

# catchment management plan



## **RIVER EREWASH** first annual review September 1995 - August 1996



**ENVIRONMENT  
AGENCY**

## RIVER EREWASH

### PREVIOUS CATCHMENT MANAGEMENT PLAN DOCUMENTS

River Erewash Catchment Management Plan (CMP) Consultation Report and Summary Document - January 1995

River Erewash Catchment Management Plan (CMP) Action Plan - August 1995

If you wish to make enquiries about, or would like copies of, any of these documents please contact the Environment Planner, Alison Fisher, at the address below:-

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\* \* \*

The following documents also relate to the *River Trent catchment* and are available:

Rivers Idle and Torne CMP Consultation Report; Summary Document; Action Plan \*

River Dove CMP Consultation Report; Summary Document; Action Plan; 1st Annual Review \*\*

River Tame CMP Consultation Report; Summary Document; Action Plan \*\*

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### ***Foreword***

This year has been one of change. The Environment Agency is one of the largest and most powerful environmental regulators in Europe responsible for regulating waste disposal to land, industrial releases to air, and safeguarding and improving the natural water environment. Its creation on 1 April 1996 was a major and positive step, merging the expertise of the National Rivers Authority (NRA), Her Majesty's Inspectorate of Pollution (HMIP), the Waste Regulatory Authorities (WRAs) and several smaller units from the Department of the Environment.

This merger results in a more comprehensive approach to the protection and management of the environment by combining many aspects of the regulation of land, air and water. It also provides a single point of contact for its customers.

The process of Catchment Management Planning was used by the former NRA to manage the water environment in an integrated way. Catchment Management Plans identified the uses, pressures and problems within the area and sought through partnership to resolve any issues and conflicts. The objective was to balance the needs of all water users and to manage the area in an environmentally sustainable way. The Agency is committed to continuing integrated planning as a principal means of contributing to the overall objective of sustainable development. Local Environment Agency Plans will be the mechanism by which this will be achieved, and are considered further on page one.

This is the first Annual Review to be produced for the River Erewash. I am pleased to report that good progress has been made in tackling the issues identified in the Action Plan. This was made possible by the commitment of all involved, and greatly enhanced by the collaborative and partnership approach adopted. I look forward to working with you in the coming year to safeguard and enhance our environment.

***Dr. B.D. Waters  
Lower Trent Area Manager  
Midlands Region***

## **EXECUTIVE SUMMARY**

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### **General**

This first year of the Action Plan has seen good progress made towards protecting and improving the water quality, water resources and natural habitat in the catchment. Of the 82 actions planned for the 1995-1996 year, progress has been made on 31, 18 of which have been completed successfully. One outstanding action (13d) has been deferred to a later date in the plan due to a change in work priority. Many of the actions have involved organisations working in collaboration with others.

### **Notable Achievements**

- Construction has started on improvements to seven sewage treatment works in the catchment and also on major sewerage systems and associated overflows.
- The adopted Erewash Local Plan states that all types of development are subject to satisfactory arrangements for sewerage.
- The impact of colliery closures on the catchment is no longer considered an issue.
- Regular biological monitoring has shown encouraging evidence for reduced toxic pollution within the catchment.

### **Notable Developments**

- Progress has been made in respect of colour removal at Pinxton, Pye Bridge and Milnhay Sewage Treatment Works.
- Progress has been made on the reduction of the effects of Opencast Coal Sites on the environment.
- A new action has been added - to develop national biodiversity action plans for water voles, otters, great crested newts and crayfish and to survey for species distribution within the catchment.

### **Disappointments**

- Initially good progress was made at the local level in addressing the management of the abstraction to the Erewash Canal from the River Erewash. This progress has now stagnated.
- The issue of the effects of the River Erewash on the Attenborough Gravel Pits is awaiting the outcome of the current planning application for extension of the workings of the gravel pit westwards into Derbyshire.
- There appears to be a lack of enthusiasm to the forwarding of recreational issues, except from anglers.

## VISION FOR THE CATCHMENT

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The River Erewash is a small watercourse which passes through a number of urban areas. In the past, the river valley has suffered from the ravages of the Industrial Revolution. Relicts of past mining and industrial dereliction are still evident in many places.

The river itself has, for many years until recently, been of poor quality, consisting largely of treated sewage effluent. It was often highly discoloured with dye wastes and in times of rain, gross sewage solids were present. Except in a few locations, the river was devoid of fish. The few fish that lived in the river did so precariously. This sad reflection of human neglect provided us with perhaps one of our greatest challenges: the challenge of restoring the river.

By addressing both the existing and foreseeable problems identified in this plan, progress is being made towards improving the water environment to the benefit of all.

The Agency's vision for the catchment is to:

- \* achieve improvements in water quality and safeguard and enhance the water environment.

Key objectives of this plan are to:

- \* reduce the impact of sewage and industrial pollution.
- \* take advantage of redevelopment opportunities to promote the remediation of contaminated land, to protect both surface and groundwater.
- \* restore fisheries, as the quality of the river and canal improves.
- \* plan walkways and riverside amenities.
- \* conserve and enhance flora and fauna, especially in the lower reaches of the river, where it passes through the Attenborough Gravel Pits.
- \* manage the water resources of the catchment to allow sustainable development and overcome the problems of imbalance of water between river and canal.
- \* maintain the flood defences to the appropriate standard of service throughout the catchment to protect people and property at risk from flooding. The defences also need to be improved where it is considered appropriate, cost effective and environmentally acceptable to do so.
- \* ensure that new development does not increase the risk of flooding by increased runoff or loss of floodplain.
- \* influence the planning processes of the local authorities to ensure that development does not adversely affect the water environment.

We recognise the importance of improving the river system. It is our intention to work with all other agencies and representative organisations in the catchment to promote an integrated approach to the management of the river. The realisation of our vision will be achieved through a balanced management approach, so that the required improvements can be made and sustained in active collaboration with all legitimate interests in the river catchment.

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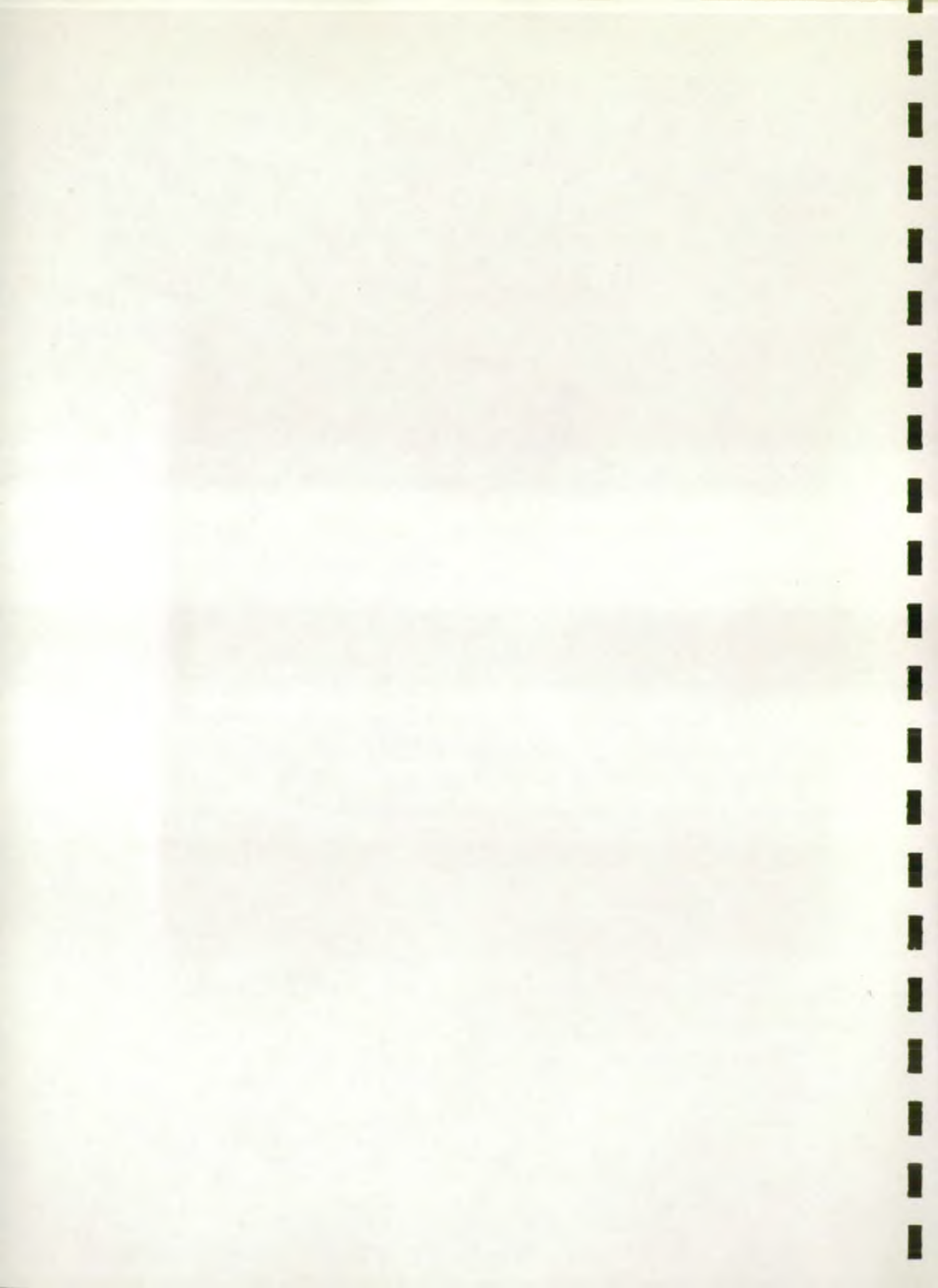
# Erewash Catchment Management Plan



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## 1.0 INTRODUCTION

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This is the first Annual Review to be produced for the River Erewash Catchment Management Plan. It follows on from the Action Plan produced in August 1995 by the NRA. This review deals with the water environment only and covers the period September 1995 - September 1996.

Catchment Management Planning has been the means by which the former National Rivers Authority has undertaken integrated planning for the water environment. The Environment Agency's overall aim to protect and enhance the whole environment contributes to the world wide environmental goal of sustainable development. Holistic planning will be a principal tool in delivering this objective. Forward planning in the Agency will be undertaken for the full spectrum of Agency responsibilities and it will build on the Catchment Management Planning process. The plans will be known as Local Environment Agency Plans (LEAPs) and will include the new functions of Integrated Pollution Control (IPC) and Waste Regulation.

Integrated Pollution Control was introduced by the Environmental Protection Act (1990). It is a method by which complex industrial processes having the greatest potential for causing pollution are regulated. This includes the regulation of sites, which use, store or dispose of radioactive material. A main feature of IPC is that it takes account of all releases to air, water and land, in order to achieve the best overall environmental outcome.

The function of Waste Regulation includes the setting of consistent standards for waste management practice to regulate the treatment, storage, movement and disposal of controlled waste.

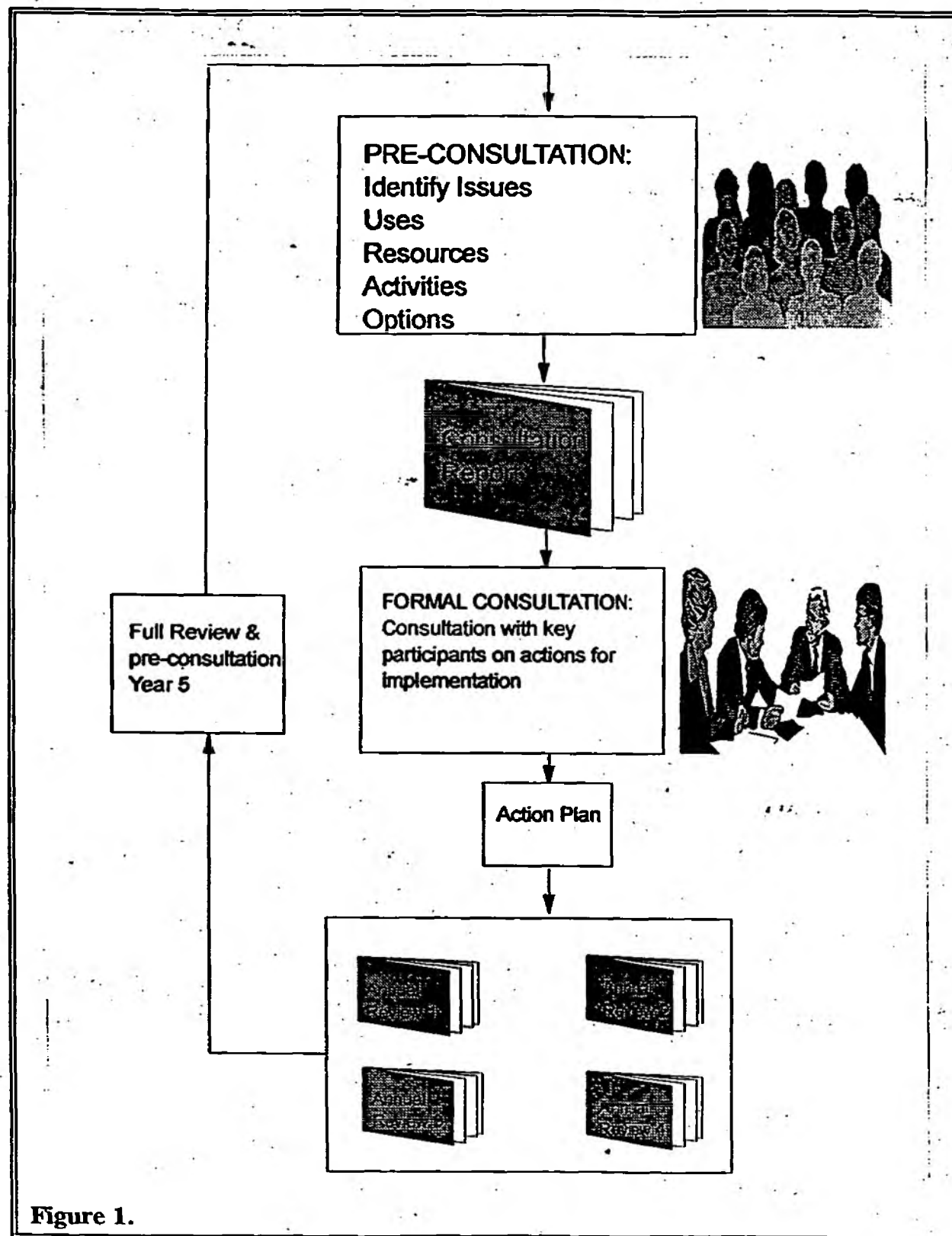
The schedule for achieving LEAP coverage for all the catchments in England and Wales is currently being decided. In the interim the Agency is committed to preparing Action Plans and Annual Reviews for Catchment Management Plan (CMP) Consultation Reports that were launched before 1 April 1996. Figure 1 on Page 2 indicates the steps in the planning process.

Monitoring the implementation of identified actions is an important part of the process and this is achieved by Annual Reviews. In the CMP process four annual reviews have normally been undertaken prior to producing a further Consultation Report. Due to the requirement to produce a LEAP to plan for all the Agency's responsibilities, this process is likely to be brought forward for the River Erewash. It is hoped that after the second Annual Review in October 1997, the River Erewash will be restarted as a LEAP. Any outstanding actions from the River Erewash CMP will be incorporated in the LEAP process and highlighted until actions have been achieved in the environment.

In this the first year since the publication of the CMP Action Plan, progress has been made on 31 of the 82 actions planned. A number of very notable achievements have been made by the Agency and in partnership with other organisations. The integrated planning process takes an open approach and seeks to create a sense of ownership of our environment, so that environmental risks can be minimised and benefits secured. Your

involvement in this process is welcomed. Your comments are sought on progress to date and indeed on your perception of the continuing appropriateness of identified actions.

### The Planning Process



**Figure 1.**

## 1.1 The Catchment

The Erewash Valley is located to the west of Nottingham. Rising in the vicinity of Kirkby in Ashfield, the River Erewash flows in a southerly direction. It is bounded on the east by the River Leen and on the west by the River Derwent and joins the River Trent at Attenborough.

The Erewash Canal between Langley Mill and Trent Lock is closely associated with the River Erewash, and water is abstracted from the river and Nethergreen Brook at Langley Mill to feed the canal. Water from the Nut Brook also feeds the Erewash Canal, below Hallam Field Lock.

Prior to industrialisation, the catchment was predominantly rural and agricultural in character. Once the coal and ironstones were discovered, the character of the valley changed, with the appearance of collieries, gas and tar works and blast furnaces. In more recent times, all but one of the collieries have closed down and some of the worst spoil heaps have been reinstated under successful reclamation schemes. Numerous small industrial estates and large opencast coal sites have replaced the old industries and scenes described by DH Lawrence in many of his novels.

The Catchment is a mix of open rural areas and dense urban areas, comprising towns such as Long Eaton, Ilkeston, Stapleford, Sandiacre, Eastwood and Heanor.

The canal and railway network combine with the river corridor to create a greenway within urban surroundings. There are some very natural looking sections which support a varied river ecology, with rural pockets in the upper reaches of the river.

Some green areas have been used to create open space and parks such as Shipley Country Park, and recreational areas such as the American Adventure Theme Park and the Ski Slope at Cossall.

The corridor supports a mosaic of notable grasslands, wet grasslands, swamp, marsh and open water, which is home to many species of birds, including kingfishers.

## 1.2 Assessment of the Catchment and Major Changes Since Publication of the First Plan

One purpose of this Annual Review is to assess the relevance of the activities in the Action Plan and report significant changes in the catchment area. This review should be read in conjunction with the River Erewash Action Plan (August 1995). Changes occurring over the last year are highlighted below. One new action has been added to the plan (see Issue 13j).

### **a) New Legislation**

The Environment Act 1995 which created the Agency, also introduced legislative changes which impact on our functions. Significant features of the Act include our duty to play our part in achieving the objective of sustainable development and to

have regard to likely costs and benefits in the undertaking of our functional responsibilities.

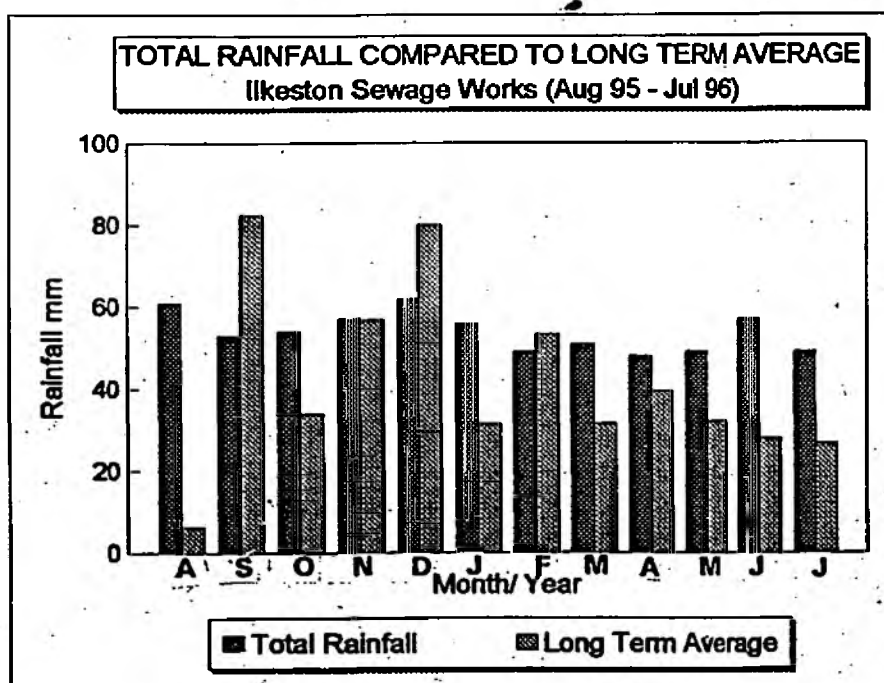
**b) Planning and Development**

The formation of the Agency in April 1996 has resulted in a review of the Regional boundary of the Severn-Trent Region, now renamed the Midlands Region. CMPs and LEAPs will continue to be progressed on a catchment boundary basis.

**c) The Drought of Summer 1995**

The Summer of 1995 was unusually hot and very dry. Rainfall in the catchment during the period was 544 millimetres (mm) representing only 81% of the long term average for the area. This proved a very testing time for those managing and using water resources.

The chart below shows the rainfall over the review year.



A hosepipe ban was enforced by Severn Trent Water Ltd within the catchment from 22 August 1995 to 19 January 1996. Restrictions were placed on one abstraction licence in the catchment on 15 July 1995. With drought conditions persisting in the summer of 1996, water resources again needed to be managed and used carefully.



## 2.0 SUMMARY OF PROGRESS

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Considerable progress has been made on a number of issues within the plan.

There are 23 issues highlighted in the plan with a total of 83 actions over the 5 year plan period. Of 71 actions planned for this year 18 have been completed with only one (Action 13d) being deferred to a later date in this plan due to a change in work priority.

Of the 83 total actions, one is a new action (13j), brought in as a result of new developments in the area of biodiversity. Good progress or projects underway to schedule was reported for 13 of the remaining actions. A total of 25 actions will not be reported on in future Annual Reviews, since they form part of the routine, day to day work of the Agency. Of those actions remaining, 5 have been taken into another action, while a further 7 are awaiting the outcome of another action in order to be initiated. Disappointing or nil progress was reported for only 5 actions. More details are given below.

### 2.1 Notable Achievements, Notable Developments and Disappointments

#### Notable Achievements

- \* Construction has started on improvements to seven sewage treatment works in the catchment and also on major sewerage systems and associated overflows.
- \* The adopted Erewash Local Plan states that all types of development are subject to satisfactory arrangements for sewerage.
- \* Colour consent conditions have now been issued for Pinxton, Pye Bridge and Milnhay Sewage Treatment works. Pilot scale colour removal has also been implemented by the Water Company and Dyers.
- \* The impact of colliery closures on the catchment is no longer considered an issue. A report prepared by the former NRA, British Geological Survey, Wardell Armstrong and British Coal has identified the River Erewash as a possible recipient of reemergent minewater if pumping ceased. The extended life at protected collieries in the area, together with improved water quality through improvements to sewage works and sewerage systems in the catchment means that this may not become an issue for a considerable period of time. Pumping of minewater will have to continue, to protect other working collieries from flooding.
- \* Regular biological monitoring has shown encouraging evidence for reduced toxic pollution within the catchment. Aquatic crustaceans, which are especially sensitive to some pesticides and were absent from the river 1993-1994 are now reestablishing themselves as the toxic substances have reduced. In addition to this, taxa reports show that Gammarus and Asellus (absent from the river in 1993-1994), now populate the river at Shipley Gate, Ilkeston and Trowell.
- \* Locking devices have been installed on the Erewash Canal, by British Waterways

at strategic locks to help prevent the unauthorised dewatering of the canal.

- \* Policies and/or supporting statements have been included in several local authority documents produced recently. The Agency's efforts to seek to influence the planning process by encouraging the adoption of Agency guidelines for developers has begun to have some effect.
- \* The Agency's resistance to development which would increase the risk of flooding due to additional surface water runoff, has also had some effect.
- \* A map based report has been produced for the new Erewash Conservation Group, showing details of SSSIs, SINCs, washlands, floodbanks and other features within the catchment.
- \* There appears to have been a very good survival rate of fish following the restocking of 5000 chub and dace into the River Erewash between Pinxton and Aysworth in December 1995.
- \* Flood defences between Moorbridge Lane and the railway embankment at Stapleford have been investigated and raised to the 1 in 100 year standard.
- \* A 'litter pick' was organised at Attenborough Nature Reserve during the Tidy Britain Group's 'National Spring Clean Week', by Broxtowe Borough Council. Together with Amber Valley BC, Broxtowe run the 'People and Places programme' for the Tidy Britain Group. This involves numerous voluntary initiatives in the catchment, such as library displays and litter picks, educational awareness in schools and canvassing, such as that at the lock on the Erewash Canal at Beeston Rylands.

### **Notable Developments**

- \* Progress has been made in respect of colour removal at Pinxton, Pye Bridge and Milnhay Sewage Treatment works. A number of colour removal treatments are being trialled. There have been water quality improvements in terms of General Quality Assessment (GQA), which should be sustainable and lead to achievement of the water quality objectives on completion of the modifications to the sewage treatment and sewerage disposal systems along the river.
- \* Progress has been made on the reduction of effects of Opencast Coal Sites on the environment. Extensive settlement facilities are in place at Smotherfly OCCS.. The temporary diversion channel for the River Erewash has been constructed and is working satisfactorily to divert channel and floodplain flows during the working of the Smotherfly Site. Discussions are underway about the restoration of the site and the reinstatement of the River Erewash.
- \* A new action has been added - to develop national biodiversity action plans for water voles, otters, great crested newts and crayfish and to survey for species distribution within the catchment.

- \* The first meeting of the Erewash Conservation Forum has been held and the strategy for the restoration and improvement of damaged habitats and appropriate management of existing habitats has commenced.
- \* Tree planting and fencing has commenced in the catchment with planting undertaken at Toton in the Autumn of 1996.
- \* The restoration of old and creation of new wetland habitats has commenced in consultation with Local Authorities, Wildlife Trusts, RSPB and the Bennerley Marsh Group.
- \* Identification of flooding problems by means of surveys carried out under Section 105(2) of the Water Resources Act 1991 is currently being updated by the Agency.

### **Disappointments**

- \* Initially good progress was made at the local level in addressing the management of the abstraction to the Erewash Canal from the River Erewash. This progress has now stagnated. Principles of the use of Moorgreen Reservoir to augment the flow in the Netherfield Brook and canal have been agreed, but the details have yet to be determined.
- \* The issue of the effects of the River Erewash on the Attenborough Gravel Pits is awaiting the outcome of the current planning application for extension of the workings of the gravel pit westwards into Derbyshire. The diversion of the river from the gravel pits and other practical means of ameliorating the effects of the river cannot be investigated until then. Similarly, the forum set up to discuss the management of the gravel pits awaits the same outcome. As far as the Water Level Management Plan is concerned, information gathering on weir heights, outfall structures and problems associated with dewatering in adjacent workings has commenced. This action can only proceed properly and costs worked out, once the forum is set up.
- \* There appears to be a lack of enthusiasm to the forwarding of recreational issues, except from anglers.

### **2.2 Summary of the Environment Agency's routine activities within the catchment:**

In addition to the progress reported, the Agency has undertaken a variety of day to day activities to protect and improve the water environment. This routine work includes:

- \* Environmental Quality Enforcement and routine monitoring work.
- \* Water Resources - Licence Determination, Policing and Enforcement
- \* Fisheries - fish surveys, attendance of fish kills, restocking
- \* Flood defence activities - regulation (including issuing of land drainage consents), enforcement, maintenance and improvement works, and emergency response.
- \* Planning Liaison - working closely with LPAs -commenting on planning application consultations and proposals associated with Local Development Plans.

### 3.0 ACTIONS UPDATE

The following Action Plan tables have been reproduced from Section 5 of the River Erewash Action Plan (August 1995). The tables have been updated to show progress and any changes that have occurred since the Action Plan was published. Progress for each action is summarised in the column on the right hand side.

#### 3.1 Additions and Alterations to the Plan Table

Due to the evolving nature of the Action Plan, some changes are inevitable as a result of the past year's activities. Some routine actions form part of the every day protection policies of the Agency. Where applicable, progress has been reported on these issues. In subsequent reviews however, these activities will receive a reduced profile as CMPs and their successor documents LEAPs become increasingly issue lead.

#### 3.2 Issues

The issues are presented with a number of actions, a target timetable and the identification of responsible parties. Whilst every effort has been made in both the Action Plan and Annual Review to reflect the current priorities and cost of schemes, it must be recognised that these have been developed within existing economic and political constraints. Progress will depend on the resources available and recognising the competing priorities of all organisations involved.

#### 3.3 Action Plan table

The following tables report on progress for the catchment. The key to use these tables is given below:

ALL	All interested Parties	LA	Local Authority
BCU	British Canoe Union	LPA	Local Planning Authority
BUT	Butterley Aggregates Ltd	LU	Loughborough University
BW	British Waterways	MPA	Mineral Planning Authorities
CA	Coal Authority	NFA	National Federation of Anglers
CO	Coal Operators	NRA	National Rivers Authority
CC	County Councils	RA	Ramblers Association
CoCo	Countryside Commission	RL	Riparian Landowners
CPRE	Council for the Protection of Rural England	RSPB	Royal Society for the Protection of Birds
CS	Civic Societies	SC	Sports Council
DC	District or Borough Councils	SO	Site Owners
DoE	Department of the Environment	STW	Severn Trent Water Ltd
EN	English Nature	TBG	The Tidy Britain Group
FWAG	Farming and Wildlife Advisory Group	WP	Woodland Projects
HA	Highways Agency	WT	Wildlife Trust
IND	Industrial Dischargers	VG	Voluntary Groups

#### KEY

- > More than
- == Action in the year indicated (numeric entry given if costs known)
- U Unknown at this time
- CS Commercially sensitive
- R No additional costs to annual budgetary provision (recurring or routine)
- \* Costs shared between identified bodies
- V Voluntary work



Issue 1. River Quality Objectives - the setting and achievement of appropriate agreed water quality objectives to meet the needs/uses of the river system

ACTIONS	RESPONSIBILITY		TOTAL COST  (£K)	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER								
a) Set and achieve appropriate agreed water quality objectives to meet the needs and uses of the river system	EA	STW CG IND	40,000 (up to)	==	==	==	==	==		Water Quality Objectives have been set. The use of the General Quality Assessment (GQA) scheme indicates improvement at a number of locations. When the schemes referred to below in Issue 2 are completed, water quality objectives should be achieved.
b) Obtain statutory status from DoE	DoE EA		10						10	A pilot scheme has been carried out on the River Stour and submitted to the DoE, who have put it out for consultation, prior to consideration about more general implementation in other catchments. Cost dependant on DoE

Issue 2. Sewerage and Sewage Treatment Strategy - improvements to achieve the objectives identified in Issue 1

ACTIONS	RESPONSIBILITY		TOTAL COST  (£K)	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER								
a) Improve effluent quality to meet proposed water quality objectives	EA STW		(See Issue 1)	==	==	==	==	==	==	Work has commenced on new sewage treatment plants at Kirkby, Pye Bridge, Ilkeston and Newthorpe. Work is due to start imminently at Pinxton, Milnhay and Toton. Sewerage schemes have commenced at Kirkby, Ilkeston and Kimberley By-pass Sewer, and other starts are imminent.

NE The costs for this action are incorporated in Issue 1.

Issue 3. European Union Urban Waste Water Treatment Directive (UWWTD) (91/271/EEC) - the removal of nutrients to ameliorate eutrophication

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Gather data on nitrates, phosphates and macrophytes	EA		<20	<10	<10					Data being gathered
b) Review 1997 for inclusion in programme	DoE/EA		<5			<5				Scheduled for next year
c) Removal of nutrients to ameliorate eutrophication	STW		U				= =	= =		The cost of this work will be dependant upon the results of the 1997 review.

Issue 4. Policy for determination of Planning Applications in areas served by inadequate sewerage and sewage treatment facilities

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Policy to be determined	EA		R	= =						<p>The adopted Erewash Local Plan states that all types of development are subject to satisfactory arrangements for sewerage.</p> <p>This is no longer considered to be an issue and will not be reported upon in future Annual Reviews.</p>

Issue 5. Action to eliminate highly coloured discharges from sewage treatment plants

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Reduce colouration of the river and canal system	EA	STW IND	300	150	150					<p>Colour consent conditions have been issued for Pinxton, Pye Bridge and Milnhay sewage treatment plants. Pilot scale colour removal has been implemented by the Water Company and the Dyers. 50% of the flow is currently being treated with chlorine dioxide at Pinxton. The use of Polyelectrolytes and flocculating agents is being tested at Pye Bridge and Milnhay.</p>

Issue 6. Coal Mining - Impact of Colliery Closures

ACTIONS	RESPONSIBILITY		TOTAL COST  (£K)	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER								
a) Investigate loss of resource to river and canals	EA	CA CO	See b)	==						A report prepared by the former NRA, British Geological Survey, Wardell Armstrong and British Coal, has identified the River Erewash as a possible recipient for emergent minewater if pumping ceased. The Agency is continuing to investigate the implications.  Due to the extended life at protected collieries in the area, this may not become an issue for a considerable period of time. This is because pumping will have to continue, to protect other working collieries from being flooded.
b) Investigate emergence of pollution within the catchment	EA	CA CO	40*	==	==					
c) Remediation measures to protect water quality	EA	CA CO	R	==	==	==	==	==	==	This routine work has continued throughout the year and is ongoing. Since it forms part of the Agency's day to day activities, progress will not be reported in future Annual Reviews

NB a) and b) were investigated jointly. These actions will not be reported on in future Annual Reviews, since improved water quality through improvements to sewage works, and the continued pumping of minewater to protect other working collieries means that the issue of colliery closures may not impact for many years to come.



Issue 7. Opencast Coal Sites - effects on the environment

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Opencast Coal Sites to be operated in a manner which will reduce the threat of pollution	CO	EA	CS	==	==	==	==	==		This is currently being achieved. Extensive settlement facilities are in place at existing sites and are made a requirement for any proposed new site. Quality conditions in respect of discharges are imposed in consents.
b) Channel flow and floodplain must not be obstructed by site operations	CO	EA	CS	==	==	==	==	==		Consent issued and temporary diversion channel constructed and operating satisfactorily to divert channel and floodplain flows during working of Smotherfly site. Appropriate measures will be requested for any other future locations. The Agency is involved in discussions about the restoration of Smotherfly Opencast site and the reinstatement of the River Erewash.
c) Upon reinstatement, the floodplain and river channel to be restored to satisfactory line and level	CO	EA	CS	==	==	==	==	==		Details of reinstatement of floodplain and channel to a satisfactory line and level have been agreed but not yet implemented for the Smotherfly site. Appropriate measures will be requested for any other future locations.
d) Ensure restoration of river to more natural course	EA	CA MPA CO	R	==	==	==	==	==	==	d) and e) will be achieved through careful consideration of any future opencast developments. Details agreed as at c) above for the Smotherfly site ensure that the river will be restored to a natural form and promote the enhancement of riverside habitat. Appropriate measures will be requested for any other future locations. This is routine, day to day work of the Agency and as such, progress will not be reported in future Annual Reviews.
e) Promote enhancement of riverside habitat	EA	CC DC	R	==	==	==	==	==	==	

NB Coal Operator Costs refer to the Smotherfly site only, since this is the only site in the catchment which affects the river.

# Issue 8. Contaminated Land

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Upon redevelopment, remediation measures to eliminate risk of pollution	EA	SO LPA	R	==	==	==	==	==	==	This work forms part of the Agency's day to day routine work and as such, progress will not be reported in future Annual Reviews.

# Issue 9. Effluents and toxic substances - effects on flora and fauna

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Routine biological monitoring at appropriate sites	EA		<5	==	==	==	==	==	==	Regular biological monitoring of sites on the River Erewash has provided encouraging evidence for reduced toxic pollution. In general, the biological quality of the river has improved in response to water quality improvements. Aquatic crustaceans, which are especially sensitive to some insecticides, were largely absent from the river from 1993 to 1994. Good populations have now become reestablished as toxic substances have reduced. Taxa reports show that Gammarus and Asellus now populate the River Erewash at Shipley Gate, Ilkeston and Trowell, whereas they were absent 1993 - 94. This work is routine to the Agency and will continue as part of the Agency's day to day activities. As such, progress will not be reported in future Annual Reviews.
b) Elimination of toxic effluents	EA	IND	R	==	==	==	==	==	==	

Issue 10. Abstraction at Langley Mill

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Operating agreement for abstraction of River Erewash to Erewash Canal	EA	BW	See d)			= =				This will be linked to d) below.
b) Install locking devices on strategic locks along Erewash Canal	BW		6	6						This has been done by BW.
c) Assess feasibility of telemetry control systems for Erewash Canal	BW	EA	See d)			= =				This can be done, but will be interrelated to a) and d).
d) Investigate increased use of Moorgreen Reservoir to augment flow in Nethergreen Brook and canal	BW	EA RL	2	1	1					The principal of use has been agreed, but the details have to be determined. Costs mentioned are Agency costs. Any further costs incurred will depend upon the determination of details of use by BW

# Issue 11. Effects of surface runoff from development

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Seek to influence planning process by encouraging adoption of Agency Guidelines for Developers	EA	EA	R	==	==	==	==	==	==	Policies and/or supporting statements have been included in adopted Local Plans for Erewash Borough, Amber Valley Borough, Broxtowe Borough, Ashfield District and Nottinghamshire Structure Plan Review. Also in the consultation drafts for Bolsover District Local Plan and Derbyshire Structure Plan Review.
b) Encourage LPA to preserve Green Belt Land from development	EA	LPA	R	==	==	==	==	==	==	This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews.
c) Encourage environmental enhancement as part of development or redevelopment	EA	LPA SO	R	==	==	==	==	==	==	This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews.
d) Prevent polluting discharges from industrial premises to the river system	EA	IND SO	R	==	==	==	==	==	==	This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews.
e) Prevent polluting effects of construction of extra lanes on M1 motorway	EA	HA	R	==	==	==	==	==	==	This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews.
f) Resist development which would increase the risk of flooding due to additional surface water runoff	EA	LPA SO	R	==	==	==	==	==	==	Supported by policies and/or supporting statements included on Local and Structure Plans (see 11a above) This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews.
g) Works to mitigate the effects of surface water runoff to be considered in the context of the whole catchment, not individual sites	EA	LPA	R	==	==	==	==	==	==	This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews.

NB all of these actions are considered to be part of the routine day to day work of the Agency and as such, they will not be reported on as Issues in future Annual Reviews. Progress on the adoption of Agency Guidelines for Developers will continue to be monitored and reported on elsewhere in future Annual Reviews.



Issue 12. Effects of the River Erewash on Attenborough Gravel Pits

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Improve sewage treatment and sewerage system	EA	STW	(see Issue 1)	==	==	==	==	==	==	This action has already been identified in Issues 1 and 2. As such, it will no longer be reported on for this particular issue.
b) Continue to investigate impact of river on gravel pits	WT	EA/EN, STW,CA	1.25	==	==					RMC (UK) Ltd, on behalf of Butterley Aggregates Ltd have investigated the effects of the river on the SSSI as part of the current planning application for extension of the workings into Derbyshire.
c) Investigate the diversion of river from gravel pits and other practical means of ameliorating river effects	EA	MPA/WT	U			==				This cannot be investigated until Derbyshire County Council determine the planning application for extension to the workings. Costs are very much dependant upon the outcome of that decision.
d) Set up forum to discuss management of gravel pits	EA/ BUT	ALL	U		==	==				This was discussed at the new Erewash Group Meeting on 25 October 1996 (EA, NWT, EN, DCC, NCC) . The decision was made to await the outcome of the planning application for extension to the workings currently being considered by Derbyshire County Council.
f) Prepare Water Level Management Plan	EA	ALL	U	==	==	==	==			Information gathering on weir heights, outfall structures and problems associated with dewatering in adjacent workings has commenced. This action can only proceed properly and costs worked out, when d) has been done.

Issue 13. Restoration and improvement of damaged habitats and appropriate management of existing habitats

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Improve Riparian habitats where appropriate	ALL		15			15				Major conservation works on River Erewash at Toton, where a meander has been reinstated. See also Issue 19b) for instream work under same project.
b) Promote countryside stewardship and other appropriate schemes in riparian locations	MAFF	RL RSPB FWAG	R*	==	==	==	==	==	==	A meeting has been held with the new FWAG advisor for Notts. Issues have been identified to MAFF, who now run the CS Scheme. NB costs for this action are nominal, non quantifiable and shared between responsible bodies.
c) Investigate riparian tree planting and fencing opportunities and implement where appropriate	EA	RL	22	2	5	5	5	5		Planting at Toton undertaken Autumn 1996
d) Investigate restoration of wetlands in the floodplain	EA		5+			5				No Progress.
e) Restoration of old and creation of new wetland habitats	EA	LA/WT RSPB	50	10	10	10	10	10		Being done in consultation with Bemerley Marsh Group.
f) Produce register of grasslands	EN	CC/WT	R	==						This has been done for Notts and Derbys as a desk study inventory.
g) Protect subsidence flashes	EA	WT	U	==	==	==	==	==	==	** See note below
h) Set up forum to discuss conservation issues	EA	ALL	2+	1	1					Forum meeting held and strategy of Erewash commenced. First meeting of new Group - 25 October 1996.
i) Investigate use of buffer zones	EA	ALL	U	==	==	==	==	==		The new guidelines for countryside stewardship schemes allow payment for buffer strips. ** See note below.
*j) Develop national biodiversity action plans for water voles, otters, great crested newts and crayfish and survey for species distribution	EA		5			5				*NB - new action added. Surveys for water voles will take place in 1997. A known site of the great crested newt will also be protected.

NB \*\*This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews.

Issue 14. Eradication of invasive plant species

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Survey river corridor	EA	CC/LU	2.5	2.5						Surveys completed in 1996.
b) Undertake cutting and/or spraying regime	LA/EA	RL	15*	5	5	5				Programme of spraying developed and Flood Defence Operations have been made aware of special problems relating to Japanese knotweed.

Issue 15. Industrial Heritage and archaeological aspects

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Liaise with County Council re surveys of historic sites	CC/EA	VG	10				5	5		No progress yet.
b) Ensure protection at planning stage	LPA		R	==	==	==	==	==	==	** See note below.
c) Promote public awareness of sites	CC	CS	R	==	==	==	==	==	==	** See note below.
d) Liaise with local canal restoration groups	EA		R	==	==	==	==	==	==	** See note below.
e) Investigate impact of restoration of canals on wildlife	LPA	WT	R	==	==	==	==	==	==	** See note below.

NB This work forms part of the routine, day to day activities of the leading body. As such it will not be reported on as an issue in future Annual Reviews.

Issue 16. Optimisation of recreational use of the river in the catchment

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Develop footpaths along the river and circular walks	LA		U*	==	==	==	==	==	==	Agency land at Toton has a cycle route as part of the Sustrans Dover to Inverness route.
b) Promote long distance riverside walk and cycleway	LA	RA	>250	==	==	==				Over £250,000 is being spent by Erewash BC on a cycleway. The stretch from Long Eaton to Heanor is presently being constructed. Next year it will go all the way to Shipley Park.
c) Promote fishing at targeted lengths of river for young/disabled	LA/RL	NFA	U*	==	==	==	==	==	==	Erewash BC have constructed disabled angler access points at Long Eaton and Gallows Inn near Ilkeston (cost for a single ramp approx £17k).
d) Investigate canoe access at suitable locations	BCU	RL	U*	==	==	==	==	==	==	No progress.
e) Investigate impact of increased recreational use on wildlife ie the Community Routeways Initiative on Nature Reserves	LA	EA/WT/RSPB	U*	==	==	==	==	==	==	Not Known.
f) Formation of coordination group from interested parties	EA	ALL	1			1				No progress - awaiting input from LA/BCU/RL etc on above issues to take this forward.
g) provision of facilities for promotion and development of recreational access	LA	SC	U*			==	==	==	==	Progress on this action is dependant upon action 16f) above.

Issue 17. Litter and rubbish problems in and near rivers and canals, particularly in urban areas

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Ensure that rubbish is not dumped in canals ( and rivers) by using enforcement powers	BW	EA/LA	R	==	==	==	==	==	==	Only BW have the necessary enforcement powers to combat this problem. Since it forms part of the routine work of BW, it will not be reported upon in future Annual Reviews.
b) Raise public awareness of problems caused by rubbish dumping	TBG	LA	V	==	==	==	==	==	==	No costs - all done through voluntary help/ sponsorship
c) Clear rubbish which may pose a flood risk	RL/LA	EA	R	==	==	==	==	==	==	This work forms part of the day to day routine work of the Agency and as such will not be reported on as an issue in future Annual Reviews.
d) Improve design and operation of combined sewer overflows	STW	EA	(See Issue 1)	==	==	==	==	==		This action has already been mentioned as part of Issues 1 and 2 and will not therefore be reported on in future Annual Reviews.

Issue 18. The possible provision of tree cover in the river corridor and catchment to enhance conservation

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Improve tree cover where appropriate, ie Greenwood/ East Derbyshire Woodland Projects, Erewash Woodland Strategy	LA	CPRE WT/WP RSPB EA/CC	U*	==	==	==	==	==	==	Will be brought in via new Erewash Cons. Group. A new Project Officer has been appointed for the E Derbys Woodland Project. A Strategy document is due in Jan 97. A landscape assessment has been approved. The costs of the Derbyshire portion of Action 18a) will depend on this.



Issue 19. Restoration of fisheries in the river and associated canal

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Improve water quality in river and on canal	EA	STW	(see Issue 1)	==	==	==	==	==	==	The costs for this action have been incorporated into Issues 1 and 2. As such, this action will no longer be reported upon for this Issue in future Annual Reviews.
b) Redress habitat degradation in river	EA	RL	60			15	15	15	15	Work carried out at Toton on Agency owned land to reconnect an old meander with other channel modifications. Instream work linked to work done under Issue 13a). Further work planned
c) Enhance proprietorial rights on river (stocking with fish)	EA	RL	14		2	3	3	3	3	5000 chub and dace were stocked into the River Erewash between Pinxton and Awworth in December 1995.
d) Promote fishery surveys on improving stretches of river	EA		4	1	1	1	1			Scheduled for October 1996

Issue 20. Standards and enhancement of flood protection

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Investigate existing flood defences to assess whether they are to an appropriate level	EA		50 (5 in 1994/5)	40	5					Flood defences between Moorbridge Lane and railway embankment at Stapleford were investigated and raised to the 1 in 100 year standard. Investigation of further lengths of flood defences will be carried out after receipt of the floodplain outline resulting from the hydraulic model study due March 1997.
b) Investigate whether structural integrity of flood defences is adequate to guard against failure	EA		80 (55 in 1994/5)	25						Asset survey substantially completed but appraisal of the results in order to identify any structural defects has yet to be carried out.
c) Investigate whether there are any undefended properties currently at risk from flooding	EA		(See Issue 20a)	==	==					Flooding of undefended property at Shipley Gate, near Eastwood is currently being investigated. No other undefended properties have currently been identified as being at risk of flooding. Further assessments will be made after receipt of the floodplain outline resulting from the hydraulic model study due March 1997.
d) Investigate past flood defence schemes for impact on river course - need for restoration project	EA		R	==	==	==	==	==	==	A former river meander has been reintroduced adjacent to Royal Avenue, Long Eaton. A further meander is to be reintroduced at this location during 1996/7. See Issues 13a) and 19 b)
e) Future flood defence schemes - environmental assessment, mitigation measures and enhancement	EA		R	==	==	==	==	==	==	This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews.

Issue 21. There is currently no flood warning scheme

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Investigate introduction of a flood warning scheme	EA		5	5						The introduction of a flood warning scheme was investigated and found to be of a low priority as there is only one undefended property which is currently identified as being at risk of flooding. Further assessment is to be made after receipt of the floodplain outline resulting from the hydraulic model study due March 1997.

Issue 22. Responsibility for protection of property from flooding from Ordinary (non Main River) watercourses

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Promote awareness of duties, powers and responsibilities of all parties	EA	LA	R	==	==	==	==	==	==	Awareness has been promoted by means of surveys carried out under Section 105(2) of the Water Resources Act 1991. ** See note below
b) Identification of flooding problems	EA	LA/RL	3		2	1				Identification of flooding problems by means of surveys carried out under Section 105(2) of the Water Resources Act 1991. An update of the flooding survey by the Agency is currently in progress.
c) Improvement works in order to alleviate flooding	LA	RL	U	==	==	==	==	==	==	The Agency is not aware of any recent works carried out by LAs or RLs in order to alleviate flooding.
d) Enforcement action to ensure remedial works are undertaken	LA	EA	R	==	==	==	==	==	==	This work is routine/ongoing, with enforcement action by LAs or the Agency where any ordinary watercourses are in such a condition that the proper flow of water is impeded. ** See note below.
e) Encourage Riparian Landowners to maintain watercourses to an adequate standard	LA	EA/RL	R	==	==	==	==	==	==	** See note below

\*\* Note - this work forms part of the routine day to day work of the Agency and as such, it will not be reported on in future Annual Reviews.

Issue 23. Definition of and control of development on floodplains

ACTIONS	RESPONSIBILITY		TOTAL COST	1995 / 96	1996 / 97	1997 / 98	1998 / 99	1999 / 2000	FUTURE	PROGRESS
	LEAD	OTHER	(£K)							
a) Press for policies to be included in Structure Plans and Local Plans to protect floodplain from development	EA	LPA	R	==	==	==	==	==	==	Policies and/or supporting statements included in adopted Local Plans for Erewash Borough, Amber Valley Borough, Broxtowe Borough, Ashfield District and Nottinghamshire Structure Plan Review. Also in the Consultation Drafts for Bolsover District Local Plan and Derbyshire Structure Plan Review. This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews
b) Press for policies in Structure and Local Plans to remove redundant structures from floodplain	EA	LPA	R	==	==	==	==	==	==	Supported by policies and/or supporting statements included in Local and Structure Plans (See Issue23a). This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews
c) Define extent of floodplain to 1 in 100 year return period	EA		10	7	3					Floodplain outline map resulting from hydraulic model study is due March 1997.
d) Resist development on floodplains, except where compensatory measures can be agreed	EA	LPA	R	==	==	==	==	==	==	Supported by policies and/or supporting statements included in Local and Structure Plans (See Issue23a). This work forms part of the routine, day to day activities of the Agency. As such it will not be reported on in future Annual Reviews

#### **4.0 FUTURE REVIEWS**

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It is important to monitor the Action Plan, to ensure that targets and actions are achieved and that the plan continues to address relevant and significant issues in the catchment in an appropriate manner. This report summarises the progress made since the publication of the Action Plan in August 1995. The following annual review will cover the period September 1996 - September 1997, and will deal with the water environment only. Following this second Annual Review, the catchment of the River Erewash will be restarted as the Erewash LEAP, at which time, the full spectrum of Agency responsibilities will be considered.



**APPENDIX 1 Current status of the Local Authority Development Plans in the Catchment**

<u>Local Authority</u>	<u>Development Plan and Current Status</u>	
Nottinghamshire County Council	Nottinghamshire Structure Plan Review - Nottinghamshire Minerals Local Plan - Nottinghamshire Waste Local Plan -	Adopted Nov 1996. Public Inquiry (Oct 1994-Feb 1995) Consultative Draft (Nov 1995)
Ashfield District Council	Ashfield Local Plan -	Adopted Dec 1995
Broxtowe Borough Council	Broxtowe Local Plan -	Adopted April 1994
Derbyshire County Council	Derbyshire Structure Plan Review - Derbyshire Minerals Local Plan -	Consultation Draft March 1996 Public Inquiry Jan 1997
Amber Valley Borough Council	Amber Valley Local Plan -	Adopted August 1994
Bolsover District Council	Bolsover Local Plan -	Consultation Draft Feb 1996
Erewash Borough Council	Erewash Borough Local Plan -	Adopted Sept 1994

## APPENDIX 2 Pollution Incidents April 1995 - March 1996

The table below shows the pollution incidents for April 1995 to March 1996. The type and cause of the pollution is indicated, together with the severity, as denoted by the classification of the incident (see over for details).

		Class 1	Class 2	Class 3	Class 4 (No Pollution)	TOTAL
TYPE	Agriculture	0	0	6		6
	Oil	0	0	38		38
	Chemical	0	2	6		8
	Sewage	1	5	15		21
	Other	1	3	28		32
		2	10	93	TOTAL	105
CAUSE	Industry & Commercial	0	2	23		25
	Agriculture	0	0	3		3
	Water Utility Company	1	6	21		28
	Other	1	2	46		49
		2	10	93	TOTAL	105

The number of pollution reports received and investigated in 1995 - 1996 were down 12 % on the previous year.

Oil accounted for 38 % of substantiated pollution incidents (by type) in the catchment.

Criteria for assessing Pollution events 1995 - 1996:

**Class 1:** A major incident involving one or more of the following:

- Extensive fish kill (more than 100 fish).
- Closure of potable water, industrial or agricultural abstraction necessary.
- Excessive breaches of consent conditions and environmental impact.
- Potential or actual persistent effect on water quality or aquatic life greater than one week.

- Extensive remedial measures necessary.
- Major effect on amenity value.
- Effect on conservation value.

**Class 2: A significant pollution which involves one or more of the following:**

- Notification of abstractors necessary.
- Significant fish kill (50 - 100 fish).
- Readily observable effect on invertebrate life.
- Water judged unfit for stock.
- Bed of water course contaminated.
- Amenity value to the public, owners or users reduced.

**Class 3: A minor pollution which involves one or more of the following:**

- Notification of abstractors not necessary
- Fish kill (< 10).
- No observable effect on invertebrate life.
- Suitable for stock watering.
- Stream bed locally contaminated (at discharge point).
- Minimum environmental impact.

**Class 4: Unsubstantiated pollution:**

- A reported pollution which, upon investigation, proves to be unsubstantiated - ie no evidence can be found of a pollution incident having occurred.

## APPENDIX 3 Fisheries: Stockings and Mortalities

### 1. Fish Stocking

The following fish stocking was carried out in the catchment:

River	Reach	fish stocked		
		Life stage	Type	Number
Erewash	Ironville to Awsworth	2 year old	dace and chub	5000

Anecdotal evidence suggests that more anglers are using the river.

### 2. Fish Mortalities

Date	Location	Fish killed	Cause
18/06/95	Pinxton Wharf	200 roach	Spawning
04/09/95	River Erewash	12 chub 52 roach 800 sticklebacks	Pollution
12/07/95	River Erewash	100 chub 350 gudgeon	Pollution/low DO/ thunderstorms
14/07/95	River Erewash	230 chub 990 roach 1290 perch	Unknown
14/07/95	Nottingham Canal at Awsworth	5 roach 20 perch	Algae/ low DO
18/07/95	River Erewash relief channel at Toton	1 chub 41 roach	Storms/ low DO
22/01/96	River Erewash	5 dace 10 chub 85 roach	NRA flood defence works
01/02/96	River Erewash	2 chub 103 roach	Iced up