRA. The winning entry was a conservation pool in Holme Lacey, excavated with guidance and help from ourselves and planning by village schoolchildren.

### **Craycombe Turn moorings**

We installed a number of moorings on the River Avon at Craycombe Turn.

#### Ryeford Sawmill

This project worked with the Stroudwater Canal Company to repair and refurbish an old sluiceway structure on the River Frome at Stonehouse where the Stroudwater canal is close to the River Frome.

#### River landscape appraisal

Appraisals were carried out on the following rivers; Frome, Cam, Whicksters Brook, Clay Coton Brook, Finham Brook, Leadoñ and Swift. All these rivers were identified in the appropriate catchment plans as needing landscape/habitat improvements or rehabilitation on a grander scale.

#### Landscape maintenance contract

All the landscape/planting projects which have been undertaken over the last 15 years have been surveyed and a programme of thinning, fencing and otherwise making good has been established.

#### Sandhurst

A feasibility study was undertaken to look at the restoration of ecologically important brick pits for nature conservation and recreational benefits.

#### Badsey Brook

This involved the management of riverside willow carr and the restoration of an old channel as a wetland area alongside original channel straightened for flow measuring purposes.

#### The Old Mill, Clifford Chambers

This was an extensive scheme to regrade a redundant fish farm to recreate a natural flood plain meadow and lake, removing flood banks designed to protect its former use. The restoration of accurate levels involved detailed survey and design in conjunction with the Land Drainage Consents Officer and careful reprofiling during works to ensure that flood protection to property was sustained at existing or improved levels. The approach to the site was across the river, due to the inadequacy of existing structures and the work was carried out within a girdle of large mature indigenous trees. The meadow will be sown with wild flower species appropriate to the flood plain location. A public footpath runs around the site and along the river.

#### Longford Weir

We undertook repairs to a small weir installed to regulate flows to a conservation wetland constructed previously by the FRCN department. The weir had been damaged by vandalism. A new weir was also installed in the main river on the advice of environmental quality staff to enable flows to be regulated to avoid the wetland in the event of an upstream pollution. This work was undertaken with Coventry Leisure Services and a grant from the Countryside Commission.

#### Huddington Manor, Bow Brook

This involved the re-shaping and management including the light dredging of a conservation pool established eight years ago. Clearance and thinning of vegetation to improve habitat and the reformation of small flood banks were also undertaken to ensure adequate protection.

#### River Arrow, Alvechurch

A survey and feasibility study was undertaken to remove an unsightly and redundant sluice structure in a visually attractive valley which is well used as a recreation area. Another objective was to restore a natural river character upstream by channel improvements and to create a pool or wetland habitat adjacent to the river. This work was done with Alvechurch Parish Council and Parish Pride.

#### Canley Brook, Coventry

This project was an appraisal of an archaeological site to explore the possibility of re-introducing water to avoid inevitable damage to underground timber and other remains of brick and clay pit system associated with the manufacture of pots in the early Medieval period.

#### Charlecote Park dredge

This project worked with the National Trust to undertake a levels survey and a feasibility study to look at partially dredging a carp lake in a historic park to improve the fishery habitat. Spoil disposal needed to be carefully considered to incorporate it into the historic landscape and haul routes are limited.

#### Ashleworth

Working with Gloucestershire Wildlife Trust we dredged a number of shallow scrapes within a SSSI to improve the existing habitat of nature conservation value.

#### Stanchard Pit bank improvements

The riverbank in this part of Tewkesbury is a popular spot for fishing, but instability has made it hazardous and visually raw. Recreation has been enhanced by the provisions of fishing platforms amongst reed planted margins, increasing habitat diversity and improving visual amenity in this high profile area. The bank has been planted and the planting stabilised with timber piling. Bank top trees are in keeping with the flood plain landscape character.

#### Abbey Mill, Tewkesbury

This project involved the construction of an architect designed control structure in the weather boarded style of the original Mill to blend in with the historic backdrop of Tewkesbury Abbey and medieval cottages. The riverside quay is designed with appropriate furniture, block paving and planting detail to reflect the character of a historic navigable watercourse. We also provided interpretation boards of an old tilting sluice gate and a new sluice provided. An old cast iron manufacturer's plate has also been restored.

#### Slimbridge (Purton to Frampton) Observatory

This is a low energy, "environmentally friendly" insulated timber structure. Which involved a turfed roof and earth shaping designed to blend in with the floodplain landscape. The observatory provides extensive views over a large lake excavated to create spoil for flood bank construction. Other conservation works and wetland creation were undertaken at the site. This work was undertaken with the Wildfowl and Wetlands Trust.

#### **Mitchells Salt Rhine**

This involved the creation of an extensive wader scrape and lake excavated as part of the work to reconstruct the flood bank along the rear of this estuarine SSSI which extended a pressured habitat.

#### **Priding to Bush Crib**

This involved the reinstatement of private gardens after flood defence constructed a defence scheme through 31 properties. The first phase of this work is on seven properties all designed to individual landowners specification.

#### **Hock Ditch**

We completed a specialised reinstatement of access road onto saltmarsh in a SSSI following report submitted to English Nature and established hedgerows on agricultural margins beyond.

#### **Saltmarsh Ecology**

We completed the fourth year of an ecological survey on five estuarine saltmarsh sites. These had been previously disturbed by Flood Defence works. The surveys were undertaken to establish the impacts of this work and the rate and quality of regeneration.

#### **Lydney Flood Alleviation Scheme**

We completed landscape mitigation works alongside one kilometre of river, including tree, shrub, wildflower and marginal planting.

#### **Deerhurst Gauging Station**

We created a pond and wetland on land associated with the gauging station. We also undertook tree and scrub planting to strengthen existing vegetation in the landscape.

#### **Glynch Brook Gauging Station**

We did some planting on land associated with the gauging station to enable it to blend into the rural landscape and to screen the structure from the nearby motorway.

#### **Binn Wall and Severn Beach**

We monitored silt movements in the Estuary and designed a barrier to deter car parking on the foreshore of a SSSI and saltmarsh.

#### **Lower Trent**

We restored an old meander in the River Erewash and created an island haven on NRA land at Toton.

On our land at Winthorpe we undertook a facility design for disabled fishing platforms that would also help to protect banks from erosion. These designs are now ready to be let for contract.

We completed site management plans on the following sites: Winthorpe, Torne Wood, River Erewash at Toton, River Eau, Warping Drain, and Bawtry.

To improve the habitat for breeding birds we installed a number of rafts on our site at Dunham.

We installed a new footbridge over the river on our property at Three Rivers. This will increase the fishing area because of a loss of a site due to capital scheme at Keadby.

In order to improve an NRA site for anglers we created a new track and car parking bays at Medge Hall pool.

Working with British Waterways we installed floating moorings and a picnic site to improve facilities at Hazleford.

We provided gravel bars to improve the habitat for breeding birds at Armthorpe Reservoir.

Together with Nottingham City Council, Gedling Borough Council, Ashfield District Council and the Countryside Commission we helped to support a project officer for the Leen - Corridors to the Countryside Project. This person will be dedicated to the project and will produce strategies for the Rivers; Leen, Trent and part of Fulham Brook. We also helped to produce a PR package for the project which included leaflets, signposts, finials etc.

We worked with Melton Borough Council on the Scalford Brook to divert the river and revet the banks with willow spiling. This work helped to reinstate a footpath in a country path.

We worked with Amber Valley District Council to develop a heritage centre at an old mill at Belper. Part of the centre involves a display on the River Derwent. We also helped to improve the facilities at this site by installing new picnic tables.

Working with local landowners we assessed the current status of wetlands along the River Trent. A report was produced with recommendations for further work.

We worked with Oxton estates to evaluate the conservation status of rare plants along a watercourse, Oxton bogs which has been declared A.L.F. A report was produced with recommendations.

Together with Leicestershire University we undertook a crayfish survey which monitored signal crayfish and native crayfish in the rivers in Leicestershire. A report was produced showing the population distribution.

Working with Sutton Bonington Parish Council we provided a small footbridge and picnic tables on a site at Sutton Bonington adjacent to the River Soar.

## **PUBLICATIONS/LEAFLETS**

### ***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  
Eel & Elvers  
Regional Fishing Guide 1996/97  
River Trent Angling guide  
Rivers Soar & Wreake Angling guide

### ***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

# THAMES REGION



## THAMES REGION

### RECREATION & CONSERVATION SITES

Table 1.

AREA	RECREATION			CONSERVATION		
	IN USE	FUTURE USE	TOTAL	IN USE	FUTURE USE	TOTAL
NORTH EAST	9	6	15	13	8	21
SOUTH EAST	19	0	19	10	1	11
WEST	29	4	32	17	8	25
REGIONAL	50	14	64	40	17	57

Table 1. has been created by data supplied by the Region.

### LEASED ACTIVITIES ON NRA SITES

A number of activities are leased on NRA owned sites these are outlined in the table below, together with the number of sites on which these take place.

Table 2: Activities leased

*Fishing	40
Moorings	4
Grazing	1
Boating	4

*\* data requires validation*

### SURVEYS, MAINTENANCE & MANAGEMENT PLANS COMPLETED ON NRA SITES

37 sites have had habitat surveys undertaken, 11 sites have had management plans written and 10 sites have had maintenance plans written.

### SITE TYPES

A site can be classified as more than one type, for instance the site may be wetland but also estuarine. This information is represented in Table 3. Thames Region also own 136 recreational footbridges which form an integral part of the Thames Path National Trail/Towpath, and have not been included in Table 3.

**Table 3. Site Type**

Asset eg. structure	46
River	61
Stillwater	12
Woodland	22
Grassland	52
Wetland	27
Estuary	2

## **SITE DESIGNATIONS**

A number of sites within Thames Region have a landscape, wildlife or heritage designation.

**Table 4. Site designations**

National Trail	41
Regional Trail	1
Country Park	1
AONB	2
SSSI/SAC	4
SNCI	26
LNR	1
SPA	1
Listed Building	2

## **ACTIVITIES - LAND & WATER BASED**

### **LAND BASED**

<b>Activity</b>	<b>Restricted*</b>	<b>Permit*</b>	<b>Open*</b>	<b>Total</b>
Bird Watching	1		5	6
Cycling			10	10
Horseriding			1	1
Motor Sports			1	1
Jogging/running			9	9
Walking			58	58

## WATER BASED

Activity	Restricted*	Permit*	Open*	Total
**Boating	3		45	48
**Canoeing	4		39	43
Coarse fishing	7	20	9	36
Game Fishing		13		13
Sailing	3			3
Rowing			23	23

The different types of access can be defined as;

\*Restricted - where access is limited to only those clubs/associations who have permission to use the site

\*Permit - where access is available to everyone, for the price of a permit or ticket.

\*Open - where access is free for everyone.

\*\* At Thames Lock sites where a public right of navigation exists, "boating" is always included as a recreational activity. Canoeing and rowing are similarly included except where a particular site is very unsuitable or unpopular.

## FACILITY PROVISION

Some NRA sites where the above activities take place also have facilities provided by the NRA. Table 5. sets out those facilities available and which of these are suitable for people with disabilities.

Table 5.

Facility	Number of sites	Suitable for the disabled
*Footpath	70	23
Car Park	7	2
Picnic Site	5	2
Interpretative Boards	18	12
Toilet	22	5
Viewing point	5	2
Cycle trail	7	
Campsite	9	1
Fishing platform	211	14
Club House	5	
Nature Trail	1	
Slipways	6	
Moorings	24	

\* Footpaths are not necessarily provided by the NRA they may be a right of way crossing the site.

## RIGHTS OF WAY

On a number of NRA sites, rights of way exist across the site. In Thames Region there are 54 sites where a public footpath exists, 1 site where a bridleway exists and 11 sites which have permissive paths crossing the land.

## SITE USAGE

Table 6. outlines the estimated number of visits made to NRA sites in Thames Region annually. Site usage has not been formally measured and these are rough estimates. An estimate has not been made for every recreation and conservation site.

A number of projects were undertaken on the River Wandle; Wetland restoration at Spencer Road and Watermeads; planting of aquatic plants at Wallington Road ; and pollarding at Wildnerness Island.

The NRA used willow spiling to protect banks from erosion on the River Thames at Richmond.

Marginal planting was undertaken on the River Lee at Amwell Magna.

Channel works were undertaken on the River Ingrebourne at Hactone Lane.

A wader scrape was created alongside the River Brent at Brent Reservoir. The NRA lowered the weir and introduced a fish pass on the River Chess at Chenies. Channel works were also undertaken.

A weir was lowered on the River Roding at Redbridge.

The NRA restored a lake at Belmond School at Mill Hill. This was done to restore the lake to provide habitat for local wildlife but also as a useful educational resource for the school.

Water levels were stabilised on Stockers Lake Ditch at Rickmansworth.

Channel works were undertaken on the Turkey Brook at Newbury Avenue and the Stanstead Mill Stream at Stanstead Abbots.

Working together with various local authorities and Southern, we produced a cost benefit study of the restoration of the Wey and Arun Canal to provide better information on the economic value of the canal's restoration.

We have continued to contribute to the PLA Driftwood service with the Port of London Authority and the riparian London Boroughs. This service removes floating rubbish from the tideway through London. This helps to improve access on the river but also helps to improve the visual amenity value of the River.

Working with Elmbridge Borough Council the NRA undertook access improvements to a slipway and the towpath to improve access to the River Thames at Weybridge.

Together with THT we have undertaken access improvements along the River Thames as part of a riverside improvement project.

At Cookham Amenity area we produced a site information panel to improve the information at this NRA owned site.

## West

The NRA, BBONT, Rover and TWUL together worked to restore a lake which is linked to the work of the writer CS Lewis and on a nature reserve in his name.

Together with a local landowner the NRA created an island in the Shiplake Mill Stream to improve the habitat characteristics of the stream to encourage wildlife.

Together with the Wiltshire Wildlife Trust the NRA helped to fund the Kennet Otter Habitat Project. The NRA helped to build a number of otter holts and also provided advice on habitat management for otters. A similar project was undertaken on the River Cherwell with BBONT, British Waterways and Yamanouchi Ltd. Both projects will continue to be supported by the Environment Agency.

The NRA continued to support the monitoring and management of Pinkhill Meadow, together with Thames Water. The meadow is an important wetland resource in the area and support will continue in 1996/97.

Research and development funding has helped to study the populations of water voles in the Upper Thames and how habitat management can help to increase population sizes. This work will continue in 1996/97.

On the Radcot Cut at Clanfield the NRA created a pond and wader scrape to provide important habitat for wildlife.

On the River Thames at Doctors Island the NRA undertook work on a backwater to restore it and improve its value for nature conservation.

The NRA together with Thamesdown Borough Council created a pond and an area of wetland on the River Cole at Lotmead Farm.

Channel works were undertaken on the River Dun at North Standen and on the River Lambourn at Easton.

Off River Supplementation Units (ORSU) were created on the River Evenlode, Ashford Mill and the River Kennet at Wasing Estate. These provide important sites for spawning fish and fry and also provide useful habitat for wildlife. These ORSU are shallow enlarged bays adjoining the river with a narrow "neck".

The NRA undertook pollarding on the River Thames at Cholsey Marsh.

The NRA and the Pang Valley Countryside Project undertook a restoration of a water meadow next to the River Pang at the Dairies. A similar project was also undertaken on the River Windrush at Barrington.

We reconstructed a Thames towpath/ Thames Path bridge ( No. 54 ) to safeguard the continued public use of the Thames Path.

We supported the Reading Water Festival with Reading Borough Council. This festival helps to promote the waterspace in Reading for recreation.

Together with volunteers and Thames TC we constructed a footbridge over the Little Brook to allow public access through a nature reserve.

Working with the Wilts and Berks Canal Amenity Group, we improved a canalside footpath to improve access for the public.

#### **North East**

Working with Windsor and Maidenhead Borough Council the NRA created a wetland nature reserve at Horton Lagoons.

Together with Lee Valley RPA the NRA undertook channel works on the Small River Lea at Enfield. Also with a local angling club on the River Mimram at Archers Green.

The NRA undertook restoration work on the Bulrush pond at Epping Forest.

Together with Thames Water and Herts and Middx Wildlife Trust a wetland was restored adjacent to the Manifold Ditch at Kings Mead.

Channel works were undertaken at a number of sites in the Area; River Mimram at Rose Farm; River Roding at Loughton, the Old River Lee at Waltham Cross; and the River Chess at Bois Mill. ORSUs were added to these works at; River Rib at Standon; and the River Quin at Braughing. A weir was built together with channel works on the River Ver at Pre Saw Mill.

On the River Crane at Crane Park the NRA built a fish pass and created a reed bed.

We co-funded with Groundwork Colne Valley an access study of the Colne Valley. The survey was undertaken to provide better information on opportunities for greater public access.

We produced a feasibility study to establish the need for a recreation strategy for the River Lee.

We helped to fund with the Countryside Commission, Hertfordshire County Council and St Albans County Council improved public access along the River Ver.

With Hertfordshire County Council we produced a guide to the Beane Valley Walk.

With the London Borough of Ealing and other London Borough Councils we produced an information pack on the West London Waterways Walks.

Working with British Waterways and the Lower Lea project we did some environmental improvements to the City Mill Lock Area which improved visually a site in a very depressed area.

## **PUBLICATIONS and LEAFLETS**

### ***Conservation***

Pinkhill Meadows Nature Reserve  
Invertebrate Animals of the Tidal Thames  
Nature and the Freshwater River Thames  
Restoring Land for Otters  
Ponds and Conservation  
River Ash Enhancement Project

### ***Fisheries***

Fisheries Byelaws 1978

### ***Navigation***

A User's Guide to the River Thames  
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  
Annual Navigation Newsletter  
Thames Navigation Byelaws 1993  
The Thames Navigation General and Licensing Byelaws 1993 - An Introduction  
The Royal River Thames  
Thames Region Fact File - Navigation

### ***Recreation***

Enjoying the Waterside, Amenity & Recreation in the NRA Thames Region  
The Thames Barrier, The Eighth Wonder of the World  
Three Walks from Hurley Lock  
Pinkhill Meadow Nature Reserve  
Abingdon Riverside Walk  
The Two Rivers Walk  
The Thame Valley Walk  
The Beane Valley Walk  
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  
Thames Region Fact File - Recreation



# WELSH REGION



Table 6.

No. of visits in a year	No. of NRA sites
1 - 49	
50 - 99	
100 - 499	
500 - 999	
1000 - 4999	
over 5000	10
unknown	63

## **PROJECTS UNDERTAKEN IN NRA THAMES REGION**

The following are examples of projects undertaken by the NRA or in conjunction with other organisations during 1995/96.

### **Regional**

We have worked with Southern Electricity and the Countryside Commission to develop Tourist Information points alongside the River Thames to provide visitor information at Thames lock sites. This will help to increase the understanding of the River.

We have co-funded, together with the Sports Council the development of a recreation facilities database in support of the Thames Recreation Strategy published last year. This will help to provide information for both organisations on which to make decisions.

### **South East**

The NRA, Berkshire County Council and English Nature worked together to create a pond at St. Dominics School. The pond will attract wildlife and provide a useful educational resource for the school.

The NRA, the Wildfowl and Wetlands Trust and English Nature have put resources into creating and monitoring a wetland at Barn Elms Reserve. The monitoring work will continue over the next couple of years.

The NRA and now the Environment Agency support a barn owl box project with the Hawk and Owl Trust, which involves the maintenance and monitoring of a number of barn owl boxes in the area.

The NRA and Spelthorne Borough Council undertook work on the River Ash at Shepperton. This work involved tree management and channel works. A footpath was also created alongside the river.

The NRA undertook a number of projects on the River Mole: channel works at Langley Green; and landscaping work at Garson Farm and Hersham Park.

The NRA undertook channel works on the River Hart at Fleet and on the Gatwick Stream at Crawley.

Bank reprofiling was undertaken on the River Bourne at Chersey Meads by the NRA.

The NRA created a water meadow alongside the River Wey at Mellow Farm.

Tree management was undertaken by the NRA on the River Thames at Windsor. Pollarding was undertaken on the River Pool at Winsford Road.

An oxbow lake was restored on the River Mole at Dorking.

## WELSH REGION

### RECREATION & CONSERVATION SITES

Table 1.

AREA	RECREATION			CONSERVATION		
	IN USE	FUTURE USE	TOTAL	IN USE	FUTURE USE	TOTAL
SOUTH EAST	3	0	3	4	0	4
SOUTH WEST	3	2	5	3	3	6
NORTHERN	20	0	20	17	0	17
REGIONAL	26	2	28	24	3	27

Table 1. has been created by data supplied by the Region.

### SURVEYS, MAINTENANCE & MANAGEMENT PLANS COMPLETED ON NRA SITES

7 sites have had habitat surveys undertaken, 5 sites have had landscape surveys undertaken and 6 sites have had management plans written .

### LEASED ACTIVITIES ON NRA SITES

A number of activities are leased on NRA owned sites these are outlined in the table below, together with the number of sites on which these take place.

Fishing	1
---------	---

## SITE TYPES

A site can be classified as more than one type, for instance the site may be wetland but also estuarine. This information is represented in Table 3.

Table 3. Site Types

Asset eg. structure	7
River	8
Stillwater	4
Woodland	2
Grassland	5
Wetland	1
Estuary	3
Coast	1

## SITE DESIGNATIONS

A number of sites within Welsh Region have a landscape, wildlife or heritage designation.

Table 4. Site designations

National Park	7
Country Park	1
AONB	1
SSSI/SAC	10
SNCI	2
LNR	3
RSPB Reserve	1
Ramsar	4
SPA	3
SAM	2
Listed Building	1
SSAI	3

## ACTIVITIES - LAND & WATER BASED

### LAND BASED

Activity	Restricted*	Permit*	Open*	Total
Bird Watching	1		13	14
Cycling			9	9
Horseriding			1	1
Motor Sports			1	1
Hunting/shooting	1		2	3
Walking	2		15	17

### WATER BASED

Activity	Restricted*	Permit*	Open*	Total
Boating			1	1
Canoeing	2	1		3
Coarse fishing		1		1
Sea fishing			1	1
Game Fishing	3	5	1	9
Jet skiing			1	1
Swimming			1	1
Waterskiing			1	1
Sailing			1	1
Windsurfing			1	1
Rowing			1	1

The different types of access can be defined as;

\*Restricted - where access is limited to only those clubs/associations who have permission to use the site

\*Permit - where access is available to everyone, for the price of a permit or ticket.

\*Open - where access is free for everyone.

## FACILITY PROVISION

Some NRA sites where the above activities take place also have facilities provided by the NRA. Table 5. sets out those facilities available and which of these are suitable for people with disabilities.

Table 5.

Facility	Number of sites.	Suitable for the disabled
*Footpath	17	10
Car Park	4	3
Picnic Site	4	4
Information/Visitor Centre	3	2
Interpretative Boards	9	8
Toilet	3	1
Viewing point	6	4
Club House	1	1
Boat House	1	
Nature Trail	1	1
Bird Hide	2	1
Slipways	2	
Moorings	2	

\* Footpaths are not necessarily provided by the NRA they may be a right of way crossing the site.

## RIGHTS OF WAY

On a number of NRA sites, rights of way exist across the site. In Welsh Region there are 10 sites where a public footpath exists and 2 sites have a permissive path crossing the land.



## SITE USAGE

Table 6. outlines the estimated number of visits made to NRA sites in Welsh Region annually. Site usage has been formally measured and these are rough estimates. An estimate has not been made for every recreation and conservation site.

Table 6.

No. of visits in a year	No. of NRA sites
1 - 49	3
50 - 99	
100 - 499	
500 - 999	1
1000 - 4999	
over 5000	1
unknown	32

## PROJECTS UNDERTAKEN IN NRA WELSH REGION

The following are examples of projects undertaken by the NRA or in conjunction with other organisations during 1995/96.

### Promotion Projects

#### Western Cleddau (Pembrokeshire)

Weirs and groynes were created to improve fish holding areas on this straightened and over-deepened river, and to retain higher flows in the river to increase adjacent wetland habitat (Llangloffanfen, a SSSI and NNR). Willow was planted into the groynes.

This project was undertaken in collaboration with CCW, landowners; Pembrokeshire Angling Association. The NRA provided £3K, with the work carried out by IBU.

#### Tregaron Bog SSSI (Ceredigion)

Work involved repairs to a peat bund which was originally constructed to increase wetlands with this NNR (also a candidate SAC). CCW prepared the contracts, the work was undertaken by an external contractor with the NRA contributing £1.5K.

#### Dulais Treeplanting

The landowner provided a 5m buffer strip and erected fencing while the NRA funded materials to a cost of £1K. The aim is to increase bankside shade to reduce macrophyte growth and so reduce the need for regular flood defence weed and silt clearance in future years.

#### Aeron Fencing

Again the landowner provided a buffer strip with NRA funding the fencing, costing £0.5K.

#### River Tywi Treeplanting

The landowner provided a 5m buffer strip and fenced the area off to protect it from grazing. The NRA funded £0.5K of treeplanting.

#### Pontiets Pond, Pontiets

In collaboration with British Coal Opencast a coarse fishing pond was constructed which will be used by local schools and managed by the local community.

#### Dipper Boxes, Rheidol Catchment

Twenty boxes were placed under suitable bridges in liaison with Dyfed CC and RSPB to increase nesting sites in the catchment.

#### Forest Farm Wetland, Cardiff

An ongoing project which includes the provision of a conservation visitor centre and the creation of a nature reserve in collaboration with Cardiff City Council. Work undertaken in 1995 includes wetland creation to which the NRA contributed £5K. The site will be officially opened in summer 1996.

#### Court of Noke, Pembridge Area

An ongoing project on the river Arrow in collaboration with the landowner. The remains of a controlled wetland system are being restored to which the NRA contributed £1K.

#### Ynysgau Farm & Glanbynar Farm

The NRA contributed £1K to each of the above projects which involved habitat improvements. The projects were undertaken in collaboration with the landowners and Byn Groundwork Trust.

#### Nant Hafod Tudor

In collaboration with Islwyn Groundwork Trust, we contributed £1K to provide disabled facilities in this public open space.

#### Lugg Meadows Study

The NRA contributed £1K towards an ongoing archaeological study by Hereford and Worcester County Archaeological Service of this Lammas meadow.

#### Conwy Estuary Watercraft

We are continuing to work with other agencies to regulate jet and water skiing on the Conwy Estuary.

#### Upper Conwy Canoeing

We are working in collaboration with the National Park, canoeist and anglers to resolve access problems.

#### Lower Dee Improvement Scheme

In collaboration with Chester City Council, the NRA contributed £1K to improve riparian habitat, principally for coarse fish, by planting marginals, a habitat which is poorly represented on the lower Dee.

#### Anglesey Showground Pool

A pond was created in collaboration with the Anglesey Agricultural Society, to which the NRA contributed £1.5.

#### Chirk Castle Ponds Restoration

Working with the National Trust and volunteer groups, the NRA contributed £1.5K towards desilting work to restore an historic amenity pond.

#### Wetlands for Wales Project

This project is undertaken in collaboration with the RSPB, CCW, ADAS, Farmers Union of Wales and the North Wales Wildlife Trust. Work this year focussed on Bagill Marsh, Llyn Fens, Shotwich fields restoration, and the Anglesey wetlands to which the NRA contributed £77K. A millenium bid was submitted in association with a number of partners to restore and create wetlands in North and Mid-Wales and manage these for biodiversity for people to enjoy. The bid was unsuccessful but a Heritage Lottery bid will be made next year.

#### Clwvd Pond Restoration at Llanrhaede

In collaboration with the landowner a pond was desilted. The NRA contributed £1K.

### North Gwynedd Coastal Sites

We contributed to a review of enhancement potential to link existing coastal wetlands in collaboration with CCW, RSPB, and local authorities, this included a review of the economic benefits of enhancement work. This study is being followed up by ADAS.

### Dee Meadows Study : Phase I

A study to identify restoration potential for this site of county wildlife importance was undertaken, working in collaboration with Chester City Council and English Nature. Work by the council has included restoration of the old ditch system.

### Wrexham Landscapes Project & Flintshire Landscapes Project

We worked with the Welsh Development Agency to take forward a landscape strategy for Wales.

### Rhyddgaer Pools

We collaborated with the landowner to reinstate and fence off a series of ponds on Anglesey.

### Afon Ddu Restoration

Dredging by the landowner of a 1km section of non-main river has resulted in near loss of this important site for the fresh-water pearl mussel. A study is underway to identify restoration potential.

### W Cleddau - Upper Reaches

Provision of willow stakes were used to meander the river within the channel to create greater aquatic diversity.

### Lougher (Swansea)

Willow staking of meanders to provide stability and bankside cover.

### Braint Wetland. Anglesey

Negotiations are ongoing to restore an area of floodplain and so improve wet grassland habitat.

### Pontcarreg Culvert (Tawelan Brook - Carmarthen)

An otter ledge, dipper boxes and modified "window box" was included in design to enhance the wildlife potential of the culvert.

### Dafen

Although the project managed to retain a rare mature black poplar tree, there were concerns about the long-term viability due to the proximity of construction. Over 100 grafts were taken from the tree, in liaison with CCW, which when two years old will be planted out within this and adjacent catchments.

### Pont-y-Cerbyd at Solva

This is a flood defence operational site where works are ongoing. Work this year included repairs to a bird hide, fencing and a gravel path to the hide, which were provided for £1K. The site will be officially open in summer 1996.

#### Canolfan Tryweryn

Consultation is ongoing with CCW, Tourist Board, WCA and the National Park to develop this National White Water Centre also as an otter centre. Footpaths and an otter trail leaflet have already been produced.

#### Maerdy Education Centre

This site operates as a fish farm and work is ongoing to develop the site as an education centre.

#### Dee Estuary

Negotiations are ongoing to prevent four-wheel drive access to the dune system at the Point of Ayr which is an internationally important wetland site. We are working in collaboration with CCW, RSPB, industry, the local authority and local community.

The landholding is used by the RSPB who organise school trips and guided bird watching walks all year round.

#### Japanese Knotweed

Continued involvement with control of Japanese knotweed (part of R&D on invasive plants).

#### Otters

Reactive survey is undertaken to provide advice to NRA staff on the likely impacts of 3rd party applications and NRA work on otter populations.

#### Wye Barn Owl Project

Monitoring is ongoing in collaboration with the Hawk & Owl Trust of 60 barn owl nest boxes erected as part of the Wye enhancement project.

#### Bat Boxes

Monitoring is ongoing in collaboration with the Brecknock & Radnorshire Bat Group.

#### Dipper Boxes

Monitoring is ongoing in collaboration with Radnorshire Wildlife Trust on the upper river Wye and tributaries. Boxes were erected due to a lack of suitable nesting sites in the upper catchment.

#### Terrapins

The NRA is collecting data on the distribution of terrapins for the British Herpetological Society. Information is being sent in by the public following TV, radio and newspaper articles.

#### River Wye Navigation Order

The NRA is seeking navigation powers to manage and regulate navigation on the river Wye. We undertook informal public consultation to assess opinion on this proposal and promoted the necessary order in 1996.

## **PUBLICATIONS/LEAFLETS**

### ***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 and Line Byelaws 1996  
River Wye Angling Guide  
An introduction to eel and elver fishing  
Angling Guide for the Rivers Dee and Clwyd 1994 - 1995  
Fishing the rivers of Wales (trout and salmon) 1996  
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 (*joint NRA & WCA*)  
River Wye Handbook  
River Wye Code of Conduct

Glas-y-Dorlan magazine

# **SOUTHERN REGION**





## **SOUTHERN REGION**

### **RECREATION & CONSERVATION SITES**

Table 1.

<b>AREA</b>	<b>RECREATION</b>			<b>CONSERVATION</b>		
	<b>IN USE</b>	<b>FUTURE USE</b>	<b>TOTAL</b>	<b>IN USE</b>	<b>FUTURE USE</b>	<b>TOTAL</b>
<b>KENT</b>	31	13	44	23	18	41
<b>HANTS &amp; IOW</b>	3	2	5	2	2	4
<b>SUSSEX</b>	8	17	25	10	15	25
<b>REGIONAL</b>	<b>42</b>	<b>32</b>	<b>74</b>	<b>35</b>	<b>35</b>	<b>70</b>

Table 1. has been created by data supplied by the Region.

### **LEASED ACTIVITIES ON NRA SITES**

A number of activities are leased on NRA owned sites these are outlined in the table below, together with the number of sites on which these take place.

Table 2. Activities leased

<b>Fishing</b>	6
<b>Moorings</b>	3
<b>Boating</b>	2
<b>Grazing</b>	6

### **SURVEYS, MAINTENANCE & MANAGEMENT PLANS COMPLETED ON NRA SITES**

37 sites have had habitat surveys undertaken and 7 sites have had management plans written.

## **SITE TYPES**

A site can be classified as more than one type, for instance the site may be wetland but also estuarine. This information is represented in Table 3.

**Table 3. Site Type**

Asset eg. structure	46
River	61
Stillwater	12
Woodland	22
Grassland	52
Wetland	27
Estuary	2

## **SITE DESIGNATIONS**

A number of sites within Southern Region have a landscape, wildlife or heritage designation.

**Table 4. Site designations**

National Trail	41
Regional Trail	1
AONB	2
SSSI/SAC	4
SNCI	26
LNR	1
Country Park	1
Listed building	1
SPA	1
SAM	12
SSAI	4

## ACTIVITIES - LAND & WATER BASED

### LAND BASED

Activity	Restricted*	Permit*	Open*	Total
Bird Watching			3	3
Horse riding			4	4
Cycling			2	2
Hunting/shooting	2			2
Walking			37	37

### WATER BASED

Activity	Restricted*	Permit*	Open*	Total
Boating		2		2
Canoeing		2		2
Coarse fishing	2		1	3
Sea fishing			1	1
Sailing			1	1

The different types of access can be defined as;

\*Restricted - where access is limited to only those clubs/associations who have permission to use the site.

\*Permit - where access is available to everyone, for the price of a permit or ticket.

\*Open - where access is free for everyone.

## **FACILITY PROVISION**

Some NRA sites where the above activities take place also have facilities provided by the NRA. Table 5. sets out those facilities available and which of these are suitable for people with disabilities.

Table 5.

<b>Facility</b>	<b>Number of sites</b>	<b>Suitable for the disabled</b>
*Footpath	1	
Car Park	1	
Information/Visitor Centre	1	
Interpretative Boards	1	1
Toilet	3	1
Nature Trail	1	
Bird Hide	1	
Moorings	4	

\* Footpaths are not necessarily provided by the NRA they may be a right of way crossing the site.

## **RIGHTS OF WAY**

On a number of NRA sites, rights of way exist across the site. In Southern Region there are 34 sites where a public footpath exists, 4 sites where a bridleway exists and 2 sites which have permissive paths crossing the land.

## SITE USAGE

Table 6. outlines the estimated number of visits made to NRA sites in Southern Region annually. Site usage has not been formally measured and these are rough estimates. An estimate has not been made for every recreation or conservation site in use.

Table 6.

No. of visits in a year	No. of NRA sites
1 - 49	
50 - 99	
100 - 499	
500 - 999	
1000 - 4999	
over 5000	
unknown	39

## **PROJECTS UNDERTAKEN IN NRA SOUTHERN REGION**

The following are examples of projects undertaken by the NRA or in conjunction with other organisations during 1995/96.

We worked with Kent County Council on a programme of pond and wetland enhancements throughout Kent.

We worked with East Sussex County Council and the Sussex Wildlife Trust on a management programme for Rye Harbour Nature Reserve, which we part own. This has involved the provision of a site warden, routine maintenance and the provision of a rabbit fence around the reserve.

We worked with the Hawk and Owl Trust to provide nest boxes and make habitat enhancements. This will increase nesting opportunities for barn owls and increase rough grassland hunting territory.

Together with English Nature we undertook a botanical survey of ditches on the North Kent marshes. This provided baseline data to be used prior to the implementation of water level management plans.

We contributed to the appointment of a FWAG officer for the High Weald area of Kent and East Sussex together with East Sussex County Council and Kent County Council. This involved the promotion of wildlife on farms; additional advice on consents and licences and the enhancements of wetlands and ponds.

We continued to contribute to the survey of SNCIs in East Sussex undertaken by East Sussex County Council and Sussex Wildlife Trust. The survey will help to maintain a database and provide an update of site notifications.

Working with English Nature we undertook a programme of enhancements resulting in habitat improvements to the River Beult.

We undertook bank stabilisation on a lake to improve the habitat on Pett Level SSSI which we own. This work was undertaken with English Nature's guidance.

Working with Horsham District Council, West Sussex County Council and Surrey County Council we started year one of a three year project to control Giant Hogweed. This started with a pilot project on Boldings Brook which is a tributary of the River Arun.

We contributed to an investigation / desk study of the status of birds in Sussex undertaken by Sussex Ornithological Society.

We helped enhance an area of Southover School grounds to become a conservation area, including a wetland area.

Together with the Marine Conservation Society, English Nature, East Sussex County Council, West Sussex County Council and local authorities we contributed to the assessment of the Sussex marine environment. This will help to improve our knowledge of the marine

environment and will identify sites and features of conservation importance. We worked with West Sussex County Council to construct a number of toad breeding ponds. This will help to alleviate road mortalities and provide new breeding sites for toads.

We worked with Sussex Downs Conservation Board (SDCB) on the restoration of Shopham Canal Bridge. The bridge is a site of historic and archaeological importance. We also worked with SDCB to restore Blakehurst pond to enhance the conservation value of the pond within the SNCI. We undertook similar work at Gurstan Farm to restore an existing pond.

Together with West Sussex County Council and Arun District Council we contributed to the appointment of a project officer to deliver improved access, conservation enhancements etc within the project area. The project officer will also promote Stewardship.

We worked with Storrington Parish Council to desilt Storrington pond and restore it and improve both its conservation and amenity value.

We worked with RSPB to replace the fencing at the RSPB reserve at Pulborough Brooks to provide better control of access to this wetland.

We helped Sussex Wildlife Trust to restore a number of ditches at Filsham to enhance their conservation value.

Together with Sussex Wildlife Trust and Southern FM radio station we developed a schools competition to develop wetland projects. A number of ponds and wetlands have been created. The project has also helped to raise awareness of water conservation issues amongst local schools.

We worked with East Sussex County Council, English Nature, Sussex Wildlife Trust and local authorities to produce a poster magazine in celebration of nature conservation activities in East Sussex. This helped to raise public understanding of conservation issues in East Sussex.

We contributed to a project with South East Water Company, East Sussex County Council and English Nature to improve access and provide interpretation boards and a floating island at Ardingly Reservoir.

Working with Hampshire County Council and Hampshire Wildlife Trust we contributed to a Habitat Survey of Hampshire. This survey will provide useful baseline habitat data.

With Sparsholt College and English Nature we contributed to a survey of native crayfish populations in the River Itchen. The survey provided baseline data collection and recommended habitat improvements.

We helped to improve the conservation and amenity value of a historic pond, Weeke Pond. This work was undertaken with Winchester District Council and Teg Downs Residents Association.

Working with Hampshire Wildlife Trust we undertook a project to identify and implement the management of wetlands on Hampshire Wildlife Trust nature reserves.

We undertook a project with Hampshire Wildlife Trust and the Isle of Wight County Council to increase water supply to a wetland on the Isle of Wight to improve the quality of the reedbed at Afton Marshes and enhance its nature conservation value.

Together with Sparsholt College, English Nature and the World Wide Fund for Nature we established a captive breeding colony of water voles. This will increase our knowledge of water voles and establish a source of animals for potential release.

We contributed to the employment of a project officer to promote environmental awareness, conservation and recreation in the Solent. This project is also supported by Hampshire County Council, Isle of Wight County Council, Hampshire Wildlife Trust, Associated British Ports and Local Authorities.

We continued our support of the Medway River Project which helps to promote community action in the Lower Medway Catchment. This involves enhancements for recreation, conservation and education within the project area. The project is also supported by Kent County Council, Countryside Commission and various local authorities.

We continued our support of the Kentish Stour Project with Kent County Council and various local authorities. This project promotes community action in the Kent Stour catchment and again aims to enhance conservation, recreation and education within the project area.

We are partners in the North West Kent project with Kent County Council and various local authorities. The project is similar to the Medway and the Stour Projects.

We contributed to the Medway and Swale initiative which is a project which promotes conservation and recreation in the Medway and Swale coastal area. Other organisations involved are: English Nature, RSPB, the Sports Council, Medway Ports and a number of local authorities.

We worked with Tonbridge and Malling Borough Council to restore and stabilise the banks of Barden lake. This work will help to enhance the recreational access to the lake.

English Nature and ourselves provided interpretative panels at Stodmarsh SSSI to improve the understanding and enjoyment of the SSSI.

As part of the Rye Bay project we helped provide signs to reduce the impact of recreation on a sand dune SSSI at Camber Sands. This will help people to understand the impacts and control access to the SSSI.

Working with Chichester Harbour Conservancy, Countryside Commission and West Sussex County Council we made improvements to the footpath, to raise the height to reduce storm damage and improve disabled access at Cobnor Point. This helped to enhance access especially for people with disabilities.

We worked with the South Downs Conservation Board to provide disabled access to the beach and we provided a canoe launch platform at the Seven Sisters Country Park.



We helped organise a low tide day with English Nature, Kent County Council and River Ocean Research and Education. Leaflets were produced and guided walks given along the foreshore to enhance the public understanding of coastal processes; flood defence issues; coastal conservation and archaeological issues. The day was extremely successful.

Working with West Sussex County Council we restored Flat Dossers Bridge, a footbridge on a tributary of the River Adur.

Together with the Wey and Arun Canal Trust we contributed towards a cost benefit study of the proposed restoration of further sections of the disused Wey and Arun canal. This study will help to understand the issues to inform any decisions on future activities.

Working with the Isle of Wight County Council we made a number of improvements to a footpath alongside Scotchells Brook on the Isle of Wight.

Working with Hampshire County Council we made improvements to a footpath along the River Alre, adjacent to a bank improvement scheme.

Working with Hampshire County Council we undertook a feasibility study of building a white water canoe facility at the tidal limit of the River Itchen.

## **PUBLICATIONS and LEAFLETS**

### ***Conservation***

River Darent conservation project  
Ponds and Conservation - pond pack  
Managing Aquatic Plants  
Otters - the South East Otters and Rivers Project  
Spotting the Otter  
New life for Hermitage Stream  
Green link

### ***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  
Sailors guide to Rye

# NORTH WEST REGION



## **NORTH WEST REGION**

### **RECREATION & CONSERVATION SITES**

Table 1.

<b>AREA</b>	<b>RECREATION</b>			<b>CONSERVATION</b>		
	<b>IN USE</b>	<b>FUTURE USE</b>	<b>TOTAL</b>	<b>IN USE</b>	<b>FUTURE USE</b>	<b>TOTAL</b>
<b>CENTRAL</b>	15	10	25	18	6	24
<b>NORTHERN</b>	1	1	2	2	0	2
<b>SOUTHERN</b>	3	1	4	4	1	5
<b>REGIONAL</b>	<b>19</b>	<b>12</b>	<b>31</b>	<b>24</b>	<b>7</b>	<b>31</b>

Table 1. has been created by data supplied by the Region.

### **LEASED ACTIVITIES ON NRA SITES**

A number of activities are leased on NRA owned sites these are outlined in the table below, together with the number of sites on which these take place.

Table 2. Activities leased

<b>Fishing</b>	<b>8</b>
<b>Mooring</b>	<b>1</b>
<b>Boating</b>	<b>1</b>
<b>Grazing</b>	<b>1</b>

### **SURVEYS, MAINTENANCE & MANAGEMENT PLANS COMPLETED ON NRA SITES**

24 sites have had habitat surveys undertaken, 5 sites which have had landscape surveys undertaken. 7 sites have had management plans written and 6 sites have had maintenance plans written.

## SITE TYPES

A site can be classified as more than one type, for instance the site may be wetland but also estuarine. This information is represented in Table 3.

Table 3. Site Types

Asset eg. structure	4
River	18
Stillwater	4
Woodland	4
Grassland	10
Moorland	1
Wetland	1
Estuary	1
Coast	5

## SITE DESIGNATIONS

A number of sites within North West Region have a landscape, wildlife or heritage designation.

Table 4. Site designations

Regional Trail	2
National Park	1
AONB	1
LNR	1
SNCI	6
SSSI/SAC	5

## ACTIVITIES - LAND & WATER BASED

### LAND BASED

Activity	Restricted*	Permit*	Open*	Total
Bird Watching			4	4
Horse riding			1	1
Cycling			3	3
Jogging/running			4	4
Walking	1		12	13

### WATER BASED

Activity	Restricted*	Permit*	Open*	Total
Boating		1	2	3
Canoeing	1	2	1	4
Coarse fishing	3	2	1	6
Game Fishing	3	1	1	5
Sailing		1	1	2
Water skiing	1			1
Jet skiing	1			1
Sub aqua		1	1	2
Windsurfing		1	1	2
Rowing	2	1		3

The different types of access can be defined as;

\*Restricted - where access is limited to only those clubs/associations who have permission to use the site

\*Permit - where access is available to everyone, for the price of a permit or ticket.

\*Open - where access is free for everyone.

## FACILITY PROVISION

Some NRA sites where the above activities take place also have facilities provided by the NRA. Table 5. sets out those facilities available and which of these are suitable for people with disabilities.

Table 5.

Facility	Number of sites	Suitable for the disabled
*Footpath	12	4
Car Park	6	1
Picnic Site	4	1
Information/Visitor Centre	1	1
Interpretative Board	1	
Toilet	2	1
Campsite	1	
Cycleway	3	
Fishing platform	1	
Club house	1	
Nature Trail	1	
Bird hide	1	
Slipway	1	
Moorings	2	
Fishing Lodge	1	1
Boat Hire	1	

\* Footpaths are not necessarily provided by the NRA they may be a right of way crossing the site.

## RIGHTS OF WAY

On a number of NRA sites, rights of way exist across the site. In North West Region there are 13 sites where a public footpath exists, 7 sites have a permissive path and 1 site has a bridleway crossing the land.



## SITE USAGE

Table 6. outlines the estimated number of visits made to NRA sites in North West Region annually. Site usage has not been formally measured and these are rough estimates. An estimate has not been made for every recreation and conservation site.

Table 6.

No. of visits in a year	No. of NRA sites
1 - 49	
50 - 99	
100 - 499	
500 - 999	
1000 - 4999	
over 5000	
unknown	18

## **PROJECTS UNDERTAKEN IN NRA NORTH WEST REGION**

The following are examples of projects undertaken by the NRA or in conjunction with other organisations during 1995/96.

### **FLOOD DEFENCE CAPITAL SCHEMES**

#### **\*River Birket, Wirral**

A series of scrapes were created to improve much-needed wetland habitat on the Wirral along with ponds and dipping platforms on school grounds for educational use. Spoil from the ponds and scrapes was used to provide gentle gradients to the new flood banks. It is hoped that local people and schools will be involved in the planting which will take place in 1996/7. We also are helping Wirral Groundwork to establish a surfaced cycle route along the new flood banks.

#### **\*Amblecotes, Manchester**

A number of high quality football pitches were provided for the local community in compensation for future disruption to playing fields which will result from the construction of a flood alleviation scheme. The scheme included extensive native planting and creation of wetland scrapes.

#### **River Gow, Cheshire**

Negotiations are continuing with landowners to re-create a significant wetland area for birds, known as the Gow Meadows as part of a flood alleviation scheme. Work to date includes a detailed levels survey of the potential wetland and a baseline survey of birds using the site.

#### **\*Appleby, Cumbria**

Flood protection was provided in this highly sensitive heritage town following wide consultation with local people. The scheme has used local stone and detailing for new walls and local people were involved through the Appleby Artist in Residence Scheme set up by the NRA in association with Cumbrian Public Art. The result is a series of art panels throughout Appleby which depict the relationship between the town and the river Eden, onto flood gates. The complete series of works is entitled "Water Marks".

#### **\*Overton & Middleton, Lancashire and Skinburness, Cumbria**

Creation of two borrow pits at each site (3 hectares in total) to provide spoil for coastal flood banks and a mixed habitat of open water and marginal planting. Trees, shrubs and aquatic species to be planted in 1996/7. As part of the Overton project, the project manager and resident engineer attended an R.S.P.B. workshop on reedbed creation.

#### **\*Archeaological Investigation**

Watching briefs were undertaken for flood projects at Overton & Middleton, Lancashire and at Skinburness, Cumbria. Trial pits were dug at Skinburness and revealed a timber sea defence dating from the Middle Ages, details were recorded and archived.

## **FLOOD DEFENCE REVENUE SCHEMES**

### **River Waver Habitat Improvements**

The river forms part of an intensively managed and drained system with constrained trapezoidal channels of limited habitat for wildlife. This year a trial 330m section was regraded to produce a 2-stage channel along one bank. Monitoring will continue as the channel develops. It is hoped the initial capital cost will be offset by lower maintenance costs in the medium term.

### **Crossens Catchment**

This is a pumped drainage system, which is intensively managed, draining high quality agricultural land. This year saw a major change to operational practice which enabled retention of a reed fringe over a significant part of the catchment. The flood defence and conservation implications are being carefully monitored.

## **PROMOTIONAL PROJECTS**

### **Morecambe Bay Collaborative Projects**

The NRA has contributed to a range of projects led by South Lakeland District Council including: heritage interpretation at Furness and Cartmel peninsulars; car parking for disabled people; and improvements to a shoreline footpath near Flookburgh.

### **Ennerdale Char, Cumbria**

Fish population studies have been ongoing since the mid-1980's. Results have shown spawning areas to be degraded due to changes in the water discharge pattern and the effects of an Irish Bridge which has significantly reduced gravel migration downstream. Gravel and bedchecks have been added this year to improve spawning areas.

### **Low Flows, Fylde, Lancashire**

A report was commissioned to review the ecological evidence of reduced water levels in the Fylde. The aim is to enable an assessment of environmental impacts from existing and future water abstractions. Evidence has been found of wetland areas which are drying out, including a number of biologically important sites and the report has highlighted a pond loss rate of 40% this century.

### **Control of Invasive Species**

Across the region there are ongoing programmes to control areas of giant hogweed on selected river catchments. Hogweed populations are identified by conservation and flood defence staff. In some cases, this work is undertaken in collaboration with the local authorities. Cleared areas are allowed to regenerate naturally and the success of the projects are being monitored. We contributed to a seminar on Japanese knotweed control on the Windermere catchment organised by the Lake District National Park.

### **County Sites**

Conservation staff provided Lancashire County Council with information on aquatic sites for the production of a revised register of County Biological Heritage Sites.

### **Chat Moss**

We gave advice to a Woodland Trust site, working in partnership with the Local Wildlife Trust to introduce tree cover around the moss and run trials to restore groundwater levels to maintain the conservation interest of this moss.

### **Lower Keer Rehabilitation**

This section of the Keer has been degraded by past flood defence works. A pre-feasibility study was undertaken using existing River Corridor Survey information and rapid site walkover to highlight habitat short-falls and suggest improvements.

### **Boarshaw Clough**

We continued to work with Rochdale Groundwork on the management of this wooded valley.

### **Pond Life Project, Cheshire & Lancashire**

Originally in Cheshire, this project has now extended to include Lancashire and has attracted European funding. The project was originally part-funded by the NRA from 1992-5 with work undertaken by John Moores University, Liverpool. The aims are to establish base-line information on ponds (including the establishment of a GIS system) and encourage local community action through the designation of Parish Pond Wardens. We continue to contribute to this project, with £4.5K provided in 1995/6.

### **Owley Wood, River Weaver, Cheshire**

As part of the Mersey Basin Campaign, bankside sycamores were cleared and the river banks reprofiled to create reed fringes along this riverside woodland which is managed by the local community and the British Trust for Conservation Volunteers.

### **Peatland Inventory Phase 2, Cheshire**

A partnership project between Cheshire County Council, the NRA, and English Nature, with the NRA contributing £3K towards the project cost of £12K. The purpose is to identify and assess peatland areas which support semi-natural vegetation but which are not designated sites. To date, 172 sites, covering 658 hectares have been identified.

### **Stream Care Project**

This is an ongoing project, funded by the NRA, North West Water plc and the Countryside Commission and is part of the Mersey Basin Campaign. The purpose is to support local action to clean up and care for rivers and streams in the Mersey area by providing funding, and advice through a Community Projects Officer.

### **Black Poplars, Cheshire**

Seed from the native black poplar, a rare riverside tree, has been collected and grown on by Liverpool University. Around fifty poplars have been planted along Whittle Brook and Padgate Brook in Warrington and the River Gow, Cheshire, the northern limit for this species.

### **Crayfish Survey, Cumbria**

We contributed £3K to a survey (co-ordinated by English Nature and undertaken by Nottingham University) to establish crayfish population and distribution on the river Eden. The survey has extended to include the river Kent and results will be used to determine proposed Special Areas of Conservation.

### **Fresh Water Pearl Mussel Survey, Cumbria**

We contributed to a survey co-ordinated by English Nature to establish the population and distribution of the pearl mussel. The results have shown nationally important populations on the rivers Ehen and Irk.

### **Whittle Brook, Warrington**

The project was completed this year with the planting of trees and shrubs, the planting of wild flowers by local people and schoolchildren, and the installation of interpretation panels to convey to the public why and what the restoration of over 3 kilometres of this brook has achieved.

### **Information Boards**

Central Area have begun a trial using a standard interpretation board where revenue works affect the public, for example along public rights of way. The boards outline our duties, the need for the work and environmental considerations.

### **Otter Habitat Improvements**

We continued our work to improve otter habitat through the creation of log pile holts on the river Lune, Lancashire and the river Dane, Cheshire.

### **River Valley Initiatives**

The aim is to protect river valleys for conservation, amenity and local business through partnership. Conservation staff contribute towards these Mersey Basin initiatives, providing a direct input into those for the Weaver, Beal, Wirral, Sankey, and Alt.

### **River Wyre Tree Strategy**

This project is ongoing and aims to identify the tree resource of the Wyre, to shape the flood maintenance programme and optimise opportunities for conserving and improving tree cover. The project has arisen following tree losses from past flood alleviation schemes.

### **Barbon Beck, Lancashire**

We part-funded fencing along the beck to allow natural regeneration of the riparian strip, providing potential habitat for otter and feeding area for barn owls.

### **Countryside Management**

Advice was given for set-aside land at Swanside Beck Lancashire & for Countryside Stewardship targets on the river Gowy, Cheshire.

### **Region-Wide Landscape Assessment**

Major rivers in South & Central Area were surveyed by summer students, the results are being collated by Groundwork Wigan. The assessment identifies river landscape types and recommends a management strategy of enhancement or conservation. The aim is to provide a strategic overview of river landscape quality in the North West region, to provide a context and guide for new works, to identify enhancement opportunities, and enable high quality landscapes to be maintained.

### **Bat & Bridges Leaflet**

This highlights the need to be aware of bats when undertaking work near rivers.

### **Kendal Riverside Regeneration Scheme**

South Lakeland District Council in partnership with Kendal Civic Society and Kendal Town Council have launched a competition to provide ideas for regenerating the river Kent. Integral to the competition is the improvement of riverside amenity and conservation value whilst respecting the built heritage of the town. Recreation staff have assisted in compiling the competition brief and assessing the entries. Millennium or lottery funding may be sought to realise the best ideas.

### **REGULATORY ROLE**

Major consultations for the region included :

#### **Road Improvement Schemes**

We have assessed and negotiated to reduce the impacts from widening works on the M6, M65, M63, and an extension to the Metrolink in Manchester.

#### **Manchester Airport Proposed Second Runway**

Detailed multi-functional discussions are ongoing with Manchester Airport to agree mitigation measures for the second runway. The public inquiry decision is expected late in 1996.

#### **Creation of Diversion Channels**

Physically diverse channels with river corridor planting were negotiated at the following sites to mitigate for consenting culverting works :

Bolton Sports Village  
Maw Green Landfill Site  
Kinderton Hall, Cheshire  
Ferodo Site, Chapel-en-le-Frith  
High Carleton, Penrith, Cumbria

#### **Astley Colliery, Leigh**

The proposal to reclaim colliery waste and create a landfill site has produced an opportunity to divert Whitehead Brook away from the polluting spoil heaps to a new and more physically diverse channel at the edge of the site with benefits for water quality and wildlife.

#### **Red Moss, Horwich**

We have objected to the proposal to turn this SSSI into a site for waste disposal and are working with English Nature to produce a management plan to conserve the peatland interest.

#### **Ferrings Pond, Macclesfield**

We were successful at a local hearing and prevented the loss of an active section of the river Bollin. The objection was against a proposal to construct a pond and bank stabilisation works.

#### **Drought Orders**

Conservation advice was provided to Water Resources to assess the potential environmental effects of issuing drought orders on several rivers and lakes in the region, including the rivers Lune and Douglas, reservoirs affecting the rivers Bollin and Etherow, and the lakes Ullswater, Windermere and Derwent Water. The Lune drought order was turned down due

to the potential impact on the spring salmon population and the potential loss of the genetic stock of the river.

Modifications to the Memorandum of Understanding between North West Water and the Agency have included the need to ensure adequate flows for salmonid migration, fry and smolts. A multifunctional review was undertaken titled "environmental impact of the drought".

## **MANAGEMENT OF LANDHOLDINGS**

### **Lutra House, Preston**

A pond was created to enhance the office frontage, planted with shrubby willow and aquatic species, it is already home to a pair of mallard!!

### **Crossens Pumping Station, Crossens, Lancashire**

The site was enhanced by the creation of a small wildflower meadow, tree & shrub planting.

### **Lane Ends, Pilling, Lancashire**

This amenity site was enhanced by reed planting and plans formulated for improving this facility which is managed (under contract) by Wyre Borough Council.

### **Three Pools Waterway, Crossens**

We established parking areas and "no fishing" areas to improve access for anglers and resolved a dispute between lessees of the fishing rights and local residents.

### **Balderstones Hall Fishery, Lancashire**

Use of the site by the lessee increased following a review by the NRA of ticket availability, sales and catch returns.

## **RESEARCH**

### **Cheshire Meres Study**

The NRA led a project to collate all environmental information held internally and by external organisations for water bodies over 2 hectares. The aim of the project is to identify and prioritise future work on the meres and has now been extended to all water bodies in South Area.

### **Cormorants**

Conservation provide 2 days per month for cormorant surveys on the River Ribble. The information is used to provide base-line information of this species for the R& D project managed by John Moores University.

### **Student Projects**

Several projects were completed or are ongoing, including :

- a review of conservation comments on planning applications
- a review of the correlation between fish species and habitat, using information from fish surveys and River Habitat Survey - a similar project for crayfish has just begun
- post-project appraisal on Glossop Brook to assess the impact of in-channel works on

aquatic biology

## **INTERNAL ADVICE**

### **Green Circle Group**

The region has set up this group to provide advice to the region on environmental policy. Membership includes conservation staff.

### **Environmental Assessment Training**

Around 200 staff from all functions received training.

### **Land Drainage Consents & Flood Defence Capital Schemes**

Central & South Areas held workshops to discuss conservation best practice and ensure a consistent approach within the Area.

### **Visit to National Willow Collection**

Conservation organised a visit for flood defence staff to the collection at Long Ashton to see how willows can be used to stabilise bank erosion.



## **PUBLICATIONS and LEAFLETS**

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### **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

1994 Annual Fisheries report

1995 Annual Fisheries report

#### ***Recreation***

Spending a Penny on Windermere Could Cost You a Fortune!

1995 Annual report on Conservation & Recreation