

local environment agency plan

STAFFORDSHIRE TRENT VALLEY

SECOND ANNUAL REVIEW
JUNE 2000



ENVIRONMENT
AGENCY

Previous Staffordshire Trent Valley Local Environment Agency Plan (LEAP) Documents

- Staffordshire Trent Valley LEAP Consultation Report
June 1997
- Staffordshire Trent Valley Consultation Report Summary
June 1997
- Staffordshire Trent Valley LEAP Action Plan
February 1998
- Staffordshire Trent Valley LEAP First Annual Review
June 1999

If you or your organisation need further information or copies of any of the above documents, please contact:

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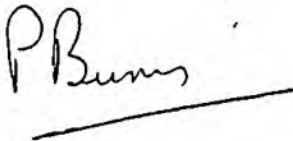
FOREWORD

The Environment Agency has responsibility for protecting and enhancing the whole environment through the promotion of sustainable development. One way of achieving this aim is through the production of Local Environment Agency Plans (LEAPs), which provide a framework for protecting and improving our local environment.

This is the first Annual Review of the Staffordshire Trent Valley LEAP. Its purpose is to report on the progress that has been made by the Agency and others during the past year, in tackling the issues identified in the Action Plan.

The progress that has been made over the last twelve months reflects the commitment of all those involved in the plan and highlights the importance of the partnership approach developed through the LEAP process. As the demand upon limited funds continues to increase it is even more vital that the momentum of environmental improvement is kept going through partnerships and collaborative ventures.

I look forward to developing further the positive achievements made so far with our partners, as we work together to enhance the Staffordshire Trent Valley environment in the coming year.

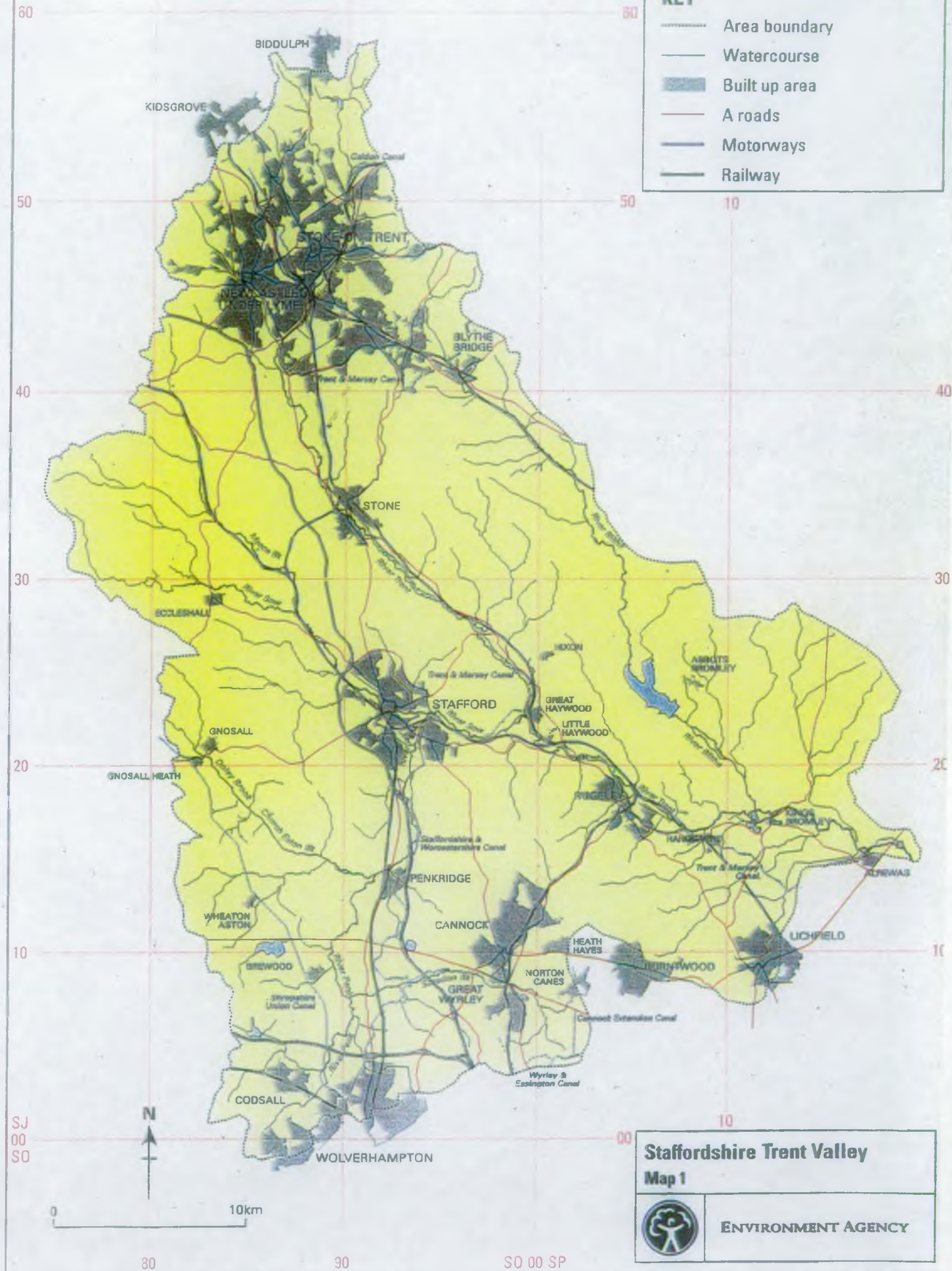
A handwritten signature in dark ink, appearing to read 'P Burns', with a horizontal line drawn underneath it.

Philip Burns
Area Manager - Upper Trent

Staffordshire Trent Valley

KEY

-  Area boundary
-  Watercourse
-  Built up area
-  A roads
-  Motorways
-  Railway



Staffordshire Trent Valley

Map 1



ENVIRONMENT AGENCY

EXECUTIVE SUMMARY

This Annual Review summarises the progress made in achieving targets to improve the local environment in the Staffordshire Trent Valley area in the second year since publication of the Action Plan in February 1998. Many parties have made positive progress pursuing the actions that were planned for the year, either as individual organisations or in collaborative projects.

Of the 50 actions planned for the year 10 have been completed and progress has been made on 29, however 11 have been delayed.

A number of key partnerships and collaborative initiatives are under way. These include:

- A scheme to determine the water regime in the South Staffordshire Coalfield with the Coal Authority and South Staffordshire Water.
- Joint investigations with local companies in Four Ashes to determine the extent of groundwater contamination in the locality.
- A Memorandum of Understanding signed between the Agency and South Staffordshire Water covering joint working arrangements on the Rising Brook at Cannock.
- Expansion of the waste minimisation initiative in partnership with the Staffordshire Waste Minimisation Group, LA21 projects, local authority Environmental Co-ordinators and Staffordshire Business Environmental Network.
- Reduction of ceramic waste in partnership with the British Ceramics Confederation, the Ceramics Research Association and local companies.
- Production of the 'Stoke on Trent Rivers Strategy' and 'River Trent Action Plan', in partnership with the city of Stoke on Trent Council. Both documents will help to achieve river corridor improvements in the City.

The tables in Section 4 form an integral part of this review, and should be referred to for a summary of progress on each action. The background information relating to each issue is detailed in the original Action Plan.

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1.0 Vision for the Staffordshire Trent Valley

The Environment Agency's vision for the Staffordshire Trent Valley area is:

The population of Staffordshire working together to create a sustainable environment that is attractive, clean and diverse, meeting the needs of people whilst maintaining and enhancing the diversity of flora and fauna. An environment that both contributes to the economic and social well being of the area and to the stabilisation of the global environment.

This can be achieved by:

- The education and involvement of local people
- The protection of good quality land and water resources, nature conservation and wildlife habitats
- Minimising pollution of air, land and water
- The revitalisation of existing urban centres and the remediation of contaminated land and areas of poor environmental quality through redevelopment and renewal
- Improving the appearance, character and habitat diversity of the rural environment

Key to this vision is the creation of a more sustainable urban environment within the North Staffordshire conurbation. A better environment means different things to different people. The Environment Agency has developed the following set of objectives to clearly focus its efforts on what it means by a better environment in the Staffordshire Trent Valley area and what it is trying to achieve. They relate to the Agency's national objectives and to the powers and duties that it has been given by Government.

Key objectives for the Environment Agency are:

- Improving water quality in ground and surface waters
- The protection of the ecology of wetlands and baseflows to rivers and streams through the efficient and proper use of water resources
- Working in partnership with local authorities to develop effective and consistent air quality monitoring systems with the aim of improving air quality, where necessary, by the effective regulation of industry
- The renewal of river corridors to improve water quality, wildlife habitats, public access and to create a more natural river regime
- To educate and raise awareness of the environment and environmental issues
- The protection of rare and threatened species
- To realise the environmental potential of urban land through redevelopment and renewal
- The development of a healthy and sustainable fishery along the length of the River Trent, its major tributaries and in urban park pools
- The development of local waste minimisation programmes to meet national waste targets particularly in the ceramics industry

We will do this by:

- Being open and consulting with others about our work
- Basing our decisions on research and science.
- Valuing and developing our employees; and
- Being efficient and businesslike in all we do.

Actions to tackle each issue in this plan will contribute to the achievement of these objectives. Some of these objectives have common goals, whilst others may require a degree of compromise between differing demands on the resources of the area. Together through commitment and enthusiastic co-operation, the Agency's vision for Staffordshire Trent Valley can become a reality.

Realisation of the vision will be achieved through a balanced management approach to all activities.

2.0 Introduction

2.1 Local Environment Agency Plans

For the Agency to fulfil its roles and responsibilities it needs to manage the environment effectively and to work in partnership with others in an integrated way. Local Environment Agency Plans (LEAPS) are an important tool in this process. The plans are non-statutory, integrated action plans based on local river catchments. They provide a focus for those concerned with the future of the local area. All of the river catchments in England and Wales are now covered by LEAPs.

LEAPs will contribute to the principle of sustainable development through integrated environmental management and improvement. They will also play a key role in:

- Promoting openness and accountability.
- Developing liaison and partnership with key groups.
- Educating the public on local and environmental issues.
- Prioritising issues and establishing an action plan for managing and improving the local area over the next 5 years.
- Realising the environmental potential of the area.
- Forming joint actions and partnerships for environmental improvement.

2.1.1 The Staffordshire Trent Valley LEAP

The Staffordshire Trent Valley LEAP Consultation Report was produced in June 1997. This outlined environmental issues within the area, and options for their solution. Following a three-month period of consultation the Action Plan was published in February 1998. This included a five-year programme of actions for improvement to the local environment, and outlined areas of work and investment proposed by the Environment Agency and others.

2.2 The Annual Review Process

An important part of the LEAP process is to monitor the Action Plan on an annual basis to ensure that targets are achieved, actions completed and that the plan continues to address relevant issues in an appropriate manner. This second Annual Review summarises the progress made since February 1999 to April 2000 inclusive. This document is therefore, part of the ongoing process for the Staffordshire Trent Valley area.

This Progress Report is the main output from the annual review process. It aims to:

- Report on progress made by all those involved.
- Report on changes to the content or timing of actions, including the addition of new actions and removal of existing actions, and the reasons for these changes.
- Report on changes and events in the plan area.
- Report on other matters, such as new legislation and initiatives affecting the LEAP.

2.3 The Staffordshire Trent Valley Area

The Staffordshire Trent Valley LEAP area covers most of Staffordshire and includes parts of Wolverhampton and Walsall. It is defined by the area of land that drains to the River Trent above its confluence with the River Tame.

The population of approximately 820,00 is concentrated in the urban centres of Stoke on Trent and Newcastle under Lyme, the northern outskirts of Wolverhampton and the major towns of Stafford, Cannock and the city of Lichfield. The M6, M54 and the West Coast main railway line cross the catchment. In terms of land use, Staffordshire Trent Valley is predominantly rural with dairy farming in the north and arable farming in the south. Unemployment is below the national average at 5.4% and manufacturing remains important in the local economy, providing nearly 30% of all jobs. Ceramics and engineering remain an important part of the economic base.

Both the North Staffordshire conurbation and the West Midlands conurbation are ringed by green belts. The North Staffordshire greenbelt extends as far north as Rugeley and Lichfield. Located in the heart of England, the catchment has a temperate marine climate, with rainfall significantly higher in the north around Stoke-on-Trent and the surrounding high ground.

Stoke-on-Trent is traditionally known for its pottery industry and for coal and steel production. This is now broadening to include new manufacturing and service industries. The conurbation is attracting major inward investment and this is providing opportunities for an improved local environment as well as a more secure economic base.

Staffordshire Trent Valley includes Cannock Chase; the county's only Area of Outstanding Natural Beauty (AONB) and the second smallest AONB in Britain. It contains one of the largest country parks in Britain and virtually all of the area is designated as a site of Special Scientific Interest (SSSI) for its nature conservation value.

There are 26 SSSIs in the catchment which include a number of vulnerable habitats and endangered species of animals and plants.

2.4 Update on Events in The LEAP Area

Addressing Climate Change

Green Transport Plans have been produced for all Upper Trent Area offices. These plans set clear objectives and targets that will help reduce the environmental impact of the Agency's commuting and internal transport activity.

The Upper Trent area has continued to improve its Internal Environmental Performance, with reductions in, mileage, energy and water consumption. Continuous improvements to energy use throughout the Area have resulted in Upper Trent achieving the 'best' performance in the Agency's Midlands Region.

Regulating Major Industry

Operator and Pollution Risk Appraisal (OPRA) assessments for all Integrated Pollution Control processes were completed during the year. This will enable work planning and inspection frequencies to be based on environmental risk.

On the 15 March Automotive Lighting Ltd (Magnetti Marelli) of Cannock pleaded guilty to 4 charges relating to loss of, and inadequate management of radioactive sources, and were fined a total of £25,000.

Managing Waste

Jason White of Cheslyn Hay appeared at Cannock Magistrates court on 13 December 1999 in relation to a fly tipping incident at Calf Heath near Cannock. Mr White pleaded guilty to the charges of illegally depositing controlled waste and transporting waste without being a registered carrier. He was fined a total of £200 with the Agency being awarded costs of £660.

Mark Bagley and his brother Micheal Bagley appeared before Cannock Magistrates on the 26 January 2000 each charged with a section 33(1) offence of fly tipping. They both pleaded guilty and were each fined £500 with £230 costs.

Managing our Water Resources

A borehole has been installed by the Coal Authority at Heakley Hall Farm in Stoke to monitor rising minewater, where minewater has caused severe flooding of agricultural land in the past.

Annual liaison meetings between British Waterways and the Agency have been established to discuss issues relating to water resources.

Delivering Integrated River Basin Management

In September 1999 a 10km stretch of the River Penk was polluted by diesel oil, which was traced to an Industrial Estate in Penkridge, where an oil tank had overfilled during a delivery operation.

In May 1999 in-river work by contractors working for Bovis construction resulted in a strong discolouration of the Scotch Brook and the River Trent Canoe Slalom at Stone.

The Stoke on Trent 'Urban Pollution Management Study' began in October 1999 and is due to last for 12 months. The study will assess the impact of the sewerage system on the water environment, highlight problem areas and recommend actions to remedy these as part of the AMP3 programme.

Conserving the Land

The Agency issued indicative floodplain maps as a CD flood explorer to Local Authorities and promoted the Agency's new culverting policy. These two initiatives together will help reduce future developments in flood risk areas, or ones that could present flood problems through inappropriate use of culverts.

Flood Defence

The flood awareness campaign launched in October 1999 has improved the profile of the Automated Voice Messaging (AVM) service and has helped to increase responses to our annual detail check letters (currently over 60%) which is significantly higher than previous years.

The Agency supported the national development and implementation of the Flood Defence Consents System (FDCS) through Development Control.

Managing our Freshwater Fisheries

Fisheries staff deployed aeration equipment at Westport (small) lake on 7 August in order to save fish populations following a severe dissolved oxygen depletion caused by an algal bloom die back. The action was successful in raising dissolved oxygen levels significantly within 24 hours to avoid any requirement for subsequent rescue.

Enhancing Biodiversity

David Bellamy re-launched the Upper Trent Otters & Rivers Project at Shugborough Estate in Stafford in September 1999.

In May/June 1999 a Great Crested Newt survey of Lichfield and Cannock was commissioned, giving a better understanding of their distribution in an area not previously surveyed.

Business Development

The phased transfer of Authorisations work into Customer Services has been ongoing during 1999. All Customer Services sections in Areas now have teams that process and track authorisations. The Region intends to build on this and a project plan is in hand to continue the transfer of work, including undertaking some of the simpler determinations. The project plan takes this through to March 2001 but the intention will be to evolve further as opportunities arise.

2.5 Update on Legislation

Amendments to the Producer Responsibility Obligations (Packaging Waste) Regulations 1997

Two amendments were made to the Packaging Regulations in 1999. These include a change to the threshold targets that bring companies under the Regulations. Companies that have a turnover in excess of £2 million and handle 50 tonnes of packaging in a year will now be subject to the Regulations. Other minor changes have been included. The Agency is responsible for the enforcement of this legislation.

Proposed Changes to Abstraction Licensing Legislation

In its document "Taking Water Responsibly" the Government has set out changes that it plans to make to abstraction licensing legislation "as soon as Parliamentary time allows". The proposed changes aim to assist the Agency in managing water resources, to improve public availability of information, to increase flexibility and efficiency and to introduce controls over some hitherto excluded abstractions. "Taking Water Responsibly" was open to public consultation during 1998.

Proposed Pollution Prevention and Control Regulations

The Pollution Prevention and Control Act 1999 came into force on 27 July 1999 and sets out the legislative framework for a new environmentally holistic regulatory regime, Integrated Pollution Prevention and

Control ('PPC'). IPPC will cover the process industries currently regulated under Part 1 of the Environmental Protection Act 1990 as well as biodegradable waste landfills, hazardous waste sites, some sewage works, intensive pig and poultry farming, and some types of food processing. New measures may be imposed to control energy and raw material usage, the prevention of accidents, noise, odour, restoration of sites and emissions released to all environmental media (air, land and water). The Regulations that will bring the new regime into force are currently subject to consultation, although it is likely they will be implemented in the year 2000. It is anticipated that implementation of the Regulations will be phased in over the next 7 years.

The Groundwater Regulations 1998

The Groundwater Regulations have been issued to facilitate the implementation of the Groundwater Directive (Protection of Groundwater Against Pollution caused by Certain Substances - 80/68/EEC). Implementation of these Regulations will help to prevent pollution of groundwater by controlling discharges or disposals of certain dangerous substances where they are not already covered by existing legislation. Substances are classified as either List I or List II substances. From ~ January 1999, anyone who disposes listed substances onto or into land should apply for an authorisation, if they wish to continue with that disposal. Forms and advice are available from the Environment Agency. As of 31 March 1999, it is now illegal to dispose of any listed substance to land without an authorisation.

Anti-Pollution Works Regulations 1999

The Environment Act 1995 provided the Environment Agency with new powers to issue Works Notices to prevent or remedy the effects of pollution to controlled waters. Regulations enacting these Works Notices came into force on 29 April 1999. Works notices will normally be served where voluntary action to remedy or prevent pollution of controlled waters is not achieved and may also be served during or in the clean up phase of a pollution incident. Failure to comply with a Works Notice will normally result in prosecution and the Agency may carry out the necessary works and recover its costs.

The Contaminated Land (England) Regulations 2000

These Regulations were implemented in April 2000. Primary responsibility for their implementation will lie with the Local Authorities, who will have to investigate their area to establish land that falls within the Regulation's definition of contaminated land. Local Authorities will need to seek the remediation of these sites through the landowners or those responsible for causing the contamination. The Agency role is to provide guidance to Local Authorities and deal with sites defined as 'special sites' (which by their nature are more complex).

The Town & Country Planning (Assessment of Environmental) Effects Regulations 1999

New Regulations relating to the environmental assessment of development proposals requiring planning permissions came into force in March 1999. The Regulations substantially extend the range of applications for which an Environmental Impact Assessment (EIA) is required, and place a duty on the Agency to provide information and scoping advice to relevant applications for planning permission. The Agency is a statutory consultee for all planning applications requiring an EIA.

New Order under the Import of Live Fish Act 1980

A new order under the Import of Live Fish Act 1980 came into force on 1 November 1998 which made it an offence to release and/or keep specified non-native fish species without a licence. Any person intending to hold or release any of the listed species has to be in possession of a licence before obtaining the fish. Owners of waters in which non-native fish were kept or introduced before the order came into force were required to apply for a retrospective licence by 1 May 1999. The list of non-native species included wels (catfish), grass carp, silver carp, zander, nase, sturgeon and sterlet. Although MAFF are the licensing authority, both MAFF and the Agency are involved in enforcement.

The Conservation (Natural Habitats, &c.) Regulations 1994

The Habitats Regulations were issued to facilitate the implementation of the EC Directive 92/43/EEC. Implementation of these Regulations will maintain, or restore to favourable condition, natural habitats and wild flora and fauna at European designated sites. These are Special Protection Areas for the protection of birds, and Special Areas of Conservation for the protection of habitats and non-bird species. The Agency is currently reviewing all existing permissions that authorise activities which may have an adverse effect on a European site.

2.6 New Initiatives

National Waste Strategy

The Government's Waste Strategy is due to be published in summer 2000. This strategy will build on the draft waste strategy 'A Way with Waste' published on 1 July 1999, which emphasised the importance of managing our waste in a more sustainable manner. Some of the key issues thought to be included in the new strategy include an integrated approach to waste management, higher levels of re-use, increased recycling and composting, increased energy recovery and further development in alternative recovery technologies. It is the intention that the data collated from the Agency's National Waste Production Survey will be used to assist in finalising the Strategy.

Strategic Waste Management Assessments

The Agency is currently collating information on the types and quantities of wastes accepted by all licensed facilities across the country. This information is due to be published (in an aggregated format) in the first ever Environment Agency Strategic Waste Management Assessments (SWMAs). These reports will be based on Planning Regions and will also include aggregated information on licensed capacities of treatment and transfer sites and the remaining void capacity at operational landfill sites. Information from sites within the catchment will be included in the West Midlands Planning Region SWMA.

Time Limited Licences

Predecessor Waste Regulation Authorities had in some cases included clauses that could cause the licences to expire. The Pollution Prevention and Control Act 1999 has corrected this problem, which could have allowed licence holders to be released from the controls of a licence before demonstrating that the land was not likely to give rise to pollution or harm through the licence surrender process. The Agency will also be reviewing the affected licences to ensure that they meet the requirements set out by The Department of Environment, Transport and the Regions (DETR).

Introduction of Operator and Pollution Risk Appraisal (OPRA)

Since May 1999 the frequency of inspections of Licensed Waste Management facilities in West Midlands-Tame Area has been determined by the Operator and Pollution Risk Appraisal (OPRA) methodology. This ensures that the Agency's resources are better targeted and focused on those sites that present the greatest risk of pollution or harm.

"Taking Water Responsibly" and Catchment Abstraction Management Strategies

Following public consultation during 1998, the Government has set out steps in "Taking Water Responsibly" that it wishes the Environment Agency to take within current legislation and also legislative changes that it plans to make (see Section 3.1). One initiative resulting from the document is the development of Catchment Abstraction Management Strategies, which will allow the Agency to prioritise abstraction requirements for local catchments and will guide licensing decisions.

National and Regional Water Resources Strategies

The Agency will be producing one national and eight regional water resources strategies by the end of 2000, following the recent consultation "Sustainable Water Resources for the Future: Values and Challenges". The strategies will guide water resources management over a 25 year planning period.

Oil In Your Local Environment (OIYLE) Campaign

Building on the success of the national Oil Care campaign, Oil In Your Local Environment (OIYLE) is a Midlands Region campaign which aims to work in partnership with oil distributors. The campaign will target industrial and domestic users of oil to raise awareness of the problems caused by oil pollution and encourage good practice in the storage, use and disposal of oil products. Advice will be disseminated through oil distribution companies invoicing procedures and during deliveries. Training in best practice will also be provided to oil distributors, along with 'grab packs' of absorbents, etc. to deal with any spillage during delivery. OIYLE was launched in December 1999.

Changes to the National Flood Warning System

A national change to the Flood Warning system is programmed for September 2000. The changes will seek to provide early awareness of potential flood events, based on Met Office data for predicted rainfall and on catchment conditions. Flood warnings will also change from a colour-based scheme to a word-based scheme. A major public awareness campaign will be carried out prior to the changes.

Flood Estimation Handbook

A new Flood Estimation Handbook has been produced nationally by the Environment Agency and the Centre for Ecology and Hydrology bringing together all the latest technological advances and knowledge on flooding so that problems can be assessed in a consistent way across the country. It will provide a consistent approach to estimating run-off and will aid in all areas of flood defence.

"Better Town Planning"

The "Better Town Planning" project is a National Project aimed at delivering improvements to the efficiency and effectiveness of the Agency's role in Town Planning over a three year period. The project gives a much higher priority to improving the Agency response to Local Authority development plans and a targeted risk based approach to dealing with planning application consultations. Implementation of this new strategic approach to planning will increase the involvement of the Agency's planning and technical functions in the development planning process. It will result in greater efficiency and consistency and provide a targeted approach to planning application consultation. It will also increase the Agency's capacity to deliver competent responses to Environmental Impact Assessments (EIA) at all necessary stages.

Managing Waste ~ A Guide To 'Good Environmental Practice For Trading Estates And Business Parks'

The Agency has produced a guide to 'Good Environmental Practice for Trading Estates and Business Parks' as part of the agency's overall strategy for the direction of the SME sector, and is one of a series of documents on estate management. The guide will assist tenants on industrial estates to understand their impact on the environment and provide a framework under which they and estate landlords can work together to increase business efficiency and protect the environment.

3.0 Summary of Progress

3.1 Notable achievements:

AMP 2 & 3 Programme ~ A number of actions across a variety of Issues.

A large number of actions have been completed or are underway as a result of the AMP programme. The programme has also secured funding for a number of other actions that are scheduled for completion over the next five years.

Issue 1: The Use of the River Trent as a Public Water Supply Source.

The River Trent catchment dye tracing project has been completed, providing the Agency with increased knowledge of travel time and dispersion characteristics of polluting inputs. Regional reports have also been produced.

Issue 7: The Potential Impact of Colliery Closures in the South Staffordshire Coalfield on the Water Environment.

Work carried out over the last few years has included drilling additional monitoring points, reviewing pumping trials and gaining additional information on the coal field. This has shown no threat to public water supply abstractions in the short-medium term. Further work is planned by the joint working group involving the Agency and the Countryside Agency, with future funding being largely by the Countryside Agency.

Issue 10: Groundwater Pollution at Four Ashes near Wolverhampton.

The extent and nature of the groundwater contamination is now well defined following various site investigations and research and development work. Negotiations are now ongoing between the Agency and the various companies involved regarding remediation. Pilot trials for a treatment are planned for 2000/01.

Action 14.1: Knypersley Reservoir. Reinstate flow compensation structure to provide compensation to the River Trent.

British Waterways have undertaken some repair work to the structure, and no complaints regarding loss of flow were received during 1999. Discussions are ongoing.

Action 16.7: Strategic Plan for the Trent Valley

The Central Rivers Project Report has been completed and successfully launched in a joint initiative with Staffordshire county Council, Lichfield district Council, East Staffs Borough Council, English Nature, Staffordshire wildlife Trust, Hanson plc., Lefarge Redland plc. Due to the success of the initiative the project team are looking to appoint a project officer to carry forward the action plan for the next 3 years.

Action 17.1: Develop a joint approach with the City of Stoke on Trent.

The Stoke Rivers strategy has been completed and launched. The plan will be used to guide and control new development close to the City's main rivers.

Issue 20: A review of Flood Defences in Stafford

Funding for the issue has been secured and the study's carried out have identified a need to replace existing defences. The works will be incorporated into the capital scheme, with the project start date identified as 2004/2005. Also to date 70 new recipients have taken the offer to receive direct flood warnings.

Issue 24: Quantity of Ceramic Waste Arising in the Area.

The Staffordshire Trent Valley Waste Minimisation Club in the area has been developed and promoted, and the initiative is now complete. A partnership has also been established between the Agency, Staffordshire Business and Environmental Network, Groundwork and British Ceramics Confederation to deliver a waste minimisation programme within Environmental Management Systems to ceramic and other companies.

Issue 28: Fisheries Management of Municipal Park Pools in Stoke on Trent and Newcastle under Lyme

A pilot project to survey the pools with characteristic problems has been completed. The City Council, Stoke angling clubs and the Agency have formed the City Waters Management Advisory Group to improve fishery management at these waters. Several projects have been completed via the partnership, involving the creation of fishing pegs, improving access, and producing an information leaflet to promote angling on urban waters in Stoke.

3.2 There have been some disappointments:

Action 13.4: Sustainability of Groundwater Resources ~ RiverSow/Burntwood Pools- Bishops Wood Aquifer.

The business case for the site has had to be revised as there have been problems identifying alternative water supplies in the local area. It is expected that the new business case will be completed by the close of this financial year.

Action 16.4: Crayfish

Resources to implement the programme of surveys have so far not been found.

Action 16.6: Invasive Plants

Resources to implement a pilot project have so far not been found.

Action 18.2: Bankside Habitat Diversity

Resources to implement the programme of surveys have so far not been found.

Action 18.3: Weed Growth on the River Sow.

Resources to implement the programme of surveys have so far not been found.

The Agency is proactively responding to the lack of available funding for projects by bidding for external monies. Bids are being compiled on an opportunistic basis, alongside continued efforts to establish wider partnership links.

4.0 Actions Update

4.1 New Issues and Actions

LEAPs are fluid documents and, following the current review, one new issue and one new action has been included, reflecting the ongoing development of the plan and the addressing of new concerns. The new Issue and actions are shown in bold in the Action Tables (Section 4.4), and are listed below.

New Issue

Issue 29: Extend the Flood Warning service Within the Staffordshire Trent Valley

Issue

16: Biodiversity in the Staffordshire
Trent Valley

2: The sewerage system in Stoke on Trent
& Newcastle under Lyme

New Action

16.8 Promotion of best environmental practice on
farms adjacent to watercourses.

2.4 Monitor implementation of AMP3
improvement schemes.

4.2 Amended Actions

No actions have been substantially reworded, however a number of issues have incurred slightly alterations in order to clarify their original purpose and make reporting easier, the most substantial are highlighted in bold.

4.3 Removed Actions

A number of actions have not been carried over into this review as they were completed during the last reviewing period, for further details on completed actions and issues please refer to the First Annual Review. One uncompleted issue and two uncompleted actions have been removed from the current review for various reasons as shown below.

Removed Issue/Action	Reason
Action 5.1: Use the SIMCAT model complete the assessment of compliance with long term RQO and Fisheries Directive.	The action has been removed for a three primary reasons: <ul style="list-style-type: none"> - The UPM study in Stoke on Trent will provide a solution to the problems arising from the River Trent catchment. - Consents reviews are now carried out on an area basis. - RQO National Guidance is not yet available.
Issue 9: Environmental Monitoring of IPC Authorisations	This issue is now being progressed by both the West Midlands Regional Air Quality Action Plan and through the ongoing review of IPC authorisations as required by statute. Where the release of persistent toxic pollutants are or have been such to justify wider environmental monitoring, involvement by the Local Authority is on a case by case basis. Consequently no further action beyond the daily role is required.
Action 22.1: Meeting Making Waste Work Targets	Limited resources and the low priority of this action have meant that progress has not been made, nor is likely.
Action 24.3: Annual Residents Liaison Meeting	Meetings are now held on a biannual basis and have become a routine function.

4.4 List of Issues

Issue 1	The use of the River Trent as a public water supply source.
Issue 2	The sewerage system in Stoke-on-Trent and Newcastle under Lyme.
Issue 3	River Quality Objective failures.
Issue 4	Poor fishery and poor biological quality in the River Trent from Tittensor to Hoo Mill.
Issue 5	Potential River Quality Objective (RQO) and Fisheries Directive failures due to consented Discharges.
Issue 6	River stretches that can be upgraded to protect water quality.
Issue 7	The potential impact of colliery closures in the South Staffordshire Coalfield on the water Environment.
Issue 10	Groundwater pollution at Four Ashes near Wolverhampton.
Issue 11	Pesticide contamination in Moors Gorse and Slitting Mill public water supply boreholes.
Issue 12	The environmental impact of public water supply abstraction on the Rising Brook, Cannock.
Issue 13	Sustainability of groundwater resources.
Issue 14	Abstraction rights exercised by British Waterways.
Issue 15	Review of flow restricted abstractions in the River Sow catchment.
Issue 16	Biodiversity in Staffordshire Trent Valley.
Issue 17	Redevelopment along the banks of the Fowlea Brook and the River Trent in Stoke-on-Trent.
Issue 18	Improving the habitat on the Rivers Sow and Penk.
Issue 20	Review of flood defences in Stafford.
Issue 21	Flooding from the Rising Brook, Stafford.
Issue 22	Meeting "Making Waste Work" targets.
Issue 23	Quantity of ceramic waste arising in the area.
Issue 24	Poplars landfill site, Cannock.
Issue 25	Flooding from the Fowlea Brook at Liverpool Road, Stoke-on-Trent.
Issue 26	Surface water flooding at Brindley Ford, Stoke-on-Trent from Brown Lees open cast coal site.
Issue 27	Fisheries management of municipal park pools in Stoke-on-Trent and Newcastle under Lyme.
Issue 28	Extend the Flood Warning Service within the Staffordshire Trent Valley.

4.5 Action Tables

The following tables have been taken from the Action Plan, and updated, to show progress on the Issues in the LEAP, and any changes that have occurred. Progress for each action is summarised in the column on the right hand side. Where actions are shown in bold, this indicates they have been added at this Annual Review stage. Revised costs are also shown in bold.

Key to Costs and Timescales

- > Greater than
- < Less than
- Action in the year indicated (cost figures given if known)
- R Recurring – no additional costs to annual budgetary provision
- U Unknown costs at this time
- * Only Agency costs identified here. Costs to other organisations unknown
- K £1,000

Key to Funding Status

- C Completed
- F Funding for action by the Agency secured or anticipated
- P Little funding available for action by the Agency – progress dependant on a partnership approach.
- U Investment by a third party – funding status therefore unknown.

Abbreviations

AQOs	Air Quality Officers	IDD	Internal Drainage District
AVM	Automated voice Messaging	LAs	Local Authorities
BCC	British Ceramics Confederation	MoU	Memorandum of Understanding
BTCV	British Trust for Conservation Volunteers	PREMCO	Poplars Resource Management Co.
BW	British Waterways	RQO	River Quality Objective
CA	Coal Authority	SBC	Stafford Borough Council
CSO	Combined Sewer Overflow	SBEN	Staffordshire Business and Environment Network
CERAM	Ceramics Research Association	SCC	Staffordshire County Council
DC	District Council	SMEs	Small to Medium Sized Enterprises
DETR	Department of the Environment, Transport and the regions	SoT	City of Stoke on Trent Council
EA	Environment Agency	SSW	South Staffordshire Water
ETBPP	Environmental Technology Best Best Practise Programme	SSSI	Site of Special Scientific Interest
HA	Highways Agency	STW Ltd.	Severn Trent Water Limited
		SWT	Staffordshire Wildlife Trust
		UPM	Urban Pollution Management Study

AMP 3 (Asset Management Plan No. 3)

Asset Management Plans (AMPs) are strategic plans for programmed investment in the infrastructure of private water companies, so that they might meet obligations relating to water supply and sewage treatment. The Government has recently agreed the programme of investments for AMP3 (2000-2005) and in the Midlands Region the figure for spending by water companies will be approximately £0.8 billion.

Issue 1: The Use of the River Trent as a Public Water Supply Source

Objective: To improve water quality in the river to meet drinking water standards

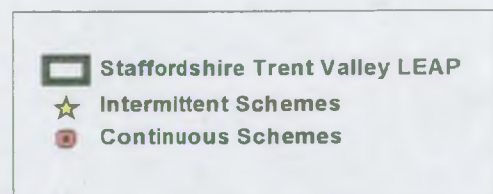
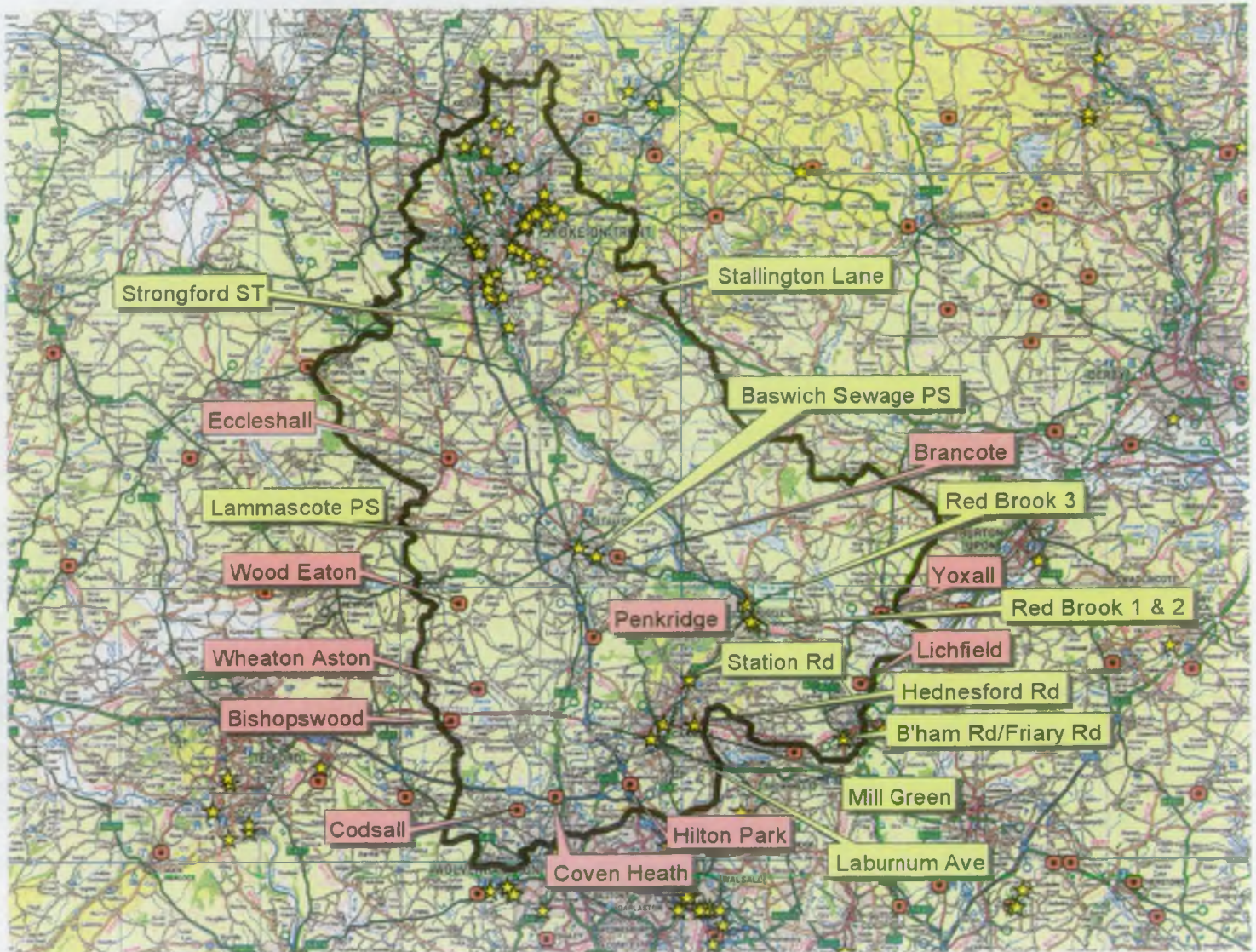
Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
1.1 Special Sampling Programme <ul style="list-style-type: none"> - Yearly Reports - Investigation into any highlighted problems - Review of consents and authorisations as necessary 	EA		85	17	17	17	•	•		Regional pesticide reports have been produced. Urban Pollution Management (UPM) study is ongoing.	F
1.2 Complete River Trent catchment dye tracing project to improve knowledge of travel time and dispersion characteristics of polluting inputs.	EA	STW Ltd SSW	66							Project completed as part of the Stoke UPM study.	C

Issue 2: The Sewerage System in Stoke-on-Trent and Newcastle under Lyme

Objective: To improve water quality and the appearance of rivers and streams in Stoke-on-Trent and Newcastle under Lyme

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
2.1 Completion of scheduled improvements under AMP2 - Mill Farm Combined Sewer Overflow (CSO)	STW Ltd.	EA	3,00	•						Mill Farm CSO works started January 2000 and is due for completion in November 2000.	U
2.2 Assess the impact of the improvements under AMP2	EA	STW Ltd	R	•	•	•	•	•		Ongoing as part of an annual assessment of general water quality.	P
2.3 Finalise details for a UPM model of the sewage system.	EA STW Ltd.		U	•	•					A full UPM study is being carried out.	
2.4 Monitor implementation of the AMP3 improvement schemes listed below (and demonstrated on the following Map) and assess water quality commencing one year after the scheme 11 STW's - Yoxall - Eccleshall - Wheaton Aston - Brancote - Codsall - Bishopswood - Penkridge - Coven Heath - Hilton Park - Lichfield 49 CSOs 5 Pumping Stations	EA		R	•	•	•	•	•	•		P

AMP 3 Schemes in the Staffordshire Trent Valley LEAP Area



Issue 3: River Quality Objective Failures

Objective: To improve water quality to meet agreed objectives

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
3.1 Cope Mere - Eccleshall, Eccleshall - Hilcote, Hilcote - Chebsey											
- Undertake a detailed study of the Mere and its surrounding catchment to identify nutrient sources	EA		15	•						The study is in progress and awaiting further data before it can be completed.	F
- Review options	EA		R*	•							
3.2 Church Eaton Brook Apeton Road Bridge to the Whiston Brook											
- Pursue improvements to Wood Eaton sewage works	EA	STW Ltd OFWAT	R*	•						In AMP3 for improvement between 2000 - 2005	C
3.3 River Trent, Abbey Hulton to Hanley											
- Investigate & locate pollution sources	EA, STW Ltd		R*	•						FR.0466 survey completed for CSO, and to be regularly monitored. Other pollution sources identified and remediated resulting in localised improvements in biology.	C
- Monitor completion of investment scheme by STW for Mill Farm CSO improvements	EA, STW Ltd	STW Ltd OFWAT	R*	•						Mill Farm CSO due for completion in November 2000.	U
- Negotiation of future investment programme by STW Ltd.	EA	STW Ltd	R*	•						Negotiations for AMP3 scheme completed.	C

Issue 4: Poor Fishery and Biological Quality in the River Trent from Tittensor to Hoo Mill

Objective: To investigate the causes of the poor fishery and poor biological quality and to undertake remedial action

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
4.1 Introduce a more detailed chemical analysis of this stretch	EA		10							Remote water quality monitors were installed at Darlaston and upstream of Strongford WRW. The data is being assessed.	F
4.2 Set up continuous ammonia/dissolved oxygen monitoring. Consider the installation of a permanent water quality monitor	EA	STW Ltd	5							Detailed biological surveys are being undertaken, with data being inconclusive at this stage. No further action is being considered.	F
4.3 Undertake river habitat surveys to investigate habitat restrictions	EA	Wildlife Trusts	10		•	•				Surveys will be carried out when funds become available. It is hoped that partnerships with landowners, including STW Ltd, can be established to facilitate remedial action.	P
4.4 Investigate remedial actions on results of investigations	EA Other groups	STW Ltd Landowners	U	•	•						P

Issue 5: Potential River Quality Objective (RQO) and Fisheries Directive Failures due to Consented Discharges

Objective: Use the 'SIMCAT' model to set discharge consent conditions to ensure RQO and Fisheries Directive Compliance

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
5.2 Plan consent reviews accordingly and set priorities for AMP3	EA		R*	•	•	•	•	•	•	Main consents review plan completed. The work is ongoing for UPM discharges and AMP3, continuous discharges.	C 2005

Issue 6: River Stretches that can be Upgraded to Protect Water Quality

Objective: Secure improved water quality by upgrading River Quality Objectives (RQOs)

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
6.1 Upgrade the long term objective for the following stretches: - River Trent - Confluence with the Fowlea Brook to Hanford (2.8km) RE5-RE4 - Gayton Brook - B5027 road bridge, Milwich to confluence with the River Trent (6km) RE3-RE2	EA		R	.	.	.	.	.		The Agency is reviewing its RQOs policy.	P

Issue 7: The Potential Impact of Colliery Closures in the South Staffordshire Coalfield on the Water Environment

Objective: To prevent mine waters polluting ground and surface waters

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
7.2 Undertake the work necessary to obtain the extra information required	EA, CA, SSW		20							When this action was included within the LEAP it was thought that there could be a significant threat to water supply abstractions. Work carried out in the last 2-3 years has included drilling additional monitoring points, reviewing pumping trails and gaining additional information on the coal field. This has shown no threat to public water supply abstractions in the short - medium term. Further work is planned by the joint working group involving EA and CA. Future funding will be largely by the CA not the EA. The anticipated action plan identified in 7.3 was related to the now unsubstantiated threat to the water supplies. A plan for additional monitoring is in existence.	U
7.3 Prepare a long term action plan, to include new monitoring and testing as required	EA, CA, SSW		20								
7.4 Implement Plan	EA, CA, SSW		U								

Issue 10: Groundwater Pollution at Four Ashes near Wolverhampton

Objective: To define the extent of the pollution, its wider impact and the need for remediation

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
10.1 To define the manner and extent of the contamination to the underground aquifer.	Companies	EA	25							Pollution extent and nature now well defined following various site investigations and research and development work.	C
10.2 Agree and implement appropriate solution.	Companies, EA		U	•	•	•				Negotiations ongoing between EA and companies involved regarding remediation. Pilot trials for treatment plant planned for 2000/01. A plan for full-scale works has not yet been finalised.	

Issue 12: The Environmental Impact of Public Water Supply Abstraction on the Rising Brook, Cannock

Objective: To protect minimum flows in the Rising Brook

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
12.2 Investigations to establish: - engineering options	EA, SSW		R*	•						Tests are ongoing.	U
12.3 Variation of abstraction licence to allow compensation discharge	EA	SSW	R							Actions dependant upon completion on 12.2.	
12.4 Provision of compensation flow	SSW		101	5	5	5					

Issue 13: Sustainability of Groundwater Resources

Objective: To protect and reinstate baseflows to the rivers in the catchment

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
13.1 Scotch Brook – spot aquifer											
To work with STW Ltd to produce a MoU and undertake the following:	EA	STW Ltd	R*	•	•	•	•	•	2005	Funding via AMP3 has been confirmed. The programme for the investigations is being prepared and it is expected it will be agreed with STW during 2000/2001	U
- Hydrological modelling of the aquifer (joint funding)	EA, STW Ltd		40	40							
- Define water requirements within unit and consider the future demands	EA, STW Ltd		5								
- Promote use of alternative sources	STW Ltd		U		•				2005		
- Agree a long term monitoring regime of the model area	EA	STW Ltd	3								
13.2 River Blithe – Forsbrook aquifer	EA, SSW		R*		•					As 13.1.	U
- Modify existing public water supply licence to reflect existing use											
- Review baseline study of the area completed in 1995 and establish long term monitoring regime of site	EA		10		•						
- Consider if hydrogeological modelling of the aquifer is required (joint funding)	EA, SSW		U		•						

Issue 13: Continued

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
13.3 Groundslow Pools – Tittensor aquifer											
- Modify existing public water supply licence to allow some water to be used for compensation purposes	EA, STW Ltd		R*		•	•	•	•	2005	As 13.1.	U
- Set up monitoring regime for pools	EA		5	•	•					A gauge board has been installed in the Upper pool and the owner is taking water level measurements on behalf of the Agency.	C
- Liaise with Highways Agency to investigate the impact M6 drainage has on water resources of the pools.	EA, HA		U		•	•					F
13.4 River Sow/Burntwood Pools – Bishops Wood Aquifer											
- Investigate the hydrology of the catchment										The business case for the site has had to be revised as there have been problems identifying alternative water supplies into the local area.	F
i) baseline study of the area to confirm if the problem is caused by public water supply abstractions	EA		8		•	•				It is expected that the new business case will be completed by the close of this financial year.	
- Modify existing public water supply licence (Jugbank and Burntwood) to allow some water to be used for compensation purposes.	EA	STW Ltd	R*								
- Establish compensation management arrangements.	EA, STW Ltd		U								

Issue 14: Abstraction Rights Exercised by British Waterways

Objective: To increase flows in the River Trent and River Penk during low flow conditions

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
Knipersley Reservoir											
14.1 Reinststate flow compensation structure to provide compensation to River Trent	BW	EA	U		•	•				Discussions with British Waterways are ongoing. British Waterways have undertaken some repair works to the structure, and no complaints regarding loss of flow were received during 1999.	U
Saredon Brook											
14.2 Agree optimum split in resources for the River Penk and canal feeder	EA, BW		R*		•					Discussions are ongoing with British Waterways, spot gauging to be undertaken during 2000/1 to confirm Q95 at the site of canal abstraction.	
14.4 Assess the effectiveness of the modified structure	EA	BW				•					
14.5 Formalise agreement	EA, BW					•				The MoU is in draft form and awaiting completion of 14.2.	N/A

Issue 16: Biodiversity in Staffordshire Trent Valley

Objective: To protect rare and endangered animal and plant species and to promote diversity in flora and fauna

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
16.1 Support the completion of the Staffordshire Biodiversity Audit	SCC, SWT	EA	4*	•	•	•	•			Most districts have been surveyed (with support from the Agency). Staffordshire Moorlands is being surveyed in 2000 and the remaining districts will be completed when the resources are available.	U
16.2 Otters and Water Voles											
- Support Staffordshire Otter and Vole Project to carry out survey of species distribution and identify habitat enhancement requirements	EA, SWT	Other funding partners	15	10	5					Surveys ongoing. National research and development has identified enhancement requirements.	U C
- Undertake programme of habitat enhancements identified above including the safeguarding of key water vole sites	EA	SWT, Landowners other funding partners	U	•	•					Safeguarding of sites is ongoing via flood defence works, land drainage consents and the planning process.	P
16.3 Natterjack Toads											
- Safeguard the existing population through an agreed plan of action and utilise current Agency research advice to assist in the maintenance of the local population	SCC	EA	U							Local authority are considering enhancement works.	P
16.4 Crayfish											
- Undertake programme of surveys to assess distribution and status in areas not already surveyed	EA		3*	•						Resources to implement this programme have so far not been found. Work on crayfish has been restricted to the River Dove catchment at present.	P
- Respond to surveys, where appropriate, undertaking habitat improvements	EA	Landowners	10	•	•	•				Records of occurrences from biological surveys are being recorded.	

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
16.6 Black Poplar											
- Complete R & D project on the genetic diversity of the Shropshire Black Poplar	EA		25							Project complete.	C
- Assess in collaboration with other project and, if appropriate, plant stock from the Shropshire population as part of the river corridor enhancement schemes	EA	LAs Landowners	U	•	•	•				Ongoing as planting opportunities arise.	
- Include native Black Poplar in 50 appropriate planting schemes in Trent Valley	EA, SWT	LAs, Landowners Env. Groups	1.5	•	•	•	•				U
16.7 Invasive Plants											
- Undertake pilot project to identify and eradicate invasive plants from the river bank and river corridor	EA	BTCV	15							No funds have been identified.	P
- Consider a wider programme of control and eradication	EA	Landowners	U							Delayed pending completion of above action.	P
16.8 Strategic Plan for the Trent Valley											
- Incorporate strategic plan into minerals and local development plans in the form of supplementary guidance	EA, LAs	Gravel companies WT's Env.groups	3	•	•					Central Rivers Project report completed and launched. Joint initiative with Staffordshire county council, Lichfield district council, East Staffordshire borough council, English Nature, Staffordshire WT, Hanson Plc., Lefarge Redland Plc. The project is looking to appoint a project officer to carry forward the action plan for the next 3 years. The Agency providing £3.5k each year to a total of £5k.	C

Issue 16: Continued

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
16.8 Promotion of best environmental practice on farms adjacent to watercourses.	EA, FWAG		>£8 per annum	•	•	•	•	•	•	A new partnership between the Agency and FWAG is promoting environmental issues to farmers resulting in interest in 'on-the-ground' initiatives, e.g buffer strips and pond creation in Staffordshire. Negotiations are on-going with various bodies and organisations to progress these issues elsewhere in the Upper Trent area.	F/P
16.9 Wetland Habitats											
- Create 20 hectares of shallow pools through restoration of gravel pits	EA, SWT	Landowners Env groups	0	•	•	•	•	•	2005		P
- Increase total amount of wet woodland by 40 hectares			0	•	•	•	•	•	2005	These enhancements should take place over the long term by landowners and developers. These will be promoted/achieved as 'planning gain' enhancements via the planning and development control process.	P
- Create 50 hectares of reedbed including one over 20 hectares			0	•	•	•	•	•	2005		P
- Create 20 new non-recreational (fishing) ponds			0	•	•	•	•	•	2005	FWAG will become involved where appropriate.	
- Improve and enhance 20km of river corridor including re-instating former channel and backwater features			0	•	•	•	•	•	2005		

Issue 17: **Redevelopment along the banks of the Fowlea Brook and River Trent in Stoke on Trent**

Objective: **To improve water quality and the appearance and character of rivers and river corridors through development**

Actions	Responsibility		Total Cost (£K)	99/00	00/01	½	02/03	¾	Future	Progress	Funding Status
	Lead	Other									
17.1 Develop a joint approach with the City of Stoke on Trent to include:											
- A plan of improvements for the River Trent through Stoke on Trent	SoT	EA	U							Both the 'Stoke Rivers Strategy' and the 'River Trent Action Plan' are now complete and will be used to guide/control development proposals in proximity to the city's main rivers. Although not adopted as Supplementary Planning guidance, the Rivers Strategy will be either referred to in the City Plan or included in it. Progress on 'Action Plans' for other 'main rivers' in Stoke on Trent has slipped behind programme due to work being focussed on the City Plan review.	C
- The development of planning policies as supplementary planning guidance for developers and land owners	EA, SoT		5								C
17.2 Encourage developers to adopt appropriate enhancement measures through support for external funding bids and through awareness of environment good practice.	EA, SoT	Developers	U	•	•	•	•	•		The Agency continues to encourage developers to adopt appropriate enhancement measures and raise awareness of good environmental practice through its responses to planning applications, and in particular by reference to the Stoke Rivers Strategy and River Trent Action Plan. The Agency has part funded a Rivers Strategy Education Officer (employed by Stoke City Council) to raise awareness to promote good practice.	Part F

Issue 18: Improving the Habitat on the Rivers Sqw and Penk

Objective: To improve the ecology and fishery

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
18.1 Channel Habitat Diversity											
- Look at options to modify river channels i.e. extending the use of river narrowing, the creation of meanders and identification of appropriate sites. Contact with landowners	EA	Landowners	R	•	•	•	•	•		Discussions commencing with major landowner and FWAG.	P
- Implement programme of improvements	EA	Landowners	25	•	•	•				We hope to progress the planning stage of this project this year.	P
- Identify location for the development of spawning bed	EA		R								
- Implement programme of improvements	EA	Landowners	15*	•							
18.2 Bankside Habitat Diversity											
- Assess the extent of corridor degradation and identify appropriate measures and suitable locations for improvements	EA	Landowners	5							Project progress is dependant upon funding.	P
Options include: i) Pulling back river banks to create a transition zone ii) Tree and scrub planting iii) Creation of bankside reed areas and longer grass											

Issue 18: Continued

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
- Implement programme of improvements	EA, Landowners		45*	30	5	5	5			As above.	
18.3 Weed Growth on the River Sow											
- Assess the extent of the problem and the management requirements	EA		R						•	No funding available at present.	P

Issue 20: Review of Flood Defences in Stafford

- Objective:**
- 1 To enhance the effectiveness of flood defences in Stafford
 - 2 To preserve and enhance the conservation and amenity value of the River Sow and Doxey and Tillington Marshes

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
20.1 Complete ongoing strategic study of the River Sow in Stafford	EA	IDD, SBC	26							The study has indicated an outline scheme to provide 1:100 year protection to Stafford town centre. A feasibility study is now underway.	F
In the light of the above study:											
20.2 Appraise the need for upgrading the existing flood defences.	EA		R*							A feasibility study has established a need to replace defences. Regular inspections will continue to take place.	F
20.3 Carry out remedial works required in flood defence asset survey and for the improvement in water levels in Doxey Marshes.	EA, SSC, SWT, IDD		3233*						3233	Works will be incorporated into the capital scheme. Project start date 2004/2005, subject to ongoing feasibility study.	F
20.4 Identify properties within flood risk areas in Stafford town centre and offer Direct Flood Warnings to those at risk	EA		R	•						197 properties were identified at risk and were invited to join our Flood Warning System in August 1999. To date 70 new recipients have taken the offer to receive direct flood warnings.	F

Issue 21: **Flooding from the Rising Brook, Stafford**

Objective: **To provide flood defences to alleviate flooding of property by the Rising Brook**

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
21.1 Complete ongoing mathematical modelling exercise to determine flood levels	EA		10							Coarse model complete.	C
21.2 Undertake capital or revenue works to provide flood protection	EA	Landowners	170				170			Scheme identified on a capital works programme.	F

Issue 22: **Meeting Making Waste Work Targets**

Objective: **To reduce the amount of waste produced in Staffordshire Trent Valley, to make best use of the waste that is produced, to minimise the risks of immediate and future environmental pollution and harm to human health and to increase the proportion of waste managed through reuse, recycling, waste to energy and composting**

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
22.2 Work closely with local authority recycling officers to identify joint initiatives and working arrangements	EA, LAs		R*							Links have been made with Staffordshire recycling forum and partnership projects are anticipated.	P
22.3 Monitor and report on local household, industrial and commercial recycling figures relating to the area and historical data	Audit Commission, LAs, EA		10*	.	.	.				Reports are currently being produced.	F

Issue 23: Quantity of Ceramic Waste Arising in the Area

Objective: To avoid, eliminate or reduce waste at its source and to reduce the hazard of waste arising from the ceramics industry

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
23.1 Develop & promote the Staffordshire Trent Valley Waste Minimisation Club in the area	EA	Local Business	5							Project completed	C
23.2 Joint working with ETBPP, CERAM and the BCC to develop good practice and to share innovation and technical advance in waste minimisation	EA, CERAM, BCC, ETBPP		10	.	.	.	.			A partnership has been established between the Agency, Staffordshire Business and Environment Network, Groundwork and BCC to deliver a waste minimisation programme within Environmental Management Systems to ceramic and other companies.	P
23.3 Help establish Trading Estate Environment Best Practice Schemes with BiE and Staffs University and other partners that are specifically targeted at SMEs.	EA, BiE, Staffs Uni	LAs, Local Business	R*		.					A good practice guide has been produced and is to be launched to estate owners and business support organisations.	P

Issue 24: Poplars Landfill Site, Cannock

Objective: To put in place a five year programme of improvement to tackle public concerns about birds, flies, litter, smell, dust and visual amenity

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
24.1 Update of the working plan	Biffa, EA		R*	•	•					In progress	F
24.2 Modification of the licence	EA		R	•	•					In progress	F
24.4 Investigation of combustion by-products from the gas flare	EA, Biffa	SCC, SDC	15	•	•					Ongoing and new temporary flare in operation on Southern area of site whilst awaiting planning approval for permanent instillation.	U
24.5 Investigation of the rising groundwater beneath site	Biffa	EA	10*	•	•					Ongoing negotiations with the Coal Authority and pumping continuing to hold groundwater to acceptable levels.	U
24.6 Develop an improved leachate management system	Biffa	EA	U	•	•					This action is associated with both 24.1 and 24.2 and is in progress.	U
24.7 Develop a new restoration strategy to minimise adverse environmental effects and provide beneficial after use of the site	Biffa	EA	U							Ongoing and local negotiations/agreements leading to minimising affects upon local populations.	U

Issue 26: Surface Water Flooding at Brindley Ford, Stoke on Trent from Brown Lees Open Cast Coal Site

Objective: To control site run-off by the introduction of surface water detention areas to reduce the risk of local flooding

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
26.1 Staffordshire County Council as Minerals Authority will seek to enforce the Coal Authority to fulfil planning conditions relating to aftercare of restored areas	SCC, CA		U		.					The first phase of on line surface water detention has now been completed. It was designed and completed by W.S. Atkins working on behalf of the coal authority.	U
26.2 The Environment Agency will advise and approve landscaped surface water detention areas to be implemented on Brown Lees open cast site to alleviate downstream flooding at Brindley Ford village	EA	SCC	5		.					W.S Atkins are presently undertaking design work on the second (final) phase of detention works. The design work is likely to be finalised during the September and should be to the satisfaction of the Agency. On site works will then have to be implemented.	F

Issue 27: Fisheries Management of Municipal Park Pools in Stoke-on-Trent and Newcastle under Lyme

Objective: To reduce fish mortalities in municipal park pools by improving fisheries and pond management

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
27.1 Undertake a pilot project to survey one or two pools with characteristic problems	EA	SoT	5							Project Completed	C
27.2 Develop and publish general guidelines for fisheries management of park pools for use by local authorities and others	EA		10							Developments in the management of Stoke city Council waters and the production of a national Agency leaflet on tackling de-oxygenation problems have superseded this action. The City Council, Agency and local Stoke Angling clubs have formed the City Waters Management Advisory Group to improve fishery management at these waters. Several projects have been completed via the partnership, involving the creation of fishing pegs, improving access, and producing an information leaflet to promote angling on urban waters in Stoke.	C

Issue 28: **Extend the Flood Warning Service within the Staffordshire Trent Valley.**

- Objective:**
- 1 To increase the number of recipients of direct flood warnings**
 - 2 To increase the areas in which a full flood warning service is available**

Actions	Responsibility		Total Cost (£K)	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	Future	Progress	Funding Status
	Lead	Other									
28.1 Offer direct warnings to properties at high risk within existing flood warning service area.	EA		R		•	•				New Action	F
28.2 Develop major incident flood plans for areas protected by 1 in 100 year defences Identify where plans are required and prepare programme for implementation	EA	LA's, Emergency Services	R		•	•				New Action	F
28.3 Extend area covered by a full flood warning service.	EA		R		•	•				New Action	F

Appendix 1: Summary of the Environment Agency's Routine Activities.

The strategic nature of the LEAP as a long-term planning tool means that the plan is not designed to reflect fully on routine activity within the LEAP area. Our everyday work, of which examples are given below, commits substantial resources to managing the environment.

Enforcement and routine monitoring work are important in achieving the Agency's objective to protect and improve the environment. These operations and regulatory responsibilities form the basis of our work. They include:

- Regulation of discharges to controlled waters through the issue and enforcement of Discharge Consents, responding to pollution incidents, prosecuting polluters, sampling water quality, carrying out surveys, setting water quality targets and protecting groundwater quality;
- Regulation of industrial processes with the greatest potential to pollute;
- Regulation of the disposal, keeping and use of radioactive waste;
- Regulation of keeping, treating, movement and disposal of controlled waste;
- Regulation of the remediation of contaminated land designated as Special Sites;
- Regulation of the abstraction and impoundment of water, including licence determination, charging, and policing and enforcement;
- Maintaining and improving fisheries including fish surveys, fish rescues, restocking, issuing licences and authorising the import or movement of live fish;
- Overseeing flood defence activities including issuing of Land Drainage Consents, enforcement, maintenance and improvement works, and issuing flood warnings;
- Working closely with Local Planning Authorities through commenting on planning application consultations and promoting policies to protect and enhance the environment in Statutory Development Plans.

The Agency responds to incidents of pollution of controlled waters. Where these are substantiated, investigations will be carried out to determine the source of pollution. Where a responsible party can be identified, the Agency may prosecute or issue a formal caution. Formal cautions are given where it is deemed inappropriate to prosecute but it was clear that a significant offence had been committed. Other incidents are dealt with by warning letters.

Our routine monitoring work includes site inspections, water quality sampling (biological and chemical) and surveys (for example fisheries, biology and asset surveys) throughout the catchment. Site inspections are carried out for private and Water Company sewage treatment works, sewerage systems, industrial sites, contaminated land, licensed waste management facilities, landspreading operations, and premises licensed to abstract water.

We also issue authorisations, consents and licenses for a wide range of activities with potential to cause pollution of the environment or harm to human health. These include:

- Abstraction Licences (for surface water and groundwater);
- Land Drainage consents;
- Consents to Discharge (to controlled waters);
- Waste Management Licences;
- Registrations for some Exemptions from Waste Management Licensing;
- Integrated Pollution control Authorisations;
- Radioactive Substance Authorisations (for disposal of radioactive wastes) and Registrations (for the keeping of radioactive wastes);
- Registration of Carriers of Waste;
- Rod, line and commercial fishing licences; and
- Consents to import or introduce live fish.

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