

RIVERS SWALE, URE AND OUSE CATCHMENT MANAGEMENT PLAN FINAL PLAN



NRA

*National Rivers Authority
Northumbria & Yorkshire Region
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ENVIRONMENT AGENCY

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1. VISION FOR THE CATCHMENT

The Rivers Swale, Ure and Ouse drain a catchment area of over 3200km². The rivers flow from the protected, designated uplands of the Yorkshire Dales National Park through the City of York to the port of Selby. This diversity in landscape and heritage attracts many visitors to the catchment each year, whether this be for recreational activities in the National Park or simply to enjoy the pleasures of the City of York.

The majority of the catchment is of a rural nature with the population being concentrated in the towns and the City of York at the lower end of the catchment.

Given such contrasts there are numerous opportunities for the NRA to work together with the wider community for the benefit of the water environment. The challenge of managing the waters of the catchment is in effectively responding to the range of pressures on the area and reconciling all the uses demanded, whether it be for water supply, industrial supply, effluent disposal, fisheries, conservation, recreation or protection from flooding.

Within the Rivers Swale, Ure and Ouse catchment, water resources, water quality, flood defence and land management issues are considered to be particularly important.

The catchment represents a large source of drinking water within Yorkshire. Because of this, the achievement of high water quality standards through effective and proactive pollution control are necessary to ensure the continuance of these uses. Generally water quality is good although localised problems do occur due to the discharge of sewage, industrial and farm effluent. The NRA will continue to work with Yorkshire Water Services Ltd., industrialists and landowners to ensure that through effective regulation all water quality objectives are met in the future. Abstraction of surface water for public supply is a major feature in the lower part of the catchment, notably from the River Ouse. The Authority recognises this vital use and will work to ensure optimum utilisation of this finite resource whilst protecting all other aspects of the water environment. Groundwater quality and quantity will be monitored and protected following the guidelines in the "Policy and Practice for the Protection of Groundwater".

The catchment is held to be of great landscape, conservation and amenity value. The significant conservation value of the catchment is recognised in both national and local designations. The NRA acknowledges the conservation implications of its duties, and would encourage management practices, both internally and by external organisations, that increase the habitat diversity and conservation value of the river corridor. This is particularly true where enhancements would enable opportunities for indigenous species, such as otter and crayfish, to re-establish viable populations. Of considerable interest in a catchment of such beauty is the need for access and recreational facilities for the local and wider community. The NRA will encourage responsible recreational activities on the river. The future development of recreation will only be successful through careful management, co-operation and moderation by all who have an interest in this resource.

The NRA will work to provide and maintain defences throughout the catchment in order to alleviate the risk of flooding from 'main river', to the highest level of defence that is both cost effective and environmentally acceptable. The NRA will work towards providing a comprehensive flood forecasting and warning service targeted at specific areas at risk. Whenever advance forecasts allow, warnings would be issued at least two hours prior to the onset of flooding. The Authority will protect, and enhance wherever practicable habitats, flora, fauna, fisheries, architectural and recreation interests in addition to flood defence interests when determining applications for consent to undertake works in watercourses or to develop in the flood plain.

Finally, the NRA wishes to establish strong involvement and links with local authorities, water companies, internal drainage boards, industry, landowners, farmers, environmental organisations and the general public to ensure local views are respected when future development decisions are made for the catchment. We will therefore work with all relevant parties to implement the principles of sustainable development.

2. INTRODUCTION

The National Rivers Authority (NRA) was established in 1989 to safeguard and improve the water environment in England and Wales. Our Mission Statement expresses the following principles: We will protect and improve the water environment by the effective management of water resources and by substantial reductions in pollution. We will aim to provide effective defence for people and property against flooding from rivers and the sea. In discharging our duties we will operate openly and balance the interests of all who benefit from and use rivers, groundwaters, estuaries and coastal waters. We will be businesslike, efficient and caring to our employees.

To achieve these objectives the NRA uses its resources to:

- Maintain existing assets and invest in new assets to provide flood protection, manage water resources and provide other NRA services.
- Control pollution by working with dischargers to achieve improvements and ensuring emergency response is efficient and effective.
- Determine, police, enforce and where applicable, review the conditions in water abstraction licences, discharge consents and land drainage consents to balance differing and sometimes conflicting needs whilst protecting the water environment.
- Develop fisheries and promote recreation, conservation and navigation where appropriate.
- Influence planning authorities to control development through Town and Country planning legislation.

Catchment Management Planning is a process designed to create a consistent framework within which the diverse responsibilities of the NRA can be applied within a catchment in a co-ordinated manner. It is a procedure by which issues and opportunities within a catchment are assessed and actions proposed to optimise the future well-being of the water environment. The purpose, therefore of this Catchment Management Plan, is to define a strategy for realising the environmental potential of the Rivers Swale, Ure and Ouse within the prevailing economic and political constraints for a five year period.

3. REVIEW OF THE CONSULTATION PROCESS

The Rivers Swale, Ure and Ouse Catchment Management Plan Consultation Report was launched on 24 May 1994 at which time it was distributed to local authorities, industry, landowners, environmental groups, sport and recreation groups and the public.

The Consultation Report concentrated on the issues in the catchment and possible management options for their solution. During the three month consultation period that followed it was hoped that parties would confirm the range and extent of catchment uses and activities; express views on the issues facing the water environment; suggest how the strategies and action plans should be progressed and identify actions of other bodies for inclusion in the Catchment Management Plan.

During the consultation period an informal open evening was held at the Kings Head Hotel, Richmond to discuss the report and a series of ad-hoc meetings held with various interest groups to discuss issues arising.

Five hundred Consultation Reports and a large number of supporting documents were distributed during the consultation period. This process resulted in 50 written responses being received, the comments from which have been considered and where possible, incorporated into this Plan.

The Plan is a strategic policy framework for the management of the catchment and will form the basis for improvements to the water environment by outlining areas of work and investment proposed by the NRA and others. This document primarily covers a five year period from January 1995 to December 1999 although certain projects may take longer due to funding availability and government policy.

Comments on the Consultation Report were received from 7 individuals and the following organisations:

Bedale and Upper Swale IDB
British Sugar
British Waterways
Claro IDB
Country Landowners Association
Countryside Commission

Council for the Protection of Rural England
 English Heritage
 English Nature
 Forest Enterprise
 Forestry Authority
 Foss Action Group
 J.G. Hills FRICS
 Hambleton District Council
 Harrogate Borough Council
 Hawes & High Abbotside Fishing Ass.
 Hazelwoods Preserves
 HMIP
 Leeds City Council
 Lightwater Quarries Ltd
 Lower Ouse IDB
 MAFF
 Marston Moor IDB
 National Farmers Union
 National Power
 North Yorkshire County Council
 Office of Water Trading (OFWAT)
 RAF Leeming
 Ramblers Association
 Richmondshire District Council
 Ripon Motor Boat Club
 Salmon and Trout Association
 Selby District Council
 Selby IDB
 Terrys Suchard
 Tidy Britain Group
 Unitrition International Ltd
 York City Council
 York Waterworks Plc
 Yorkshire Dales National Park
 Yorkshire Electricity Group Plc
 Yorkshire Water Services Ltd
 Yorkshire Wildlife Trust

4. OVERVIEW OF THE CATCHMENT

The River Swale originates as a series of small becks on the Northern Pennines within the Yorkshire Dales National Park. At Grinton it is joined by Arkle Beck and flows eastwards along Swaledale passing through Richmond and Catterick. The river then turns southeastward and flows parallel to the A1 until its confluence with the River Ure approximately 2 miles east of Boroughbridge. The Swale is joined by many tributaries between Catterick and the River Ure, the major ones being Bedale Beck, the River Wiske and Cod Beck.

The River Ure also rises on the Pennines within the National Park and is formed by the combination of several small becks in and around the town of Hawes. Along its length it is joined by several major tributaries, namely the River Bain, Bishopdale Beck, River Cover, River Burn, River Skell and the River Tutt. Unlike other rivers of the area, the Dale through which the Ure flows is named after a local village rather than the river, hence the somewhat anomalous fact that the River Ure flows through Wensleydale. Both rivers flow through the beautiful Dales landscape of limestone escarpments, flower rich meadows and ancient woodland reflecting the history of land management over the centuries. This landscape has particular value for nature conservation reflected in the number of national and local conservation designations, as well as for its amenity, heritage and archaeological interest.

After its confluence with the Swale, the Ure flows south-east to eventually become known as the River Ouse from the point where Ousegill Beck enters to the west of Linton-on-Ouse. From this point the River Ouse flows south through the agriculturally productive Vale of York and the City itself to Naburn Weir below which the river is tidal.

Tributaries of the Ouse include the Rivers Kyle and Foss, together with the Nidd and Wharfe, Derwent and Aire which are the subject of separate catchment plans.

The drainage area of the largely rural Swale, Ure and Ouse catchment is 3286 km² to the confluence with the River Aire.

Several centres of population exist within the catchment including Richmond, Northallerton, Thirsk, Ripon, York

and Selby with a combined population of 146,800 (based on 1991 Census Data).

The area is crossed by major road and rail links and the tidal river is an important navigational route.

Agreed uses and activities within the catchment include surface water abstraction, groundwater supply and protection, effluent disposal, solid waste disposal, land use, agriculture and forestry, conservation, archaeology and heritage, amenity, recreation and navigation, fisheries, angling, mineral extraction and mining, flood defence, flood warning and future development.

Key Details

Administrative Details

County Councils:	Humberside, North Yorkshire.
District Councils:	Boothferry, Eden, Hambleton, Harrogate, Leeds City, Richmondshire, Ryedale, Selby, Teesdale, York City.
Water Companies:	Northumbrian Water Ltd, York Waterworks Plc, Yorkshire Water Services Ltd.
National Parks:	Yorkshire Dales.
Navigation Authorities:	British Waterways - Ripon Canal, Selby Canal, Ouse and Ure; Linton Lock Commissioners - Linton Lock; York City Council - Foss only.

Water Quality

Length of Classified River in General Quality Assessment (GQA) Class : 1991 – 1993 data.

	km	% of classified watercourse
Class A	129.4	19.8
Class B	357.6	54.6
Class C	79.6	12.2
Class D	22.0	3.4
Class E	62.6	9.5
Class F	3.0	0.5
Total	654.2	100.0

The Consultation Report classified 1735.5km using the National Water Council (NWC) scheme. Presently data is only available to classify 654.2km using the GQA scheme (see Issue C for additional clarification).

Length of Canal in GQA Class: 1991 - 1993 data.

	km	%
Class E	8.4	100

Flood Protection

Length of Designated Main River: 311 km

Length of raised Flood Defences on Main River (both banks): 244 km

Number of People and Property Protected from Flooding: 6600 House Equivalents

Water Resources

Total number of Licensed Surface Water Abstractions: 460

Total number of Licensed Groundwater Abstractions: 498

Conservation

Number of Areas of Outstanding Natural Beauty (AONB): 2

Number of SSSI's: 55

5. RELATIONSHIP BETWEEN LAND USE AND THE WATER ENVIRONMENT

The broad objective of catchment management planning is to conserve and enhance the total river environment through effective land and resource management. However, while the NRA is well placed to influence some of the factors affecting the water environment, particularly in relation to the river corridor itself, it has very little control over the mechanisms which determine land use change on a catchment-wide basis. This is largely the responsibility of local planning authorities through the implementation of the Town and Country Planning Acts.

The policies in statutory development plans are important in this regard in that they set out the framework for land use change, and provide the key reference in determining development applications; the NRA encourages the inclusion of policies which reflect its concerns and responsibilities.

The crucial role of planning authorities in determining development of the urban and rural environment and

its subsequent impact on the water environment cannot be overstated.

The local planning authorities are responsible for the determination of land use changes and promoting forward planning policies. As a statutory consultee the NRA provides local planning authorities with guidance statements to assist them in formulating policies for inclusion in their plans which reflect the NRA's concerns and responsibilities including the statutory requirement to conserve and enhance the water environment and associated lands. Addressing water issues will assist the formulation of settlement strategies, the location, attractiveness and sustainability of developments. It will also improve the quality of policies for landscape, nature and urban conservation, recreation and tourism. Plans sensitive to water matters will be protecting and enhancing a vital natural resource and the surrounding environment.

As a guidance for local authorities, the NRA has prepared a set of statements relating to the broad headings of water quality and water resources, flood defence, fisheries, conservation, recreation and navigation in the river corridor and mineral workings and waste disposal. These statements are summarised in the NRA's "Guidance Notes for Local Planning Authorities on the Methods of Protecting the Water Environment through Development Plans". This Catchment Management Plan sets out issues and actions specific to this catchment which have been agreed within the framework of these Guidance Notes.

Continued consistent involvement of the NRA in the production of local, strategic and national plans is vital to the well-being of the water environment. Production of Catchment Management Plans outlining the NRA's vision for sustainable development are seen as important documents to maintain and promote close liaison with all development bodies.

6. ACTION PLAN

The proposed Action Plan is based around 11 key issues - labelled A to K - which are detailed in the following tables. Each issue relates to problem areas or opportunities identified in the Consultation Report, either of a strategic or geographical nature.

The issues are presented along with the overall objectives, actions needed to achieve the objectives and identification of responsible parties. General information about each particular issue can be found directly under the heading.

Activities have only been included in the Action Plan where we believe there is a significant chance of them happening and for which resources are likely to be available. However, the Action Plan is dynamic and will change and evolve on a regular basis as opportunities arise for the public, private and voluntary sectors to work together to deliver the identified objectives.

Wherever possible, estimated costs are identified for the period covered by this plan. A number of actions within the plan may require feasibility studies and appraisal of options prior to work commencing. In some cases this may mean the solving of issues may not be viable. Certain projects within this plan will be subject to an internal bidding process and may be reprioritised accordingly.

In the tables, the following abbreviations are used:

<	= Less than.
pa	= Per Annum.
\$	= Activity added as a result of the Consultation.
-	= Expenditure expected in year indicated.
U	= Unknown or unavailable costs.
CCTV	= Close Circuit Television
DoT	= Department of Transport
EN	= English Nature
FWAG	= Farming and Wildlife Advisory Group
IDB	= Internal Drainage Board
LA	= Local Authority
LPA	= Local Planning Authority
MAFF	= Ministry of Agriculture, Fisheries and Food
NYCC	= North Yorkshire County Council
RDC	= Ryedale District Council
RSPS	= River Swale Preservation Society
STW	= Sewage Treatment Works
UWWTD	= Urban Waste Water Treatment Directive
YDNP	= Yorkshire Dales National Park
YWS	= Yorkshire Water Services Ltd
YWT	= Yorkshire Wildlife Trust
YWW	= York Waterworks plc

N.B. All costs are NRA figures unless otherwise stated.

ISSUE A: Water Resources Management

The National Rivers Authority has a duty to conserve, redistribute, augment and ensure the proper use of water resources. As part of this duty, the NRA's role is to regulate the water companies, hydropower and other abstractors to ensure that in managing the resource a balance is achieved between the needs of the environment

and those of the abstractors.

To aid the management of the water resource, the Authority has published National and Regional Water Resource Strategies which will be implemented in the catchment. The Authority will continue its routine programme of river flow, rainfall and groundwater level monitoring.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
A1	Ensure the proper management and development of surface water resources.	Employ consultants to undertake a National review of existing policies for the determination of surface water abstraction licences.	NRA CONSULTANTS	20 part of national contract		—				
		Implement amended licensing guidelines.	NRA	U						
		Negotiate with and monitor the water companies progress on leakage, conjunctive use, source optimisation and demand management to ensure optimum utilisation.	NRA YWS YWW	10 part of regional contract						
A2	Ensure the proper management and development of ground water resources.	Review existing policy for the determination of groundwater abstraction licences.	NRA	20 part of regional review	—					
		Implement amended licensing guidelines.	NRA	U						
A3	Assess the effects of different flow and water resource regimes on the ecology of river communities.	Utilise existing R & D information and available data to report on the impact of low flows in the Swale, Ure and Ouse catchment.	NRA	<1	—					
		Assess the need for a long term monitoring programme on the ecological effects of low flows.	NRA	<1	—					
A4	Determine the environmental implications of the Tees/Swale/Wiske inter-river transfer option.	Identify the issues associated with this potential development proposal.	NRA	U	—					

ISSUE B: Aquifer Protection

In general, groundwater has a high standard of quality, both microbiologically and chemically and therefore usually requires little treatment prior to use. Groundwater is vulnerable to many activities that can cause insidious

pollution through the underground seepage of contaminants. Once polluted it is extremely difficult and costly to alleviate the pollution. Some groundwater also moves very slowly which means that it sometimes takes a long time for any pollution to be manifested.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
B1	Protect the quality of groundwater within the catchment.	Implement the NRA Groundwater Protection Policy through staff training and promotion of the guidelines to planning authorities, landowners and dischargers within the the catchment.	NRA	YWS INDUSTRY	10pa						
B2	Protect major ground-water abstractions from contamination.	Groundwater protection zones will be defined for the major ground-water sources that are used for potable supply.	NRA	CONSUL- TANTS	15						
B3	Develop groundwater quality monitoring network.	Set up a groundwater quality monitoring network, as per National guidelines.	NRA		14						

ISSUE C: Water Quality Management

The NRA uses two principal schemes for the reporting and management of river water quality: the general quality assessment (GQA) scheme; and the statutory water quality objectives (WQOs) scheme. These schemes have replaced the water quality classification system used previously by the NRA (the NWC classification).

The GQA scheme is used to make periodic assessments of the quality of river water in order to monitor geographical and temporal trends. The scheme comprises four components - general chemistry, nutrients, aesthetics and biology - each providing a discrete 'window' upon the quality of river stretches. The general chemistry component of the GQA is in current use, and comprises six tiered grades defined by standards for Dissolved Oxygen, BOD and Total Ammonia. The remaining three windows are still under development and will be applied when available.

The WQO scheme establishes clear quality targets to provide a commonly-agreed planning framework for regulatory bodies and dischargers alike. The proposed WQO scheme is based upon the recognised uses to which a river stretch may be put. These uses include: River Ecosystem; Special Ecosystem; Abstraction for Potable Supply; Agricultural/Industrial Abstraction and Watersports. The standards defining the five tiered River Ecosystem (RE) use classes, which address the chemical quality requirements of different types of aquatic ecosystems, were introduced by "The Surface Waters (River Ecosystem) (Classification) Regulations 1994". (Standards for further uses are still under development.)

For each stretch of river, a target RE class will be assigned, including a date by which this level of water quality should be achieved. Until WQOs are formally established by legal Notice served by the Secretary of State, and therefore exist on a statutory basis, they will be applied on a non-statutory basis through a translation of River Quality Objectives (RQOs) from NWC classes to appropriate RE classes and target dates.

Additional sampling points have been included in the catchment. The amended sampling programme became effective in mid 1994 enabling a more accurate water quality classification to be made in the NRA 1995 quinquennial survey. The NRA aims to continue to achieve improvements to the water environment by taking a proactive role in pollution prevention. This involves undertaking a programme of site visits to industrial premises, farms, sewage pumping stations, combined sewer overflows and sewage works to assess risks and giving advice on pollution prevention measures. The intention is to persuade and educate operators that good housekeeping programmes which limit effluent production and spillage, form part of the total management process resulting in reduced costs and benefits to the water environment.

The NRA also has a duty to monitor compliance of consented discharges to assess their quality in relation to the conditions set within the consent.

The Authority will adopt a firm and even handed approach with all dischargers and where the required improvements are not being progressed within an acceptable timescale, prosecution will be considered.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
C1 5	Establish water quality using the GQA water quality classification scheme and review water quality targets.	Carry out the NRA's quinquennial water quality survey.	NRA		U	—					
		Review medium & longer term non-statutory water quality objectives.	NRA		10		—				

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
C2	Achieve water quality improvements in the Swale, Ure and Ouse catchment by effective pollution prevention measures.	Undertake phased investigations on industrial sites and recommend pollution prevention measures.	NRA	INDUSTRY	10pa						
		Use biological and chemical surveys to identify sub-catchments affected by agricultural pollution. Carry out site visits to the farms responsible and investigate programmes for remedial action.	NRA	FARMERS	10pa						
		Continue to promote measures with YWS to reduce pollution effects from public and private surface water sewers.	NRA	YWS INDUSTRY	10pa						
		Prioritise the list of problem CSO's submitted by YWS under AMP2 and plan the necessary programme of improvements.	NRA	YWS	2						

ISSUE D: Ecology, Recreation and Amenity

The NRA has duties, under the Water Resources Act 1991, to maintain, improve and develop fisheries, to further conservation, to promote recreation and to predict or monitor biological impacts.

As part of these duties the Authority will liaise closely with other local and national authorities, with landowners,

voluntary and community organisations and specialist interest groups and will, where possible, work in co-operation with these bodies in order to achieve our objectives.

Close liaison will also be maintained with other functions and sections of the NRA in order to ensure a coherent and integrated approach.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
D1	Promote land management practices that increase the habitat diversity of the water environment.	Continue support for FWAG e.g. Bishop Monkton Ings on the Ure.	NRA	FWAG N YORKS	5 pa	—					
D2	Provide advice to landowners on the problems of bankside erosion and control methods in conjunction with other agencies.	Work with YDNP, NYCC and landowners to encourage the use of habitat creation to help combat erosion and tipping problems.	NRA	YDNP NYCC	10 pa	—					
D3	Protect and enhance the opportunities for otter populations to colonise the main rivers and tributaries in line with the national otter policy.	Support otter projects eg Otters & Rivers Project and research, to understand otter distribution and factors influencing it, with particular reference to the Middle Swale.	YWT	NRA	5 pa	—	—	—			
D4	Protect native crayfish in the catchment.	Maintain records of native crayfish and resist proposals to introduce alien species into the catchment.	NRA	MAFF/EN LA	1 pa	—	—	—	—	—	—
D5	Extend collaboration to all Internal Drainage Boards within the catchment to further improvements of the water environment.	Offer to advise IDBs in establishing ecological components in their maintenance programmes and schemes.	NRA	IDBs	<1 pa	—	—	—			
D6	Investigate the environmental impact of any hydropower schemes in the catchment (proposed schemes at West Tanfield and Linton Lock).	Monitor ecological effects of hydropower schemes, especially on fish.	NRA		2.5	—	—	—			



No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
D7	Investigate obstructions to fish passage caused by man-made structures.	Complete an inventory of obstructions to the passage of fish and prioritise works to be carried out to allow free passage.	NRA		10	—					
D8	Assess the impact that piscivorous birds have on fish populations.	Undertake collaborative work with ornithological organisations to assess the potential impact that goosanders and cormorants might have on the fish populations of the Rivers Swale and Ure.	NRA	ORNITHOLOGICAL ORGANISATIONS	1	—	—				
D9	Improve access and facilities for individuals and the various recreational interests in the catchment, who wish to enjoy the water environment.	Encourage improvement in facilities and foster a balanced approach in the development of access to the water environment. For example support the completion of a long distance path between York and Ripon.	NRA	SPORTING ORGANISATIONS AND CLUBS/ LAND OWNERS	4.5		—	—	—	—	—
		Encourage angling clubs to set aside stretches of match fishing lengths for use by non-competing anglers, enabling a fuller use of the facility.	NRA	ANGLING CLUBS	2			—			
D10	Identify areas suitable for fish habitat improvement and collaborate with others to achieve such improvements.	Continue to advise and assist in the development and/or creation of new still water fisheries with particular emphasis on waters to be made available to the general public throughout the catchment.	NRA		<5pa	—	—	—	—	—	—

ISSUE E: Flood Defence

The NRA aims to provide effective defence against flooding, appropriate to the use of the land affected whether this be urban or agricultural. This role is fulfilled in three main ways; supervision, flood defence operations and flood warning.

In accordance with the Water Resources Act 1991 the NRA exercises a general supervision over all matters relating to flood defence. This is primarily undertaken by liaison with planning authorities over development in the catchment and by powers of enforcement given by the Land Drainage Act 1991 and the Water Resources Act 1991.

On 'main river' the NRA has permissive powers to undertake works when it can be demonstrated that these are environmentally and economically acceptable. This involves provision, maintenance and operation of flood defences and undertaking other appropriate land drainage works.

The NRA also provides a flood forecasting and warning service for areas at risk from flooding from 'main river'. Warnings are issued, in accordance with a national colour coded system, to the police who implement emergency procedures as appropriate. Responsibility for providing assistance to the public lies with the District Councils.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
E1	Improve efficiency and effectiveness of the NRA's emergency response.	Investigate and record the condition of all existing flood defence structures within the catchment. Remaining actions for this objective are dependant on this.	NRA		40						
		Modify, where economically and practically possible flood defence structures to enable operation remotely utilising the Region's Telemetry System.	NRA		U						
		Consider replacing structures which cannot be readily adapted for remote operation.	NRA		<5 pa						
		Investigate the feasibility of providing CCTV at critical flood defence structures in order to improve safety and security.	NRA		<5 pa						
E2	Improve NRA maintained assets from a conservation and amenity aspect without reducing their operational performance.	Develop plans for selected sites.	NRA		<5						

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
E3	Provide and maintain flood defences.	Investigate and record the condition of Flood Defence Assets and prepare a priority based programme for repair, renewal and maintenance. Determine the most cost effective standards for each length and maintain to those standards. In preparing the programme the NRA will consider the implications of 'doing nothing' and implementing changes to current methods of operation.	NRA		U						
		Investigate the provision of additional relief outfalls to evacuate flood water from washlands as soon as possible after the flood has subsided.	NRA	LAND-OWNERS	U						
		Register washlands which come within the scope of the 1975 Reservoirs Act.	NRA		30pa						
E4	Provide and maintain a timely, reliable and accurate flood warning service.	Continue to liaise with the police and local authorities to ensure that procedures are in place to respond to NRA warnings. Continue to refine and improve the flood warning system through incorporation of the Regional Telemetry System and the River Flow Forecasting System.	NRA	LA POLICE	30pa						
E5	Manage water levels to balance the requirements of flood defence, agriculture, and conservation.	Formulate water level management plans for an agreed list of sites.	NRA	MAFF/EN IDB/LA	10 per plan						

ISSUE F: Future Development

Future residential, commercial and industrial development is identified in County Structure Plans, District Local Plans and Unitary Development Plans. These documents identify policies against which the planning authorities consider development proposals.

The NRA's purpose in participating in the planning process is to provide guidance to the relevant authorities so as to

protect the public and the environment from any adverse effects associated with development in relation to surface water and groundwater.

Continued involvement of the NRA in the planning process and production of local, strategic and national plans is seen to be of vital importance; Catchment Management Plans are an essential tool in this liaison process.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
F1	Participate in the local authority planning process to ensure protection of the water environment	Participate fully in the development control process and where necessary oppose any proposals that will damage the water environment.	NRA LPA	16 pa						
		Participate fully in the strategic planning process and provide guidance to local councils on methods of protecting the water environment through their development plans.	NRA LPA/DEV- ELOOPERS	8 pa						
F2	Increase liaison with the planning authorities, outside organisations and members of the public to promote the aims of the National Rivers Authority.	Continue involvement with local environmental groups as a means of co-ordinating activities along the river to achieve environmental protection and improvements.	NRA	2 pa						
F3	Ensure that the NRA's Catchment Management Plan is adopted as a strategy for the future management of the water environment of the Swale, Ure and Ouse catchment.	Positively promote the concept of catchment management planning.	NRA LPA OTHERS	} } 4 pa }						
		Monitor and review the CMP annually.	NRA	}						

ISSUE G: River Swale

The River Swale rises in Upper Swaledale in the Yorkshire Dales National Park. This upper section is steep and the dale itself narrow and steep-sided resulting in the flashy nature of the river. The river remains almost completely natural until Brompton-on-Swale. From this point significant stretches of the river have been straightened and floodbanks are commonplace. The river meanders widely through the Vale of York and joins the River Ure just east of Boroughbridge.

Much of the river is of high water quality but improvements are sought on the River Wiske and Cod

Beck through improvements in sewage effluent. The focus for ecology and recreation on the River Swale is habitat creation to provide bank stabilisation, prevent erosion and support established fish populations. These works will be monitored to gauge the improvements achieved. The proposed improvement to the A1 will impact on both the River Swale and some of its tributaries. The NRA aims to minimise the impact of these proposals.

Flooding occurs throughout the River Swale sub-catchment. Kirby Wiske has been identified as an area where more specific flood warnings may be possible.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
G1	Water Quality Achieve RQO on the River Wiske and tributaries.	Ensure scheduled improvements at Northallerton STW and Romanby STW take place to achieve compliance with the EC Freshwater Fisheries Directive.	NRA	YWS	<0.5						By end of 2000
		Seek to get additional improvements at Northallerton and Romanby STWs to achieve RQO with available YWS AMP2 discretionary money.	NRA	YWS	<0.5						By end of 2000
		Identify and control sources of agricultural and other pollution supported by a chemical and biological quality survey of the Wiske and tributaries upstream of Northallerton.	NRA	FARMERS	5pa						
G2	Ecology Determine the impact of acidification on the aquatic ecosystem in tributary streams of the River Swale at Whitsundale, Birkdale, Arkle and Marske Becks.	Assess whether measures available to ameliorate impacts are required.	NRA		<0.5						

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST (£K)	1995	1996	1997	1998	1999	FUTURE
G3	Monitor and evaluate the stocking of fish into the River Swale.	Collate data on fish stocks in the river using match returns and survey work.	NRA ANGLING CLUBS	3pa						
		Evaluate data collected on fish populations and current angling use to ensure fish stocking is responsive to the data collected.	NRA ANGLING CLUBS							
G4	Identify areas suitable for fish habitat improvement and collaborate with others to achieve such improvements.	Assess the effectiveness of Cundall fish haven for future design.	NRA ANGLING CLUBS/ LAND-OWNERS	U						
\$		Undertake in river and bankside enhancement work between Langton and Skipton-on-Swale.	NRA RSPS	50						
\$		Examine the benefits of any enhancement work to fish populations and angling.	NRA	<1						
G5	Minimise the impact of in river gravel workings.	Limit, through the planning process, and relevant NRA consents unnecessary removal of in river gravels.	NRA LPA	<1pa						
		Evaluate the study on the ecological value of gravel shoals.	NRA	<0.5						
G6	Flood Defence Provide and maintain a timely, reliable and accurate warning system.	Investigate the possibility of providing warnings for Kirby Wiske. Appropriate warnings will be implemented in co-operation with the police and local authorities.	NRA POLICE LA	10						
G7	Future Development Ensure that there is no increased risk of flooding or damage caused to habitats, flora and fauna, including fisheries when determining proposals to culvert, divert or alter a watercourse and its banks or change the use of flood plain.	Ensure that the NRA's interests are not adversely affected by the A1 widening which involves crossing the River Swale and tributaries.	NRA LPA DoT	<5						

ISSUE H: River Ure

The River Ure rises in Upper Wensleydale in the Yorkshire Dales National Park. From open moorland the valley falls steeply through limestone escarpments to the flat flood plain, which lie to the east of Leyburn. Between Hawes and Aysgarth the river meanders from one side of the valley to the other. At Aysgarth the river drops sharply over layers of limestone in a series of waterfalls. Shortly after Aysgarth the river leaves the National Park and again meanders across a flood plain. Between Masham and West Tanfield and down towards Ripon the valley narrows with steeper, densely wooded slopes.

The River Ure remains almost completely natural for most of its course, though the land flattens out and floodbanks

become commonplace after Boroughbridge.

Water quality improvements are sought for localised problems such as the effluent quality from WCF Foods Ltd, Boroughbridge. Another key issue will be to produce a protection strategy for the valuable limestone headwater streams. The enhancement of fish spawning and nursery areas together with the impact of fish farms on the ecosystem will be of particular interest on the River Ure. The widening of the A1 has impacted on the River Ure and tributaries. The NRA will continue to seek to minimise the impact. Flooding occurs throughout the length of the River Ure, however, Roecliffe near Boroughbridge has been identified as requiring further investigation.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
	Water Quality									
H1	Alleviate localised pollution in the River Ure from WCF Foods Ltd, Boroughbridge.	Ensure that WCF Foods Ltd achieve consistent compliance with discharge consent conditions.	NRA WCF FOODS LTD	<0.5	—					
	Ecology									
H2	Monitor the impact of fish farms on river ecology to help target farms where improvements are needed.	Continue biological surveys to assess the effect of fish farm abstractions and discharges on the receiving waters in the Masham area on the River Ure.	NRA	1	—	—				
H3	Investigate the impact of 'escapes' from fish farms on native populations of trout.	Instigate a programme of fish surveys above and below the fish farms causing concern.	NRA	3		—	—			
H4	Investigate the impact of acidification on the aquatic ecosystem in tributary streams of the Burn, Cover and Skell.	Assess whether measures available to ameliorate impacts are required.	NRA	<0.5			—			
H5	Produce a protection strategy for limestone headwater streams on the River Ure.	Utilise existing data, plus, if necessary, additional studies in the area to consider conservation value and bio-diversity, and develop a protection strategy.	NRA	0.5		—				



No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
H6	Identify areas suitable for fishery habitat improvement and collaborate with others to achieve such improvements.	Enhance fish spawning areas and nursery areas through appropriate management, eg willow planting, installation of instream structures and cleaning of gravels and assess effectiveness by pre and post installation surveys.	NRA ANGLING CLUBS	1.5pa						
		Identify areas suitable for habitat improvements: Source to Aysgarth; Aysgarth to Boroughbridge; Boroughbridge to Ouse.	NRA	<5						
H7	Examine effects of	Assess the extent of fish entrapment in the flood relief channel.	NRA	<5						
\$	Boroughbridge Flood Defence Scheme on fisheries.	Recommend further detailed study if possible improvement measures are identified.	NRA	1.5						
	Flood Defence									
H8	Provide and maintain	Investigate the feasibility of providing economically and environmentally acceptable flood defences at Roecliffe, Boroughbridge.	NRA	10						
\$	flood defences.									
	Future Development									
H9	Ensure that there is no increased risk of flooding, or damage caused to habitats, flora and fauna, including fisheries, when determining proposals to culvert, divert or alter a watercourse and its banks or change the use of flood plain.	Ensure that the NRA's interests are not adversely affected by the A1 widening which involves crossing the River Ure and tributaries.	NRA LPA DoT	<5						



ISSUE 1: Non-Tidal River Ouse

After its confluence with the Swale the River Ure flows southeast and just to the west of Linton-on-Ouse becomes known as the River Ouse, where Ousegill Beck runs in. From this point the River Ouse flows south as a freshwater river through the City of York to Naburn Weir below which the river is tidal.

Water quality issues include pro-active pollution prevention measures to prevent pollution from industrial

sites and to have accurate time travel models available if pollution does occur. The NRA will work with other agencies to enhance the recreation and amenity value of the River Ouse. Particular consideration will be given to the impact of water abstraction on the ecology of river communities. South Esplanade and King's Staith in York have been identified as areas where flood defence indicative target standards of service are not met. The possibility of providing defences will be considered.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1994	1995	1996	1997	1998	FUTURE
I1	Water Quality Maintain the water quality of the River Ouse upstream of York to meet the standards required for potable supply abstraction at both Moor Monkton and Acomb.	Undertake phased investigations on industrial sites and recommend pollution prevention measures.	NRA	10 pa						
\$		Continue to update ADZ time of travel models to aid the management of pollution incidents.	NRA	15						
I2	Achieve RQO on the River Ouse downstream of York.	Ensure scheduled improvements at Naburn STW take place to maintain compliance with the EC Freshwater Fisheries Directive.	NRA YWS	<0.5						By end of 2000
		Seek to get additional improvements at Naburn STW to achieve RQO with available YWS AMP2 discretionary money.	NRA YWS	<0.5						
		Require improved operation of Fulford Pumping Station and Storm Tanks.	NRA YWS	<0.5						
I3	Review water quality data and develop a sampling strategy to assess the quality of the River Kyle and tributaries.	Provide baseline chemical and biological information to prioritise actions within a campaign for effluent improvement throughout the sub-catchment.	NRA	U						

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
14	When appropriate, develop a multi-functional strategy to consider the impact of the possible mine closures in the area.	Continue the programme of farm visits to advise on best practice and promote schemes for termination of remaining farm effluent discharges and monitor effectiveness of actions.	NRA	FARMERS	5 pa						
		Continue investigative biological work in the upper sub-catchment areas.	NRA		1						
		Investigate the potential impact of mine closures, within the Selby coalfield, on the ecology of the water environment and develop a strategy for the limitation of any damaging impacts.	NRA		U						
15	Ecology Assess the effects of the Ouse Abstraction scheme on the ecology of river communities.	Liaise with YWS on the installation of screens and assess the impact on fish mortality at Moor Monkton intake.	YWS	NRA	1						
16	Recreation and Amenity Improve the amenity and recreation value of the River Ouse around York, where appropriate.	Explore the feasibility of a jointly funded 'Water Environment Ranger'.	RDC	NRA	0.5						
17	Flood Defence Provide and maintain flood defences.	Investigate the possibility of providing economically and environmentally acceptable flood defences for King's Staith and South Esplanade in York.	NRA	LA LAND-OWNERS	5						

ISSUE J: River Foss and Tributaries

The mainly low lying land surrounding the River Foss is intensively farmed and becomes urbanised as the river flows through York. The river has to deal with effluent from sewage treatment works, agricultural run off and litter. Habitats have been lost through developments or land drainage. Despite these pressures the slow flows of the River Foss and high nutrient levels enable aquatic flora such as water lilies and reeds to grow. Healthy plant life in turn attracts invertebrates and populations of coarse

fish which are common.

Improvements are sought in effluent quality from a number of sewage treatment works which drain into the Foss and tributaries. The NRA will continue to work closely with interested local groups and organisations to promote the aims of the Authority. Blockages caused by debris have in the past caused operational problems with sluices which control water levels in the Foss. Changes in the operation of these sluices will be investigated.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
J1	Water Resources Ensure the proper management and development of surface water resources.	Employ consultants to investigate the amelioration of low flows in the River Foss.	NRA CONSULTANTS	U						
J2	Water Quality Achieve RQO on the River Foss downstream of Walbutts STW and improve the quality of Osbaldwick and Tang Hall Becks.	Ensure scheduled improvements in effluent treatment at Walbutts STW take place to ensure compliance with UWWTD Sensitive Area requirements.	NRA YWS	<0.5						
		Seek to get additional improvements at Walbutts STW to achieve RQO with available YWS AMP2 discretionary money.	NRA YWS	<0.5						By end of 2000
		Completion of the East York ring main and closure of Osbaldwick and Stockton-on-Forest STWs will improve the quality of Osbaldwick and Tang Hall Becks. Further chemical and biological surveys will be carried out to assess the situation on completion.	NRA YWS	<0.5						
J3	Achieve RQO on the River Foss upstream of Walbutts STW.	Continue the programme of farm visits to advise on best practice and promote schemes for termination of remaining farm effluent discharges.	NRA FARMERS	5 pa						

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No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
J1	Water Resources Ensure the proper management and development of surface water resources.	Employ consultants to investigate the amelioration of low flows in the River Foss.	NRA CONSULTANTS	U			—			
J2	Water Quality Achieve RQO on the River Foss downstream of Walbutts STW and improve the quality of Osbaldwick and Tang Hall Becks.	Ensure scheduled improvements in effluent treatment at Walbutts STW take place to ensure compliance with UWWTD Sensitive Area requirements.	NRA YWS	<0.5				—		
		Seek to get additional improvements at Walbutts STW to achieve RQO with available YWS AMP2 discretionary money.	NRA YWS	<0.5						By end of 2000
		Completion of the East York ring main and closure of Osbaldwick and Stockton-on-Forest STWs will improve the quality of Osbaldwick and Tang Hall Becks. Further chemical and biological surveys will be carried out to assess the situation on completion.	NRA YWS	<0.5	—					
J3	Achieve RQO on the River Foss upstream of Walbutts STW.	Continue the programme of farm visits to advise on best practice and promote schemes for termination of remaining farm effluent discharges.	NRA FARMERS	5 pa	—					

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
		Continue the programme of farm visits to advise on best practice and promote schemes for termination of remaining farm effluent discharges and monitor effectiveness of actions.	NRA FARMERS	5 pa						
		Continue investigative biological work in the upper sub-catchment areas.	NRA	1						
14	When appropriate, develop a multi-functional strategy to consider the impact of the possible mine closures in the area.	Investigate the potential impact of mine closures, within the Selby coalfield, on the ecology of the water environment and develop a strategy for the limitation of any damaging impacts.	NRA	U						
15	Ecology Assess the effects of the Ouse Abstraction scheme on the ecology of river communities.	Liaise with YWS on the installation of screens and assess the impact on fish mortality at Moor Monkton intake.	YWS NRA	1						
16	Recreation and Amenity Improve the amenity and recreation value of the River Ouse around York, where appropriate.	Explore the feasibility of a jointly funded 'Water Environment Ranger'.	RDC NRA	0.5						
17	Flood Defence Provide and maintain flood defences.	Investigate the possibility of providing economically and environmentally acceptable flood defences for King's Staith and South Esplanade in York.	NRA LA LAND-OWNERS	5						

ISSUE I: Non-Tidal River Ouse

After its confluence with the Swale the River Ure flows southeast and just to the west of Linton-on-Ouse becomes known as the River Ouse, where Ousegill Beck runs in. From this point the River Ouse flows south as a freshwater river through the City of York to Naburn Weir below which the river is tidal.

Water quality issues include pro-active pollution prevention measures to prevent pollution from industrial

sites and to have accurate time travel models available if pollution does occur. The NRA will work with other agencies to enhance the recreation and amenity value of the River Ouse. Particular consideration will be given to the impact of water abstraction on the ecology of river communities. South Esplanade and King's Staith in York have been identified as areas where flood defence indicative target standards of service are not met. The possibility of providing defences will be considered.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1994	1995	1996	1997	1998	FUTURE
11	Water Quality Maintain the water quality of the River Ouse upstream of York to meet the standards required for potable supply abstraction at both Moor Monkton and Acomb.	Undertake phased investigations on industrial sites and recommend pollution prevention measures.	NRA	10 pa						
		Continue to update ADZ time of travel models to aid the management of pollution incidents.	NRA	15						
12	Achieve RQO on the River Ouse downstream of York.	Ensure scheduled improvements at Naburn STW take place to maintain compliance with the EC Freshwater Fisheries Directive.	NRA YWS	<0.5						By end of 2000
		Seek to get additional improvements at Naburn STW to achieve RQO with available YWS AMP2 discretionary money.	NRA YWS	<0.5						
		Require improved operation of Fulford Pumping Station and Storm Tanks.	NRA YWS	<0.5						
13	Review water quality data and develop a sampling strategy to assess the quality of the River Kyle and tributaries.	Provide baseline chemical and biological information to prioritise actions within a campaign for effluent improvement throughout the sub-catchment.	NRA	U						



No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	(COST(£K))	1995	1996	1997	1998	1999	FUTURE
H6	Identify areas suitable for fishery habitat improvement and collaborate with others to achieve such improvements.	Enhance fish spawning areas and nursery areas through appropriate management, eg willow planting, installation of instream structures and cleaning of gravels and assess effectiveness by pre and post installation surveys.	NRA ANGLING CLUBS	1.5pa						
		Identify areas suitable for habitat improvements: Source to Aysgarth; Aysgarth to Boroughbridge; Boroughbridge to Ouse.	NRA	<5						
H7	Examine effects of	Assess the extent of fish entrapment in the flood relief channel.	NRA	<5						
\$	Boroughbridge Flood Defence Scheme on fisheries.	Recommend further detailed study if possible improvement measures are identified.	NRA	1.5						
	Flood Defence									
H8	Provide and maintain	Investigate the feasibility of providing economically and environmentally acceptable flood defences at Roecliffe, Boroughbridge.	NRA	10						
\$	flood defences.									
	Future Development									
H9	Ensure that there is no increased risk of flooding, or damage caused to habitats, flora and fauna, including fisheries, when determining proposals to culvert, divert or alter a watercourse and its banks or change the use of flood plain.	Ensure that the NRA's interests are not adversely affected by the A1 widening which involves crossing the River Ure and tributaries.	NRA LPA DoT	<5						

ISSUE H: River Ure

The River Ure rises in Upper Wensleydale in the Yorkshire Dales National Park. From open moorland the valley falls steeply through limestone escarpments to the flat flood plain, which lie to the east of Leyburn. Between Hawes and Aysgarth the river meanders from one side of the valley to the other. At Aysgarth the river drops sharply over layers of limestone in a series of waterfalls. Shortly after Aysgarth the river leaves the National Park and again meanders across a flood plain. Between Masham and West Tanfield and down towards Ripon the valley narrows with steeper, densely wooded slopes.

The River Ure remains almost completely natural for most of its course, though the land flattens out and floodbanks

become commonplace after Boroughbridge.

Water quality improvements are sought for localised problems such as the effluent quality from WCF Foods Ltd, Boroughbridge. Another key issue will be to produce a protection strategy for the valuable limestone headwater streams. The enhancement of fish spawning and nursery areas together with the impact of fish farms on the ecosystem will be of particular interest on the River Ure. The widening of the A1 has impacted on the River Ure and tributaries. The NRA will continue to seek to minimise the impact. Flooding occurs throughout the length of the River Ure, however, Rocliffe near Boroughbridge has been identified as requiring further investigation.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
H1	Water Quality Alleviate localised pollution in the River Ure from WCF Foods Ltd, Boroughbridge.	Ensure that WCF Foods Ltd achieve consistent compliance with discharge consent conditions.	NRA WCF FOODS LTD	<0.5	—					
H2	Ecology Monitor the impact of fish farms on river ecology to help target farms where improvements are needed.	Continue biological surveys to assess the effect of fish farm abstractions and discharges on the receiving waters in the Masham area on the River Ure.	NRA	1	—	—				
H3	Investigate the impact of 'escapes' from fish farms on native populations of trout.	Instigate a programme of fish surveys above and below the fish farms causing concern.	NRA	3		—	—			
H4	Investigate the impact of acidification on the aquatic ecosystem in tributary streams of the Burn, Cover and Skell.	Assess whether measures available to ameliorate impacts are required.	NRA	<0.5			—			
H5	Produce a protection strategy for limestone headwater streams on the River Ure.	Utilise existing data, plus, if necessary, additional studies in the area to consider conservation value and bio-diversity, and develop a protection strategy.	NRA	0.5		—				



No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
G3	Monitor and evaluate the stocking of fish into the River Swale.	Collate data on fish stocks in the river using match returns and survey work.	NRA ANGLING CLUBS }	3pa						
		Evaluate data collected on fish populations and current angling use to ensure fish stocking is responsive to the data collected.	NRA ANGLING CLUBS }							
G4	Identify areas suitable for fish habitat improvement and collaborate with others to achieve such improvements.	Assess the effectiveness of Cundall fish haven for future design.	NRA ANGLING CLUBS/ LAND-OWNERS	U						
\$		Undertake in river and bankside enhancement work between Langton and Skipton-on-Swale.	NRA RSPS	50						
\$		Examine the benefits of any enhancement work to fish populations and angling.	NRA	<1						
G5	Minimise the impact of in river gravel workings.	Limit, through the planning process, and relevant NRA consents unnecessary removal of in river gravels.	NRA LPA	<1pa						
		Evaluate the study on the ecological value of gravel shoals.	NRA	<0.5						
G6	Flood Defence Provide and maintain a timely, reliable and accurate warning system.	Investigate the possibility of providing warnings for Kirby Wiske. Appropriate warnings will be implemented in co-operation with the police and local authorities.	NRA POLICE LA	10						
G7	Future Development Ensure that there is no increased risk of flooding or damage caused to habitats, flora and fauna, including fisheries when determining proposals to culvert, divert or alter a watercourse and its banks or change the use of flood plain.	Ensure that the NRA's interests are not adversely affected by the A1 widening which involves crossing the River Swale and tributaries.	NRA LPA DoT	<5						

ISSUE G: River Swale

The River Swale rises in Upper Swaledale in the Yorkshire Dales National Park. This upper section is steep and the dale itself narrow and steep-sided resulting in the flashy nature of the river. The river remains almost completely natural until Brompton-on-Swale. From this point significant stretches of the river have been straightened and floodbanks are commonplace. The river meanders widely through the Vale of York and joins the River Ure just east of Boroughbridge.

Much of the river is of high water quality but improvements are sought on the River Wiske and Cod

Beck through improvements in sewage effluent. The focus for ecology and recreation on the River Swale is habitat creation to provide bank stabilisation, prevent erosion and support established fish populations. These works will be monitored to gauge the improvements achieved. The proposed improvement to the A1 will impact on both the River Swale and some of its tributaries. The NRA aims to minimise the impact of these proposals.

Flooding occurs throughout the River Swale sub-catchment. Kirby Wiske has been identified as an area where more specific flood warnings may be possible.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
G1	Water Quality Achieve RQO on the River Wiske and tributaries.	Ensure scheduled improvements at Northallerton STW and Romanby STW take place to achieve compliance with the EC Freshwater Fisheries Directive.	NRA YWS	<0.5						By end of 2000
		Seek to get additional improvements at Northallerton and Romanby STWs to achieve RQO with available YWS AMP2 discretionary money.	NRA YWS	<0.5						By end of 2000
		Identify and control sources of agricultural and other pollution supported by a chemical and biological quality survey of the Wiske and tributaries upstream of Northallerton.	NRA FARMERS	5pa						
G2	Ecology Determine the impact of acidification on the aquatic ecosystem in tributary streams of the River Swale at Whitsundale, Birkdale, Arkle and Marske Becks.	Assess whether measures available to ameliorate impacts are required.	NRA	<0.5						

ISSUE F: Future Development

Future residential, commercial and industrial development is identified in County Structure Plans, District Local Plans and Unitary Development Plans. These documents identify policies against which the planning authorities consider development proposals.

The NRA's purpose in participating in the planning process is to provide guidance to the relevant authorities so as to

protect the public and the environment from any adverse effects associated with development in relation to surface water and groundwater.

Continued involvement of the NRA in the planning process and production of local, strategic and national plans is seen to be of vital importance; Catchment Management Plans are an essential tool in this liaison process.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
F1	Participate in the local authority planning process to ensure protection of the water environment	Participate fully in the development control process and where necessary oppose any proposals that will damage the water environment.	NRA	LPA	16 pa						
		Participate fully in the strategic planning process and provide guidance to local councils on methods of protecting the water environment through their development plans.	NRA	LPA/DEV- ELOOPERS	8 pa						
F2	Increase liaison with the planning authorities, outside organisations and members of the public to promote the aims of the National Rivers Authority.	Continue involvement with local environmental groups as a means of co-ordinating activities along the river to achieve environmental protection and improvements.	NRA		2 pa						
F3	Ensure that the NRA's Catchment Management Plan is adopted as a strategy for the future management of the water environment of the Swale, Ure and Ouse catchment.	Positively promote the concept of catchment management planning.	NRA	LPA OTHERS	4 pa						
		Monitor and review the CMP annually.	NRA								

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
E3	Provide and maintain flood defences.	Investigate and record the condition of Flood Defence Assets and prepare a priority based programme for repair, renewal and maintenance. Determine the most cost effective standards for each length and maintain to those standards. In preparing the programme the NRA will consider the implications of 'doing nothing' and implementing changes to current methods of operation.	NRA	U						
		Investigate the provision of additional relief outfalls to evacuate flood water from washlands as soon as possible after the flood has subsided.	NRA LAND-OWNERS	U						
		Register washlands which come within the scope of the 1975 Reservoirs Act.	NRA	30pa						
E4	Provide and maintain a timely, reliable and accurate flood warning service.	Continue to liaise with the police and local authorities to ensure that procedures are in place to respond to NRA warnings. Continue to refine and improve the flood warning system through incorporation of the Regional Telemetry System and the River Flow Forecasting System.	NRA LA POLICE	30pa						
E5	Manage water levels to balance the requirements of flood defence, agriculture, and conservation.	Formulate water level management plans for an agreed list of sites.	NRA MAFF/EN IDB/LA	10 per plan						

ISSUE E: Flood Defence

The NRA aims to provide effective defence against flooding, appropriate to the use of the land affected whether this be urban or agricultural. This role is fulfilled in three main ways; supervision, flood defence operations and flood warning.

In accordance with the Water Resources Act 1991 the NRA exercises a general supervision over all matters relating to flood defence. This is primarily undertaken by liaison with planning authorities over development in the catchment and by powers of enforcement given by the Land Drainage Act 1991 and the Water Resources Act 1991.

On 'main river' the NRA has permissive powers to undertake works when it can be demonstrated that these are environmentally and economically acceptable. This involves provision, maintenance and operation of flood defences and undertaking other appropriate land drainage works.

The NRA also provides a flood forecasting and warning service for areas at risk from flooding from 'main river'. Warnings are issued, in accordance with a national colour coded system, to the police who implement emergency procedures as appropriate. Responsibility for providing assistance to the public lies with the District Councils.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
E1	Improve efficiency and effectiveness of the NRA's emergency response.	Investigate and record the condition of all existing flood defence structures within the catchment. Remaining actions for this objective are dependant on this.	NRA	40						
		Modify, where economically and practically possible flood defence structures to enable operation remotely utilising the Region's Telemetry System.	NRA	U						
		Consider replacing structures which cannot be readily adapted for remote operation.	NRA	<5 pa						
		Investigate the feasibility of providing CCTV at critical flood defence structures in order to improve safety and security.	NRA	<5 pa						
E2	Improve NRA maintained assets from a conservation and amenity aspect without reducing their operational performance.	Develop plans for selected sites.	NRA	<5						



No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
D7	Investigate obstructions to fish passage caused by man-made structures.	Complete an inventory of obstructions to the passage of fish and prioritise works to be carried out to allow free passage.	NRA		10	—					
D8	Assess the impact that piscivorous birds have on fish populations.	Undertake collaborative work with ornithological organisations to assess the potential impact that goosanders and cormorants might have on the fish populations of the Rivers Swale and Ure.	NRA	ORNITHOLOGICAL ORGANISATIONS	1	—	—				
D9	Improve access and facilities for individuals and the various recreational interests in the catchment, who wish to enjoy the water environment.	Encourage improvement in facilities and foster a balanced approach in the development of access to the water environment. For example support the completion of a long distance path between York and Ripon.	NRA	SPORTING ORGANISATIONS AND CLUBS/ LAND OWNERS	4.5		—	—	—	—	—
		Encourage angling clubs to set aside stretches of match fishing lengths for use by non-competing anglers, enabling a fuller use of the facility.	NRA	ANGLING CLUBS	2			—			
D10	Identify areas suitable for fish habitat improvement and collaborate with others to achieve such improvements.	Continue to advise and assist in the development and/or creation of new still water fisheries with particular emphasis on waters to be made available to the general public throughout the catchment.	NRA		<5pa	—	—	—	—	—	—

ISSUE D: Ecology, Recreation and Amenity

The NRA has duties, under the Water Resources Act 1991, to maintain, improve and develop fisheries, to further conservation, to promote recreation and to predict or monitor biological impacts.

As part of these duties the Authority will liaise closely with other local and national authorities, with landowners,

voluntary and community organisations and specialist interest groups and will, where possible, work in co-operation with these bodies in order to achieve our objectives.

Close liaison will also be maintained with other functions and sections of the NRA in order to ensure a coherent and integrated approach.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
D1	Promote land management practices that increase the habitat diversity of the water environment.	Continue support for FWAG e.g. Bishop Monkton Ings on the Ure.	NRA	FWAG N YORKS	5 pa						
D2	Provide advice to landowners on the problems of bankside erosion and control methods in conjunction with other agencies.	Work with YDNP, NYCC and landowners to encourage the use of habitat creation to help combat erosion and tipping problems.	NRA	YDNP NYCC	10 pa						
D3	Protect and enhance the opportunities for otter populations to colonise the main rivers and tributaries in line with the national otter policy.	Support otter projects eg Otters & Rivers Project and research, to understand otter distribution and factors influencing it, with particular reference to the Middle Swale.	YWT	NRA	5 pa						
D4	Protect native crayfish in the catchment.	Maintain records of native crayfish and resist proposals to introduce alien species into the catchment.	NRA	MAFF/EN LA	1 pa						
D5	Extend collaboration to all Internal Drainage Boards within the catchment to further improvements of the water environment.	Offer to advise IDBs in establishing ecological components in their maintenance programmes and schemes.	NRA	IDBs	<1 pa						
D6	Investigate the environmental impact of any hydropower schemes in the catchment (proposed schemes at West Tanfield and Linton Lock).	Monitor ecological effects of hydropower schemes, especially on fish.	NRA		2.5						



No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
C2	Achieve water quality improvements in the Swale, Ure and Ouse catchment by effective pollution prevention measures.	Undertake phased investigations on industrial sites and recommend pollution prevention measures.	NRA INDUSTRY	10pa	—	—	—	—	—	—
		Use biological and chemical surveys to identify sub-catchments affected by agricultural pollution. Carry out site visits to the farms responsible and investigate programmes for remedial action.	NRA FARMERS	10pa	—	—	—	—	—	—
		Continue to promote measures with YWS to reduce pollution effects from public and private surface water sewers.	NRA YWS INDUSTRY	10pa	—	—	—	—	—	—
		Prioritise the list of problem CSO's submitted by YWS under AMP2 and plan the necessary programme of improvements.	NRA YWS	2	—	—	—	—	—	—

ISSUE C: Water Quality Management

The NRA uses two principal schemes for the reporting and management of river water quality: the general quality assessment (GQA) scheme; and the statutory water quality objectives (WQOs) scheme. These schemes have replaced the water quality classification system used previously by the NRA (the NWC classification).

The GQA scheme is used to make periodic assessments of the quality of river water in order to monitor geographical and temporal trends. The scheme comprises four components - general chemistry, nutrients, aesthetics and biology - each providing a discrete 'window' upon the quality of river stretches. The general chemistry component of the GQA is in current use, and comprises six tiered grades defined by standards for Dissolved Oxygen, BOD and Total Ammonia. The remaining three windows are still under development and will be applied when available.

The WQO scheme establishes clear quality targets to provide a commonly-agreed planning framework for regulatory bodies and dischargers alike. The proposed WQO scheme is based upon the recognised uses to which a river stretch may be put. These uses include: River Ecosystem; Special Ecosystem; Abstraction for Potable Supply; Agricultural/Industrial Abstraction and Watersports. The standards defining the five tiered River Ecosystem (RE) use classes, which address the chemical quality requirements of different types of aquatic ecosystems, were introduced by "The Surface Waters (River Ecosystem) (Classification) Regulations 1994". (Standards for further uses are still under development.)

For each stretch of river, a target RE class will be assigned, including a date by which this level of water quality should be achieved. Until WQOs are formally established by legal Notice served by the Secretary of State, and therefore exist on a statutory basis, they will be applied on a non-statutory basis through a translation of River Quality Objectives (RQOs) from NWC classes to appropriate RE classes and target dates.

Additional sampling points have been included in the catchment. The amended sampling programme became effective in mid 1994 enabling a more accurate water quality classification to be made in the NRA 1995 quinquennial survey. The NRA aims to continue to achieve improvements to the water environment by taking a proactive role in pollution prevention. This involves undertaking a programme of site visits to industrial premises, farms, sewage pumping stations, combined sewer overflows and sewage works to assess risks and giving advice on pollution prevention measures. The intention is to persuade and educate operators that good housekeeping programmes which limit effluent production and spillage, form part of the total management process resulting in reduced costs and benefits to the water environment.

The NRA also has a duty to monitor compliance of consented discharges to assess their quality in relation to the conditions set within the consent.

The Authority will adopt a firm and even handed approach with all dischargers and where the required improvements are not being progressed within an acceptable timescale, prosecution will be considered.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
C1	Establish water quality using the GQA water quality classification scheme and review water quality targets.	Carry out the NRA's quinquennial water quality survey.	NRA		U	—					
		Review medium & longer term non-statutory water quality objectives.	NRA		10		—				

ISSUE B: Aquifer Protection

In general, groundwater has a high standard of quality, both microbiologically and chemically and therefore usually requires little treatment prior to use. Groundwater is vulnerable to many activities that can cause insidious

pollution through the underground seepage of contaminants. Once polluted it is extremely difficult and costly to alleviate the pollution. Some groundwater also moves very slowly which means that it sometimes takes a long time for any pollution to be manifested.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
B1	Protect the quality of groundwater within the catchment.	Implement the NRA Groundwater Protection Policy through staff training and promotion of the guidelines to planning authorities, landowners and dischargers within the the catchment.	NRA	YWS INDUSTRY	10pa						
B2	Protect major ground-water abstractions from contamination.	Groundwater protection zones will be defined for the major ground-water sources that are used for potable supply.	NRA	CONSUL- TANTS	15						
B3	Develop groundwater quality monitoring network.	Set up a groundwater quality monitoring network, as per National guidelines.	NRA		14						

ISSUE A: Water Resources Management

The National Rivers Authority has a duty to conserve, redistribute, augment and ensure the proper use of water resources. As part of this duty, the NRA's role is to regulate the water companies, hydropower and other abstractors to ensure that in managing the resource a balance is achieved between the needs of the environment

and those of the abstractors.

To aid the management of the water resource, the Authority has published National and Regional Water Resource Strategies which will be implemented in the catchment. The Authority will continue its routine programme of river flow, rainfall and groundwater level monitoring.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
A1	Ensure the proper management and development of surface water resources.	Employ consultants to undertake a National review of existing policies for the determination of surface water abstraction licences.	NRA	CONSULTANTS	20 part of national contract		—				
		Implement amended licensing guidelines.	NRA		U						
		Negotiate with and monitor the water companies progress on leakage, conjunctive use, source optimisation and demand management to ensure optimum utilisation.	NRA	YWS YWW	10 part of regional contract						
A2	Ensure the proper management and development of ground water resources.	Review existing policy for the determination of groundwater abstraction licences.	NRA		20 part of regional review	—					
		Implement amended licensing guidelines.	NRA		U		—				
A3	Assess the effects of different flow and water resource regimes on the ecology of river communities.	Utilise existing R & D information and available data to report on the impact of low flows in the Swale, Ure and Ouse catchment.	NRA		<1	—					
		Assess the need for a long term monitoring programme on the ecological effects of low flows.	NRA		<1	—					
A4	Determine the environmental implications of the Tees/Swale/Wiske inter-river transfer option.	Identify the issues associated with this potential development proposal.	NRA		U	—					

its subsequent impact on the water environment cannot be overstated.

The local planning authorities are responsible for the determination of land use changes and promoting forward planning policies. As a statutory consultee the NRA provides local planning authorities with guidance statements to assist them in formulating policies for inclusion in their plans which reflect the NRA's concerns and responsibilities including the statutory requirement to conserve and enhance the water environment and associated lands. Addressing water issues will assist the formulation of settlement strategies, the location, attractiveness and sustainability of developments. It will also improve the quality of policies for landscape, nature and urban conservation, recreation and tourism. Plans sensitive to water matters will be protecting and enhancing a vital natural resource and the surrounding environment.

As a guidance for local authorities, the NRA has prepared a set of statements relating to the broad headings of water quality and water resources, flood defence, fisheries, conservation, recreation and navigation in the river corridor and mineral workings and waste disposal. These statements are summarised in the NRA's "Guidance Notes for Local Planning Authorities on the Methods of Protecting the Water Environment through Development Plans". This Catchment Management Plan sets out issues and actions specific to this catchment which have been agreed within the framework of these Guidance Notes.

Continued consistent involvement of the NRA in the production of local, strategic and national plans is vital to the well-being of the water environment. Production of Catchment Management Plans outlining the NRA's vision for sustainable development are seen as important documents to maintain and promote close liaison with all development bodies.

6. ACTION PLAN

The proposed Action Plan is based around 11 key issues - labelled A to K - which are detailed in the following tables. Each issue relates to problem areas or opportunities identified in the Consultation Report, either of a strategic or geographical nature.

The issues are presented along with the overall objectives, actions needed to achieve the objectives and identification of responsible parties. General information about each particular issue can be found directly under the heading.

Activities have only been included in the Action Plan where we believe there is a significant chance of them happening and for which resources are likely to be available. However, the Action Plan is dynamic and will change and evolve on a regular basis as opportunities arise for the public, private and voluntary sectors to work together to deliver the identified objectives.

Wherever possible, estimated costs are identified for the period covered by this plan. A number of actions within the plan may require feasibility studies and appraisal of options prior to work commencing. In some cases this may mean the solving of issues may not be viable. Certain projects within this plan will be subject to an internal bidding process and may be reprioritised accordingly.

In the tables, the following abbreviations are used:

<	= Less than.
pa	= Per Annum.
\$	= Activity added as a result of the Consultation.
-	= Expenditure expected in year indicated.
U	= Unknown or unavailable costs.
CCTV	= Close Circuit Television
DoT	= Department of Transport
EN	= English Nature
FWAG	= Farming and Wildlife Advisory Group
IDB	= Internal Drainage Board
LA	= Local Authority
LPA	= Local Planning Authority
MAFF	= Ministry of Agriculture, Fisheries and Food
NYCC	= North Yorkshire County Council
RDC	= Ryedale District Council
RSPS	= River Swale Preservation Society
STW	= Sewage Treatment Works
UWWTD	= Urban Waste Water Treatment Directive
YDNP	= Yorkshire Dales National Park
YWS	= Yorkshire Water Services Ltd
YWT	= Yorkshire Wildlife Trust
YWW	= York Waterworks plc

N.B. All costs are NRA figures unless otherwise stated.

and Selby with a combined population of 146,800 (based on 1991 Census Data).

The area is crossed by major road and rail links and the tidal river is an important navigational route.

Agreed uses and activities within the catchment include surface water abstraction, groundwater supply and protection, effluent disposal, solid waste disposal, land use, agriculture and forestry, conservation, archaeology and heritage, amenity, recreation and navigation, fisheries, angling, mineral extraction and mining, flood defence, flood warning and future development.

Key Details

Administrative Details

County Councils:	Humberside, North Yorkshire.
District Councils:	Boothferry, Eden, Hambleton, Harrogate, Leeds City, Richmondshire, Ryedale, Selby, Teesdale, York City.
Water Companies:	Northumbrian Water Ltd, York Waterworks Plc, Yorkshire Water Services Ltd.
National Parks:	Yorkshire Dales.
Navigation Authorities:	British Waterways - Ripon Canal, Selby Canal, Ouse and Ure; Linton Lock Commissioners - Linton Lock; York City Council - Foss only.

Water Quality

Length of Classified River in General Quality Assessment (GQA) Class : 1991 – 1993 data.

	km	% of classified watercourse
Class A	129.4	19.8
Class B	357.6	54.6
Class C	79.6	12.2
Class D	22.0	3.4
Class E	62.6	9.5
Class F	3.0	0.5
Total	654.2	100.0

The Consultation Report classified 1735.5km using the National Water Council (NWC) scheme. Presently data is only available to classify 654.2km using the GQA scheme (see Issue C for additional clarification).

Length of Canal in GQA Class: 1991 - 1993 data.

	km	%
Class E	8.4	100

Flood Protection

Length of Designated Main River: 311 km

Length of raised Flood Defences on Main River (both banks): 244 km

Number of People and Property Protected from Flooding: 6600 House Equivalents

Water Resources

Total number of Licensed Surface Water Abstractions: 460

Total number of Licensed Groundwater Abstractions: 498

Conservation

Number of Areas of Outstanding Natural Beauty (AONB): 2

Number of SSSI's: 55

5. RELATIONSHIP BETWEEN LAND USE AND THE WATER ENVIRONMENT

The broad objective of catchment management planning is to conserve and enhance the total river environment through effective land and resource management. However, while the NRA is well placed to influence some of the factors affecting the water environment, particularly in relation to the river corridor itself, it has very little control over the mechanisms which determine land use change on a catchment-wide basis. This is largely the responsibility of local planning authorities through the implementation of the Town and Country Planning Acts.

The policies in statutory development plans are important in this regard in that they set out the framework for land use change, and provide the key reference in determining development applications; the NRA encourages the inclusion of policies which reflect its concerns and responsibilities.

The crucial role of planning authorities in determining development of the urban and rural environment and

Council for the Protection of Rural England
 English Heritage
 English Nature
 Forest Enterprise
 Forestry Authority
 Foss Action Group
 J.G. Hills FRICS
 Hambleton District Council
 Harrogate Borough Council
 Hawes & High Abbotside Fishing Ass.
 Hazelwoods Preserves
 HMIP
 Leeds City Council
 Lightwater Quarries Ltd
 Lower Ouse IDB
 MAFF
 Marston Moor IDB
 National Farmers Union
 National Power
 North Yorkshire County Council
 Office of Water Trading (OFWAT)
 RAF Leeming
 Ramblers Association
 Richmondshire District Council
 Ripon Motor Boat Club
 Salmon and Trout Association
 Selby District Council
 Selby IDB
 Terrys Suchard
 Tidy Britain Group
 Unirritation International Ltd
 York City Council
 York Waterworks Plc
 Yorkshire Dales National Park
 Yorkshire Electricity Group Plc
 Yorkshire Water Services Ltd
 Yorkshire Wildlife Trust

4. OVERVIEW OF THE CATCHMENT

The River Swale originates as a series of small becks on the Northern Pennines within the Yorkshire Dales National Park. At Grinton it is joined by Arkle Beck and flows eastwards along Swaledale passing through Richmond and Catterick. The river then turns southeastward and flows parallel to the A1 until its confluence with the River Ure approximately 2 miles east of Boroughbridge. The Swale is joined by many tributaries between Catterick and the River Ure, the major ones being Bedale Beck, the River Wiske and Cod Beck.

The River Ure also rises on the Pennines within the National Park and is formed by the combination of several small becks in and around the town of Hawes. Along its length it is joined by several major tributaries, namely the River Bain, Bishopdale Beck, River Cover, River Burn, River Skell and the River Tutt. Unlike other rivers of the area, the Dale through which the Ure flows is named after a local village rather than the river, hence the somewhat anomalous fact that the River Ure flows through Wensleydale. Both rivers flow through the beautiful Dales landscape of limestone escarpments, flower rich meadows and ancient woodland reflecting the history of land management over the centuries. This landscape has particular value for nature conservation reflected in the number of national and local conservation designations, as well as for its amenity, heritage and archaeological interest.

After its confluence with the Swale, the Ure flows south-east to eventually become known as the River Ouse from the point where Ousegill Beck enters to the west of Linton-on-Ouse. From this point the River Ouse flows south through the agriculturally productive Vale of York and the City itself to Naburn Weir below which the river is tidal.

Tributaries of the Ouse include the Rivers Kyle and Foss, together with the Nidd and Wharfe, Derwent and Aire which are the subject of separate catchment plans.

The drainage area of the largely rural Swale, Ure and Ouse catchment is 3286 km² to the confluence with the River Aire.

Several centres of population exist within the catchment including Richmond, Northallerton, Thirsk, Ripon, York

2. INTRODUCTION

The National Rivers Authority (NRA) was established in 1989 to safeguard and improve the water environment in England and Wales. Our Mission Statement expresses the following principles: We will protect and improve the water environment by the effective management of water resources and by substantial reductions in pollution. We will aim to provide effective defence for people and property against flooding from rivers and the sea. In discharging our duties we will operate openly and balance the interests of all who benefit from and use rivers, groundwaters, estuaries and coastal waters. We will be businesslike, efficient and caring to our employees.

To achieve these objectives the NRA uses its resources to:

- Maintain existing assets and invest in new assets to provide flood protection, manage water resources and provide other NRA services.
- Control pollution by working with dischargers to achieve improvements and ensuring emergency response is efficient and effective.
- Determine, police, enforce and where applicable, review the conditions in water abstraction licences, discharge consents and land drainage consents to balance differing and sometimes conflicting needs whilst protecting the water environment.
- Develop fisheries and promote recreation, conservation and navigation where appropriate.
- Influence planning authorities to control development through Town and Country planning legislation.

Catchment Management Planning is a process designed to create a consistent framework within which the diverse responsibilities of the NRA can be applied within a catchment in a co-ordinated manner. It is a procedure by which issues and opportunities within a catchment are assessed and actions proposed to optimise the future well-being of the water environment. The purpose, therefore of this Catchment Management Plan, is to define a strategy for realising the environmental potential of the Rivers Swale, Ure and Ouse within the prevailing economic and political constraints for a five year period.

3. REVIEW OF THE CONSULTATION PROCESS

The Rivers Swale, Ure and Ouse Catchment Management Plan Consultation Report was launched on 24 May 1994 at which time it was distributed to local authorities, industry, landowners, environmental groups, sport and recreation groups and the public.

The Consultation Report concentrated on the issues in the catchment and possible management options for their solution. During the three month consultation period that followed it was hoped that parties would confirm the range and extent of catchment uses and activities; express views on the issues facing the water environment; suggest how the strategies and action plans should be progressed and identify actions of other bodies for inclusion in the Catchment Management Plan.

During the consultation period an informal open evening was held at the Kings Head Hotel, Richmond to discuss the report and a series of ad-hoc meetings held with various interest groups to discuss issues arising.

Five hundred Consultation Reports and a large number of supporting documents were distributed during the consultation period. This process resulted in 50 written responses being received, the comments from which have been considered and where possible, incorporated into this Plan.

The Plan is a strategic policy framework for the management of the catchment and will form the basis for improvements to the water environment by outlining areas of work and investment proposed by the NRA and others. This document primarily covers a five year period from January 1995 to December 1999 although certain projects may take longer due to funding availability and government policy.

Comments on the Consultation Report were received from 7 individuals and the following organisations:

Bedale and Upper Swale IDB
British Sugar
British Waterways
Claro IDB
Country Landowners Association
Countryside Commission



1. VISION FOR THE CATCHMENT

The Rivers Swale, Ure and Ouse drain a catchment area of over 3200km². The rivers flow from the protected, designated uplands of the Yorkshire Dales National Park through the City of York to the port of Selby. This diversity in landscape and heritage attracts many visitors to the catchment each year, whether this be for recreational activities in the National Park or simply to enjoy the pleasures of the City of York.

The majority of the catchment is of a rural nature with the population being concentrated in the towns and the City of York at the lower end of the catchment.

Given such contrasts there are numerous opportunities for the NRA to work together with the wider community for the benefit of the water environment. The challenge of managing the waters of the catchment is in effectively responding to the range of pressures on the area and reconciling all the uses demanded, whether it be for water supply, industrial supply, effluent disposal, fisheries, conservation, recreation or protection from flooding.

Within the Rivers Swale, Ure and Ouse catchment, water resources, water quality, flood defence and land management issues are considered to be particularly important.

The catchment represents a large source of drinking water within Yorkshire. Because of this, the achievement of high water quality standards through effective and proactive pollution control are necessary to ensure the continuance of these uses. Generally water quality is good although localised problems do occur due to the discharge of sewage, industrial and farm effluent. The NRA will continue to work with Yorkshire Water Services Ltd., industrialists and landowners to ensure that through effective regulation all water quality objectives are met in the future. Abstraction of surface water for public supply is a major feature in the lower part of the catchment, notably from the River Ouse. The Authority recognises this vital use and will work to ensure optimum utilisation of this finite resource whilst protecting all other aspects of the water environment. Groundwater quality and quantity will be monitored and protected following the guidelines in the "Policy and Practice for the Protection of Groundwater".

The catchment is held to be of great landscape, conservation and amenity value. The significant conservation value of the catchment is recognised in both national and local designations. The NRA acknowledges the conservation implications of its duties, and would encourage management practices, both internally and by external organisations, that increase the habitat diversity and conservation value of the river corridor. This is particularly true where enhancements would enable opportunities for indigenous species, such as otter and crayfish, to re-establish viable populations. Of considerable interest in a catchment of such beauty is the need for access and recreational facilities for the local and wider community. The NRA will encourage responsible recreational activities on the river. The future development of recreation will only be successful through careful management, co-operation and moderation by all who have an interest in this resource.

The NRA will work to provide and maintain defences throughout the catchment in order to alleviate the risk of flooding from 'main river', to the highest level of defence that is both cost effective and environmentally acceptable. The NRA will work towards providing a comprehensive flood forecasting and warning service targeted at specific areas at risk. Whenever advance forecasts allow, warnings would be issued at least two hours prior to the onset of flooding. The Authority will protect, and enhance wherever practicable habitats, flora, fauna, fisheries, architectural and recreation interests in addition to flood defence interests when determining applications for consent to undertake works in watercourses or to develop in the flood plain.

Finally, the NRA wishes to establish strong involvement and links with local authorities, water companies, internal drainage boards, industry, landowners, farmers, environmental organisations and the general public to ensure local views are respected when future development decisions are made for the catchment. We will therefore work with all relevant parties to implement the principles of sustainable development.

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