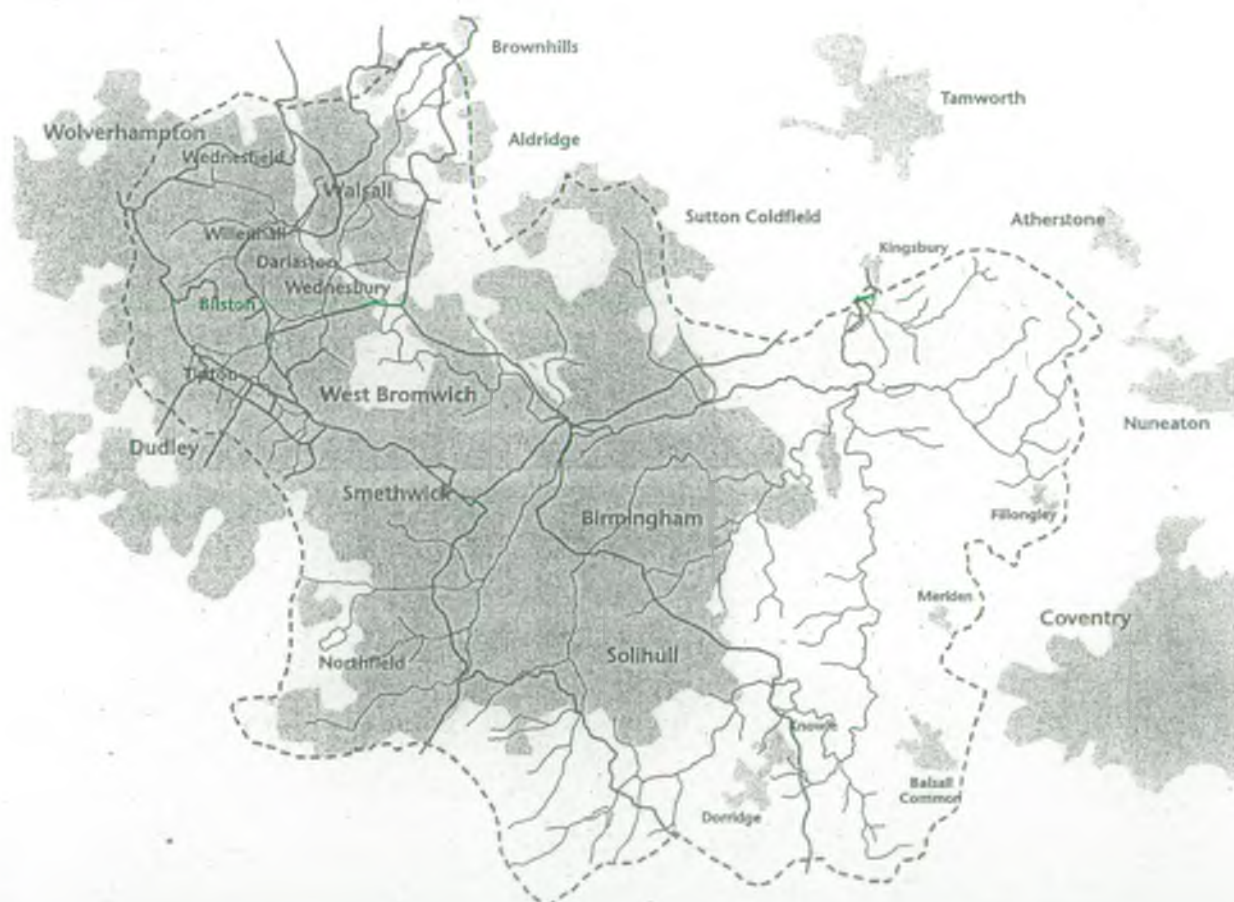


local environment agency plan

WEST MIDLANDS-TAME

FIRST ANNUAL REVIEW

JUNE 2000



ENVIRONMENT
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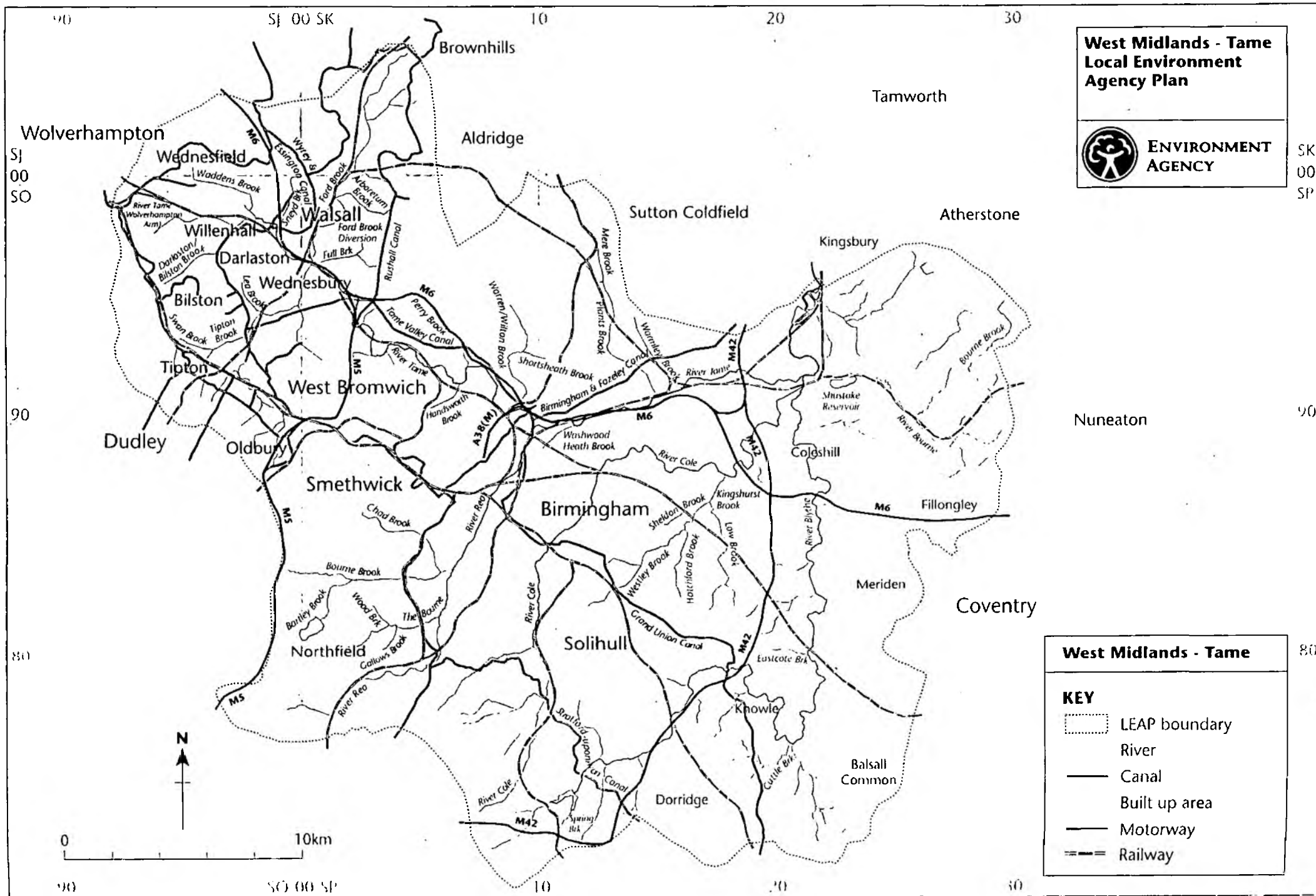
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West Midlands – Tame Local Environment Agency Plan (LEAP)

Previous LEAP Documents

West Midlands – Tame Consultation Report
March 1998

West Midlands – Tame Consultation Report Summary
March 1998

West Midlands - Tame Statement of Public Consultation
March 1998 – June 1998

West Midlands – Tame Action Plan
March 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 in an integrated manner.

This is the first Annual Review of the West Midlands-Tame LEAP since its publication in March 1999. 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.

Some good progress has been made over the last year and this is attributable to the commitment made by both the Agency staff involved and by our partners. Partnerships and collaborative working will become increasingly important as demands on limited resources continue to increase.

I look forward to building on the positive progress made so far with our partners as we continue to safeguard and enhance the environment of the West Midlands-Tame area in the coming year.

A handwritten signature in dark ink, reading "P Burns", with a horizontal line drawn underneath the name.

Philip Burns
Area Manager – Upper Trent

Executive Summary

This Annual Review summarises the progress made in achieving targets to improve the local environment in the West Midlands-Tame area in the year since publication of the Action Plan in March 1999.

Considerable progress has been made by many of those responsible for carrying out the actions that were planned for the year, either as individual organisations or through collaborative projects.

Of the 98 actions planned for the year, 7 have been completed and progress has been made on 70. However, work has not started on 21 of the actions planned to start during the review period, largely due to a shortage of resources, both financial and staff availability.

One new issue and three new actions have been added at this annual review stage (see section 4.1), and three issues and three actions presented in the Action Plan have been removed for a variety of reasons (see section 4.3).

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

- Partnership working with the Otters and Rivers Project in undertaking survey and habitat enhancement work
- Tame Walkway development; partnership with local authorities the Countryside Agency, Sustrans and landowners
- Review of Midlands-link motorways de-icing programme with the Highways Agency and the DETR
- Partnership working with Severn Trent Water on proposed Urban Pollution Management Study of the catchment
- Memorandum of Understanding agreed with British Waterways for continuous operating regime at Earlswood Lakes
- River Blythe SSSI Conservation Strategy with English Nature, Local Authorities, British Waterways and Riparian Landowners
- Partnership approach to remediation of contaminated sites at Slacky Lane and Bentley Mill Lane with Walsall MBC and Landowners and Developers
- Waste Minimisation Clubs established, including Black Country, Walsall and Wolverhampton and Witton

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1.0 Vision for the West Midlands-Tame area

The Environment Agency's vision for the West Midlands-Tame area is:

An improved and balanced relationship between human activity and the environment so that neither is adversely affected and each may draw sustainable benefits from the other.

The impact of urban development and social and economic activities in the West Midlands on the resources of air, land and water, as well as its wildlife and heritage has been considerable. Development can have a negative effect on both the quality of the environment and the quantity available for other uses and where the environment has been damaged by human activity it can have an adverse effect on people's health and well being.

Through integrated and sustainable management we will be able to realise and develop the environmental potential of the West Midlands-Tame LEAP area and at the same time ensure that its economic and social needs are met.

Our key objectives for the West Midlands –Tame area are:

- To educate and raise awareness of the local environmental issues
- To promote and encourage sustainable development in the West Midlands
- To regulate effectively across the broad spectrum of our licensing, inspecting and monitoring functions
- To increase our knowledge of air quality so we can determine where to concentrate efforts to improve it
- To promote the reduction, treatment and better management of waste
- To minimise the effects of urban run-off and contaminated land
- To maintain and improve the water quality of rivers, canals and groundwater
- To manage water resources in an environmentally sustainable way by balancing the needs of legitimate users with those of the environment
- To protect and enhance bio-diversity
- To maintain and improve fisheries
- To promote the recreational and amenity value of river corridors, canals and ponds without prejudicing the diverse heritage of the West Midlands
- To protect people, property, wildlife and our heritage from short and long term harmful environmental events
- To work in partnership with local people and organisations to realise the potential of the area and encourage stewardship of the local environment

Many of these objectives complement each other, although some may require a degree of compromise between differing demands on the resources of the area. The realisation of these objectives will be achieved through the development of links with local authorities, industry, agriculture, water companies, environmental groups and local communities.

2.0 Introduction

2.1 Local Environment Agency Plans

For the Agency to fulfil its role and responsibilities it needs to manage the environment effectively and to work in partnership with others. Local environment planning is an important tool in the 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 help 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 environmental issues
Prioritising issues and establishing an action plan for managing and improving the local area over the next five years
Realising the environmental potential of the area
Forming joint actions and partnerships for environmental improvement

2.1.1 The West Midlands-Tame LEAP

The West Midlands-Tame LEAP Consultation Report was produced in March 1998. 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 March 1999. This included a five-year programme of actions for improvements to the local environment, and outlined areas of work and investment proposed by the Environment Agency and others.

2.1.2 The Annual Review Process

An important part of the LEAP process is to monitor the Action Plan and ensure that targets are achieved, actions completed and that the plan continues to address relevant issues in an appropriate manner. This first Annual Review summarises the progress made since publication of the Action Plan and reports on the period April 1999 to March 2000 inclusive.

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 reasons for these
- Report on changes and events in the plan area
- Report on other matters, such as new legislation and initiatives affecting the LEAP

2.2 The West Midlands-Tame area

The West-Midlands Tame LEAP area covers the majority of the former county of the West Midlands including Birmingham, Solihull and much of the Black Country. Walsall and Sandwell lie within the area plus the eastern parts of Wolverhampton and Dudley. The population of the area is approximately 1.8 million, the vast majority of whom live in the main conurbation.

The area has a history of industrial usage. In the 1800s large quantities of mineral resources in the Black Country enabled the development of heavy industries such as steel, iron, brick and glasswork, which in turn enabled the establishment of final assemblers, often based in Birmingham and Solihull.

After 1860 the Black Country began to decline in prosperity as the natural mineral resources were exhausted and light engineering with new technology gradually replaced the heavier industries. Since the early 1980s a lot of effort has gone into revitalising older industrial areas.

Today the economy is more diverse with the growth of services, shops, offices and the expanding leisure industry. The principle industries in the area are engineering, metal finishing and vehicle manufacture and Birmingham is a major administrative and financial centre and England's second city.

Despite the largely urban nature of the area, there are 18 Sites of Special Scientific Interest (SSSIs) and two National Nature Reserves, Sutton Park in Sutton Coldfield and the geologically important Wren's Nest in Dudley. The urban area is an important stronghold for water voles.

The area has a number of sites of archaeological interest, not least the vast industrial heritage of the Black Country and the largest canal network in Britain.

2.3 Update on events in the West Midlands-Tame area

This section provides information on some of the area's activities during 1999/00, which go towards meeting the Agency's strategic themes.

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

Risk Assessments (OPRA) 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.

At Walsall Manor Hospital NHS Trust, the inventory of closed sources required by the Site Inspector, following his finding of an unregistered radium source in December 1999, identified a further seven unrecorded sources. These did not constitute an environmental or health hazard, but demonstrated a significant failure of management control. An Enforcement Notice was therefore served to require the safe disposal of the unregistered sources and the review and revision of procedures for the management of closed sources. This attracted local media interest.

In October 1999 at the City Hospital NHS Trust, Birmingham, sufficient breaches of the closed source Registration were identified for an Enforcement Notice to be considered, as well as there being unsatisfactory matters relating to the open source Registration and Authorisation. It was further revealed that a Cobalt-57 marker source had been lost some months previously and neither the Agency nor the Police had been informed. A PACE Code B Notice was served and a formal investigation initiated. An Enforcement Notice was subsequently served to secure proper storage, security, labelling, and documentation of closed sources.

The Agency has been working with IMI to identify the work needed to address contaminated land and air quality issues. The works has significantly contributed to historical exceedances of EC Directive levels of lead in air. Although recently there have been improvements, the proposed National Air

Quality Strategy objectives and new EC Directive limits have again created considerable doubt that the targets would be met. Due to the depressed state of the copper market, IMI announced the closure of the majority of its site including the blast furnace and electrorefinery, effective from the end of 1999. This leaves only 'clean metal' melting and casting on the site. This closure will lead to local environmental improvements (at the same time as leaded petrol is phased out). However, the closure of the final UK plant capable of dealing with low level copper wastes will have strategic significance since additional wastes will be landfilled or exported to other works in Europe.

In September 1999 an explosion took place in the 25-tonne side well furnace at the Aldec aluminium works, Willenhall, resulting in one fatality and 3 injuries, one serious. Considerable damage was done to the building; Emergency Services attended and at one point a half mile safety cordon was set up around the site and local residents were warned to stay indoors. The incident was reported on both local and national TV news. Initial reports that radioactive materials might be involved were unfounded (Aldec shares a site with the Brookside Metal copper works, where contaminated scrap has been found in the past). Concerns were also expressed that asbestos dust may have been spread outside the site, but Agency experience is that asbestos cement sheeting generates little respirable fibre in this type of incident.

In August 1999 a fly ash storage silo at the Tyseley municipal waste incinerator overflowed through the relief vent as a result of a failed level gauge. Fly ash was dispersed over the surrounding area, causing complaints from residents. The operator did not notify the Agency of the failure, and initially suggested that there could have been no significant release, despite obvious evidence to the contrary. An Enforcement Notice was therefore issued requiring installation of high level alarms on the fly ash storage silos and procedures to ensure proper reporting of Unauthorised Releases and equipment failures.

Improving Air Quality

The significant decrease in lead in air concentrations around the IMI James Bridge works in Walsall were brought about by the partial closure of the works in early 2000 along with the phase out of leaded petrol at the same time.

Managing Waste

The Area successfully tackled 105 unregulated metal recycling sites as part of a national project. This required 160 visits, serving four enforcement notices and two high profile prosecutions relating to two sites leading to fines of over £31,000. A few operators decided to cease trading, one has applied for a waste management licence but the majority chose to register as exempt. There remain 17 sites which are currently under investigation pending enforcement action. Enforcement action has commenced against a number of sites across Birmingham and the Black Country who have steadfastly refused to co-operate with Environment Protection officers' attempts to get them either to apply for a Waste Management Licence, or to bring their sites up to the standards required to enable them to register an exemption. Many of the sites are potentially polluting due to the escape of liquids during vehicle dismantling operations.

Over a period of several months from December 1999 flytipped soil and slabs were being reported to Sandwell MBC in the Rowley Regis area of the borough. Through several eye witness reports they identified a common vehicle type and registration. The information was checked out with the DVLA and found to be a false name and address. A section 71 notice requiring information was returned undelivered. The local police force in Wales also confirmed the details given to be false. On the 23rd February a seizure warrant was obtained and eight days later the vehicle was seized in a joint operation with Sandwell MBC and the Police and was given to the fire service for training.

In January 2000 reports were received of four instances of drums dumped in the Oldbury area. A total of about 190 drums were involved. The first incident was cleared away to the SARP treatment plant in Stoke. Because many of the drums had originated from BIP the remainder were cleared to a storage

area at BIP. The drums contained resins, acetone, hardeners and pigments. The source of the drums was identified and investigations undertaken.

Investigations were made in Birmingham following allegations that drums of hazardous chemicals had been illegally buried in land at Trevor Street, Nechells. The site in question was excavated with 120 drums and 150 tonnes of contaminated soil removed. The cost to the land owners for the removal and disposal of this material was estimated at £25,000.

A concerted campaign (Operation Spring Clean) targeted at unlawful waste management operations in Birmingham appears to be sending a strong message to the industry. Successful prosecutions (Olympic: £20,000, A+P Haulage: £16,000, £3,000) have sent shock waves through the waste community. Many identified by the operation have now ceased trading or are acting properly for their waste disposal.

In September 1999 an unregulated waste tyre recovery depot operated by Euro stock UK Limited caught fire on the London Street industrial estate in Smethwick. Several hundreds of tyres were believed to be involved.

In September 1999, The Agency investigated a number of complaints of watering eyes, sore throats and a chlorine-type Odour from businesses in the Minworth area. An investigation proceeded into claims that bromine fumes had escaped from the waste treatment plant in the Minworth area with a view to prosecution.

In October 1999 there was a fire at Caird Environmental at Minworth. The fire occurred at the rear of the waste transfer facility and was limited to a small area due to the prompt action of the Fire Service. Investigations identified the likely source of the fire as being a number of cardboard drums containing potassium persulphate residues which had got wet when rain got in through a hole in the roof of the transfer station. Investigations continued resulting in enforcement action.

The West Midlands Joint Pollution Group consists of the pollution regulation managers for the seven West Midlands Authorities with the Agency represented as an observer. The group works on many aspects of best practice and the Agency has been involved in the development of a number of these. The group has now adopted OPRA for part B regulation as part of their response to criticism in a DETR report on the performance of Local Authority regulators for LAPC. The group is seeking alignment with the West Midlands Regional Assembly and the Agency hosted a meeting to discuss possible approaches in January 2000.

Managing our Water Resources

The Agency has a responsibility to manage natural water resources and ensure efficient and fair use of them, whilst protecting the environment from over-exploitation. One of the ways in which we are trying to achieve sustainable water management is by working with local businesses, local authorities and non-governmental organisations and encouraging them to review their use of water and implement cost-effective water efficiency measures. Examples of this are:

The building at the RSPB Nature Reserve at Sandwell has been refurbished. The Agency has funded part of the project to incorporate water minimisation features. These include the use of waterless urinals, spray taps and rainwater harvesting for lavatory flushing. A large interactive display promoting water minimisation has been produced and information about the methods used on the site is also on display. Later this year the wildlife garden at the reserve will be replanted to show visitors how easy it is to help wildlife and how people can reduce the need to use potable water to water the garden.

Birmingham City Council have set up a group to look at energy and water consumption in its school's libraries, leisure centres etc. Some work has already been done eg urinals have water saving devices

fitted and data on water consumption in schools is collected. It is proposed to choose the three schools with the worst water consumption figures and assess the scope for introducing further water conservation measures such as percussion taps and rainwater harvesting

Delivering Integrated River Basin Management

The Agency has been working with the IBU to enhance a section of the Yardley Brook as part of the Kingfisher Project in Birmingham. Boulders and concrete tipped into a nearby pond have been removed and used to infill an area of erosion on the brook. The infilled area has been topped with smaller blockstone and should develop to form a more natural river system.

A soluble oil pollution on the Tat Bank Brook in Olbury was found to be emerging from the middle of the roadway before running into a highway drain. Further investigation traced the source to a nearby engineering company with a leaking underground collection tank. Investigations are ongoing into the extent of the pollution and the remediation measures required.

Poor results from the Spring GQA sampling programme were selected for investigation. These included the River Rea and tributaries.

The Agency's Upper Trent and Upper Severn Areas gave a joint presentation to representatives from the Civil Engineers and Contractors Association (CECA) Midlands. This has led to a joint regional and area initiative which will involve training contractors from across the midlands region involved in demolition, construction and civil engineering in the deployment of emergency equipment in the event of problems and practical tips for on site pollution prevention.

In October 1999 a formal sample was taken and served on a poultry company in the Black Country, of their trade effluent which consisted of blood, guts and feathers that was discharging direct to the Tipton Brook. The company has a history of causing problems and has been suspected as a cause for the very high BOD's in the watercourse. Investigations revealed that areas where chickens were caged prior to slaughter and where food trays and vehicle were being washed all drained directly to the storm system. Alterations were made to the drainage system and 10,000l of highly contaminated silt were removed from catch-pits downstream. It is expected that stopping effluent from this source will show a major improvement in this catchment which is currently failing a RE5 objective.

The sewerage system in the Hockley Brook area is very complex with 47 CSO's discharging into a small brook running through an urban area. The Hockley Brook UPM identified which areas are causing pollution problems. An initial scoping study began in September 1999 which progressed to a full study. In addition the Upper Tame SIMCAT model was completed in November 1999.

In September 1999 there was a major fire at Homa Garden Furniture, Wednesfield involving plastics, a small drum of ammonia, polyurethane foam and teak oil (which contains a fungicide). It involved one third of the West Midlands Fire Service resources. The police helicopter noted a smoke plume up to 20,000 feet before dissipating. Water was taken from mains and the nearby Wryley and Essington canal with run-off entering the Neachells Brook, a tributary of the Wolverhampton Tame. Agency officers monitored the watercourse and informed MAFF due to the run-off possibly containing a fungicide.

In September 1999 a report of oil pollution on the River Rea at Cannon Hill Park was investigated. The source was found to be a demolition site, off Grange Road, where a pipe had been partially severed allowing diesel to escape into nearby yard drains and then into the Bourne Brook. A formal sample was served on DSM Demolition.

Conserving the Land

The Agency issued indicative floodplain maps as 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.

The Agency have pursued the idea of a partnership with Wolverhampton MBC over the proposed Bilston Urban Village. A detailed site investigation has been undertaken by consultants Wardell Armstrong working on behalf of the site development consortium.

A dry cleaning facility, 'Apparelmaster' at Perry Bar is due for demolition and redevelopment. The site owner has been in contact with the Agency and carried out site investigation work which indicates that the made ground beneath the site is seriously contaminated with chlorinated solvents. These may be impacting on the Major Aquifer beneath the site. Appropriate remedial action is being determined.

JBA were commissioned to re-calibrate the Tame hydraulic model giving preliminary results in January 2000. Construction work for replacement defence at Holloway Bank was then programmed for April 2000. Detailed design for the replacement of collapsed defence at Darlaston has also been undertaken.

Remedial wall repair works were undertaken at Willenhall in November 1999.

On 18/10/99 the new meandering channel of the River Cole was officially opened as part of the Blythe Hall Quarry restoration proposal. This represents a successful partnership with Western Aggregates. Birmingham University are monitoring the development of the new channel. The river diversion has received wide acclaim 56.3kg of chubb and dace were transferred from the old river course to the new.

The application screening process under the Groundwater Regulations was completed by October 1999 and all authorisations issued by April 2000.

Flood Defence

The flood awareness campaign launched in October 1999 has improved the profile of the 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 (FDSCS) through Development Control

Enhancing Biodiversity

The Agency contributed to the Warwickshire Habitats Biodiversity Audit. A phase 1 survey has been carried out throughout the whole county and the information entered onto a GIS system.

The Agency is a partner of the Birmingham and Black Country Biodiversity Action Plan which is due to be launched in July 2000.

Business Development

The phased transfer of Authorisations work into the Agency's 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.

The Agency attended several successful local events with show trailer and also a major education event in Lichfield with South Staffs Water and Severn Trent Water Ltd.

A green group called the Environment Action Team has been formed of enthusiastic staff to take environmental issues within the area further. Actions following these group meeting have included the provision of 'wormeries' at each Area office and efficient use of paper before recycling.

2.4 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 will 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 (IPPC). 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 final consultation, and it is likely that they will be implemented later this year. 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 introduced 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.

2.5 New Initiatives

National Waste Strategy

The Government's Waste Strategy is due to be published this summer. 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 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

The Agency recently reviewed all waste management licences. The 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 (CAMS). CAMS will be produced locally throughout England and Wales after a period of local consultation. The responses received will contribute to the formulation of the strategy. The documents themselves will set out relevant local policies, information and issues in a catchment.

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 from 12 September 2000. 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 Agency and the Institute of 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. This should result in greater efficiency and consistency. 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

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

Issue 2: Lack of Public Access Routes along River Banks

A feasibility report has been completed on the Tame Walkway.

Issue 3: Enhancement of Watercourse Corridors in Urban Areas for Wildlife and Amenity

The Agency assisted with an aerial survey of the River Tame in Birmingham and the Rivers Cole and Blythe. The survey will help in identifying and prioritising Conservation, Fisheries and Flood Defence projects along these rivers.

Issue 5: Sustainable Urban Drainage

Sustainable Urban Drainage Systems (SUDS) has been promoted to key local authorities, the house builders and forestry interests and pilot projects publicised. As part of the SUDS initiative work all the boreholes in the Birmingham Groundwater unit, have been mapped and a programme will be developed to dip all accessible boreholes. This information will be used in conjunction with the CIRIA model to produce a map of sites suitable for SUDS developments.

Issue 6: Investment by Severn Trent Water Limited to improve water quality

The AMP2 improvement works were all completed and scheme performance is now being monitored. Improvements to Minworth and Coleshill STWs have resulted in significant improvements in the downstream quality of the River Tame. Samples taken following the completion of works, upstream of Lea Marston Lakes have shown an improving trend since the works, in particular for Ammonia and Biochemical Oxygen Demand concentrations. The improvements under AMP2 were completed six months before the Agency's planned tightening of Consent Conditions for the works. Another important scheme is the Perry Hall to Saltley link sewer (Black Country Trunk Sewer) which was completed and opened in May 2000. A significant reduction in the number of foul sewer overflow events can be expected in the affected area.

The AMP3 list has been finalised and agreed as part of the National Environment Programme. The programme is substantial compared to AMP2 and the LEAP area should benefit significantly.

Issue 7: Lea Marston Purification Lakes

A review of the operating regime at Lea Marston Lakes was undertaken in order to assess the requirements for the next 5 years. A business case was prepared detailing proposals which will result in significant savings in the operating costs of Lea Marston whilst still ensuring that the Lakes provide protection for the downstream river environment. Works to connect lakes 2a and 2b and to construct a new weir outlet from 2b have been undertaken. Two additional posts have been created until 31 March 2002 for surveying pollution at source. Planning permission has been gained for an automatic hydrogen peroxide dosing facility to counteract low dissolved oxygen events.

Coton Hall Lake at Lea Marston has been developed by the Agency's Fisheries Department as a fishery as part of an Urban Fishery development programme funded nationally. The fishery will be open to all anglers on purchase of a day ticket and will have facilities for disabled anglers. The fishery is being developed as a general mixed fishery to appeal to all tastes. To act as protection against cormorants, floating reed beds are being introduced.

Planting areas were agreed with Hams Hall Environmental Trust at Lea Marston for a second tranche of hedge and tree planting at the site to accord with the site management plan.

Issue 8: River Flows and Water Quality in the River Blythe

A successful meeting was held between British Waterways and Environment Agency Water Resources staff to discuss problems with Earlswood Lakes. These related to the introduction of carp and the water quality problem caused by overflows into the River Blythe SSSI during the summer.

The agreed solution will allow BW both to have their carp fishery, make best use of their water resources and at the same time remove a long-standing cause of damage to the River Blythe.

Issue 10: The Current Quality of Rivers and Canals

Environment Protection staff have undertaken a large number of catchment surveys to identify the cause of RQO downgrades and follow-up pollution prevention site visits to eliminate pollution at source. The catchments covered to date have been Westley Brook, Bakelite, Bentley Lane Culvert, Sneyd Brook, Hatchford Brook and the Oldbury Tame. The action taken has already resulted in an upgrade of the Oldbury Tame. As part of this work pollution sources at the Kelvin Way and Cannon industrial estates have been identified.

Issue 11 The Effect of the West Midlands-Tame Catchment on Downstream Water Quality

Urea use on elevated motorway sections was high in December 1999 due to cold weather. The event sampling programme for winter 99/00 was completed using improved sampling methods. More representative results are to be discussed with the Highways Agency/DETR soon.

Issue 12: Contaminated Land

Good progress has been made with partners/potential developers in connection with remediation of contaminated sites at Slacky Lane and Bentley Mill Lane.

Issue 15: Water Resources Development Strategy for Canals

A 30 year hydrological model has been produced for the canals in the Midlands Region covering the Birmingham Canal Navigation and the arms going outwards to Droitwich, Leamington, Stratford, Wolverhampton, Coventry, Stourport, Worcester, Tamworth and Stafford with linkage to Grand Union reservoirs.

Issue 16: Litter and the aesthetic pollution of rivers and canals

A GQA aesthetics survey was undertaken for the 2000 State of the Environment report.

Issue 20: Sustainable Waste Management

The Black Country Waste Minimisation Club was launched at Oldbury Business Centre and over 50 people from 30 different companies attended a breakfast meeting. This is a joint initiative between the Agency and Groundwork Black Country. Twenty companies have already signed up for a further five workshops which will take them step by step through waste minimisation methodology. Later meetings focussed on the issues of energy management, project implementation and generating opportunities.

West Midlands Waste Matchers is a project jointly funded by the BOC Foundation and the Environment Agency and managed by Linden Consulting Partnership based in Lichfield. The project aims to match one company's waste to another companies raw material needs. So far 96 matches have been made suggesting that this is an effective means of assisting companies to get the best from their waste. In addition 51 site visits have been made to advise on waste minimisation, waste management and energy management.

Meetings of the Walsall and Wolverhampton Waste Minimisation Group have been held during the year and feedback from group members indicates that large cost savings have been identified and that members are now working towards implementing waste minimisation opportunities. A meeting to be held in June 2000 will bring together the group and the previous waste minimisation group held in Sandwell and Dudley, to report on progress made.

A Waste Minimisation Group drawn from companies based on trading estates in the Witton area of Birmingham is being set up in partnership with Groundwork Birmingham and the Agency. The first meeting was held in April 2000.

Issue 22: Industrial Heavy Metal Pollution in Pleck, Walsall

Soil and air sampling and a review of available data have been completed in relation to heavy metal pollution at Pleck, Walsall. A report is due to be published by the end of June.

Issue 24: Review of Flood Defences on the River Tame

The Agency is undertaking an Asset Survey of the River Tame Flood Defences. The survey is on programme for delivery in January 2001.

A Visual Condition Interim Report on the River Tame Flood Defences was delivered in January 2000. Defences in poor condition have either been remedied, programmed or recommended for removal.

Issue 27: Water Level Management Plans

The Agency has updated the list of SSSIs requiring Water Level Management Plans and completed WLMPs for its own sites. Additional MAFF guidance introduced in October 1999 has significantly reduced local authority involvement.

3.2 Disappointments

Issue 1: Biodiversity

There has been a lack of progress with species surveys, in particular for Crayfish, Great Crested Newts and Black Poplar.

Issue 9: Excess Nutrient Levels in Sutton Park Pools

At Sutton Park the proposed feasibility study on construction of silt traps/settling pools on all surface water inflows to the park has not progressed, nor has investigation of methods for nutrient removal from Sutton Park Pools. The recommendations from the existing Water Level Management Plan have not been progressed.

Issue 16: Litter and the Aesthetic pollution of rivers and canals

No specific targeted action has been taken forward to promote clean up initiatives for litter and aesthetic pollution of rivers and canals or for developing a local education strategy/partnership to deliver it.

Issue 26: The Future Management of Park Hall Farm

Little progress has been achieved in reviewing the future management of Park Hall Farm. Negotiations with the wildlife trust have progressed very slowly.

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.

Where external agencies are identified as leading actions which have not progressed, the Agency will continue to exert appropriate influence to help ensure that these actions are delivered in future.

4.0 **Actions Updates**

4.1 **New issues and actions**

LEAPs are fluid documents and, following the current review, one new issue and three new actions have been included, reflecting the ongoing development of the plan and addressing new concerns. The new issue and actions are shown in **bold** in the action tables (Section 4.5) and are listed below.

Issue	New Action
Issue 6: Investment by Severn Trent Water Limited to improve water quality	6.3 Monitor implementation of the AMP3 improvement schemes listed below and assess water quality commencing one year after completion of the scheme.
Issue 6: Investment by Severn Trent Water Limited to improve water quality	6.4 Hockley Brook UPM
Issue 9: Excess Nutrient Levels in Sutton Park Pools	9.7 Consider sewerage improvements (tank storage) to improve drainage within the park, reducing the potential for sewer surcharging.
New Issue: Issue 28: Extend the Flood Warning Service within the West Midlands – Tame area	28.1 Offer direct warnings to properties at high risk within the existing flood warning service area.
	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 -Implement programme
	28.3 Extend area covered by a full flood Warning service

4.2 **Amended actions**

The wording of actions has not been specifically amended, however two actions have been relocated following the removal of Issue 11 The Effect of the West Midlands–Tame Catchment on Downstream Water Quality. These are shown in **bold** in the action tables (Section 4.5). In addition under action 10.2 (Investigate the reasons for RQO failures at the following sites) further river and canal stretches have been added to those already listed.

Relocated Action	Relocated From
6.5 Undertake a detailed Urban Pollution Management Study of the Catchment	11.5
10.5 Formulate and carry out investigative work resulting from the organics survey report	11.1

4.3 Removed actions

Three issues and three actions have been removed for various reasons as shown below.

Removed Issue/Action	Reason
Action 7.2 Continue to examine upstream water quality and seek to eliminate pollution sources across the catchment	The action will continue to be reported on via 10.2 and 4.4
Action 7.3 Remediation of low dissolved oxygen events	The action will continue to be reported on via 4.2
Issue 11: The Effects of the West Midlands–Tame Catchment on Downstream Water Quality	The issue has been found to lack cohesion and is better covered by other issues within the plan
Issue 17: Enclosure of Waste Transfer Activities	Although some efforts have been made to promote the issue with operators there is no statutory backing so only limited progress could be made. In some cases transfer stations operate well without being enclosed. The issue also has low priority in terms of resources.
Issue 23: Odour Problems in Sandwell	Some significant improvements have been achieved via day to day IPC regulation. However limited resources and the low priority of the issue have meant that progress has not been made, nor is progress likely.

4.4 List of issues

Issue 1	Biodiversity
Issue 2	Lack of public access routes along riverbanks
Issue 3	Enhancement of watercourse corridors in urban areas for wildlife
Issue 4	Urban run-off and deoxygenation of the River Tame
Issue 5	Sustainable Urban Drainage
Issue 6	Investment by Severn Trent Water Limited to improve water quality
Issue 7	Lea Marston Purification Works
Issue 8	River flows and water quality in the River Blythe
Issue 9	Excess nutrient levels in the Sutton Park pools
Issue 10	The current quality of rivers and canals
Issue 11	<i>The effect of the West Midlands – Tame catchment on downstream water quality</i>
Issue 12	Contaminated land
Issue 13	The impact of rising groundwater beneath Birmingham
Issue 14	Baseflow contribution to the River Tame
Issue 15	Water resources development strategy for canals
Issue 16	Litter and the aesthetic pollution of rivers and canals
Issue 17	<i>Enclosure of waste transfer activities</i>
Issue 18	Little Packington Landfill site
Issue 19	Flytipping
Issue 20	Sustainable Waste Management
Issue 21	Air quality monitoring

Issue 22	Industrial heavy metal pollution in Pleck, Walsall
Issue 23	<i>Odour problems in Sandwell</i>
Issue 24	Review of flood defences on the River Tame
Issue 25	The proliferation of surface water balancing systems in Solihull
Issue 26	The future management of Park Hall Farm
Issue 27	Water Level Management Plans
Issue 28	Extend the Flood Warning Service within the West Midlands – Tame area

Note: Issue shown in bold is new. Issues shown in italics are now removed via this review.

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. The numbering of the actions remains the same as that which appears in the Action Plan. Where actions are shown in **bold**, this indicates that they have been added at this annual review stage or have been relocated from another issue (now removed from the plan). The funding status of each action is shown in the final column on the right hand side.

Key to Costs and Timescales

<	Less than
>	Greater 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

AMP	Asset Management Plan*	MAFF	Ministry for Agriculture, Fisheries & Food
B'ham CC	Birmingham City Council		
BW	British Waterways	NVZs	Nitrate Vulnerable Zones
CIRIA	Construction Industry Research & Information Association	OFWAT	Office of Water Services
CSO	Combined Sewer Overflow	RQOs	River Quality Objectives
DETR	Department of the Environment, Transport and the Regions	STW	Sewage Treatment Works
		STW Ltd	Severn Trent Water Ltd
EA	Environment Agency	TBG	Tidy Britain Group
EN	English Nature	UWT	Urban Wildlife Trust
GQA	General Quality Assessment	WCC	Warwickshire County Council
HA	Highways Agency	WTs	Wildlife Trusts
LAs	Local Authorities	WQOs	Water Quality Objectives

* 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. Every five years the Water Industry Companies must agree their investment programme with the Director General of OFWAT. We are now in the third review (AMP3) which will cover the period 2000 to 2005. The Agency is anxious to ensure full consideration is given to securing environmental improvements.

Issue 1: Biodiversity

Objective: To protect rare and endangered animal and plant species to promote diversity of Flora and Fauna

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
1.1 Otters											
Support Wildlife Trust Otter Projects and encourage Trust to monitor otter distribution in the catchment by surveys, particularly on the River Blythe	EA	OARP	6*	6						Some financial help for Staffs OARP (who cover this area for the Trusts). OARP carrying out surveys and providing a detailed view of otter distribution in the area. National Otter Survey being organised by Agency to give the bigger picture of distribution.	F
Identify habitat improvement and holt creation sites	EA	OARP	1*	●	●					Surveys, liaison and recommendations for habitat enhancement /creation ongoing.	P
Improve habitat where appropriate	EA	OARP/UWT	U	●	●	●	●	●	Ongoing	Habitat improvement works carried out where landowner and resources allows.	P
Ensure needs of otters are included in waterside developments	EA	Landowners/Developers	U	●	●	●	●	●	Ongoing	Ongoing via the planning / development control process.	P

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
1.2 Water Voles Identify areas for habitat improvement following publication of the Agency's Water Vole Manual	EA	WT, BW	U		●	●				Progress delayed due to shortage of resources.	P
Improve habitats where appropriate	EA	Landowners/Developers	U	●	●	●	●	●	Ongoing	Progress delayed due to shortage of resources.	P
Ensure needs of water voles are included in waterside developments	EA	WT, BW, Developers	U	●	●	●	●	●	Ongoing	Suitable habitat management carried out where possible through planning/development control process.	P
Modify maintenance methods where appropriate to ensure protection of water voles	EA	LAs, BW	U	●	●					Pilot project to be implemented later this year.	F
1.3 Crayfish Carry out surveys to determine range	EA	WT	1-2*		●	●				Progress delayed due to shortage of resources.	P
1.4 Great Crested Newts Use UWT survey (Agency funded) & other data to produce a distribution map and identify gaps in knowledge	EA	WT	1*		●					Progress delayed due to shortage of resources.	P
Carry out further surveys to fill gaps identified in above survey	EA	WT	<3*		●	●				Progress delayed due to shortage of resources.	P

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
1.5 Black Poplar Survey river banks to identify any existing trees and ensure their protection with Tree Preservation Orders	EA	LAs, UWT	U	●	●					Progress delayed due to shortage of resources.	P
Plant new trees from genetically pure stock	EA, Urban Forestry Group	LAs, UWT	U	●	●	●	●			Progress delayed due to shortage of resources.	P
1.6 Control of Invasive Plants Draw up methodology for recording areas of colonisation by Japanese Knotweed near Watercourses	EA	LAs	U		●					Progress delayed pending clarification of national strategy.	P
Agree a co-ordinated programme of spraying	EA	LAs, Land-owners	U		●	●	●			Discussions on-going.	U
Alter maintenance programme to ensure cutting of Himalayan Balsam prior to seeding where possible	EA	LAs	U	●						Flood defence maintenance programme for main rivers has been adjusted to cut balsam before seeding wherever possible. The programme also aims to control Giant Hogweed and Japanese Knotweed.	F

Issue 2: Lack of Public Access Routes along River Banks

Objective: To improve public access for pedestrians and cyclists to and along river banks for transport and recreation

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
2.1 Complete consultants report on Tame Walkway feasibility and make it available to all LAs	EA		1		●					Consultants report completed. Meeting to be arranged with LAs.	P
2.2 Agree a programme of development for Tame Walkway from Willenhall and Sheepwash to Lea Marston	EA	LAs, Countryside Commission, Sustrans, Landowners	<1*		●					Programme to be agreed following above meeting.	P
2.3 Carry out agreed development programme	EA	As above	U		●	●	●			Development programme delayed, however key lengths of the Tame Walkway have been developed via use of the Planning Process.	P
2.4 Develop other riverside Footpaths, bridleways and cycleways	EA	As above	U	●	●	●	●			Progress delayed.	P
2.5 Link riverside paths to existing paths, rights of way, canal towpaths etc	EA	As above, BW	U	●	●	●	●			Funding (£6K) given to develop canal /Tame footpath links with Groundwork.	P

Issue 3: Enhancement of Watercourse Corridors in Urban Areas for Wildlife and Amenity

Objective: To improve the conservation and amenity value of urban watercourses and to develop their use as wildlife corridors

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
3.1 Create a continuous wildlife corridor by encouraging all new developments back from river banks and promote the creation of a landscaped strip next to the watercourse	EA, LAs	Developers	R*	●	●	●	●			When responding to planning applications and land use enquiries, Planning Liaison, supported by Conservation and Development Control, continues to progress these actions through the use of objections, planning conditions or general/specific advice as appropriate.	P
3.2 Resist further culverting of watercourses on new developments and restore existing culverts to open channels	EA, LAs	Developers	R*	●	●	●	●			As above.	P
3.3 Undertake detailed survey of river corridor (including aerial surveys) to identify enhancement opportunities	EA		5	5						Aerial survey has been undertaken and is being evaluated.	F
3.4 Draw up regeneration programme from above survey	EA		5		5					Programme will follow on from above evaluation.	P

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
3.5 Carry out regeneration programme as opportunities arise through redevelopment:	EA	Developers, Wildlife Trusts	U			●	●	●	●		
Replace hard bank reinforcement with soft engineering or create a transition zone in front			U		3					One scheme is planned for 00/01. Detailed plans have been drawn up for gabion removal in the Sandwell Valley.	F
Re-profile river banks to create habitat diversity and access to river			U		5					Detailed costed plans have been drawn up for one scheme in 00/01.	F
Carry out tree and shrub planting	EA, LAs, Developers	Urban Forestry Unit	U	●	●	●	●	●		No progress	P

Issue 4: Urban run-off and de-oxygenation of the River Tame

Objective: To reduce the harmful effects of urban run-off into the River Tame

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
4.1 General											
Assess the results of the River Tame, Identification of Wet Weather Pollution Problems Report	EA		R	●						Assessment has highlighted a number of sub catchments for investigation. Further work to be undertaken as part of a planned catchment survey programme.	F
Identify target catchments for additional survey work to identify sources requiring remediation	EA		R	●	●	●				Five catchments programmed for survey over 00/01 – 01/02.	F
Carry out surveys and targeted Pollution Prevention work	EA	STW Ltd, LAs	U*	●	●	●				To be undertaken, in part, as part of the above programme.	F
Review analytical data, post survey work	EA		R		●	●	●			Ongoing.	F
4.2 Implement automatic peroxide dosing facility at Lea Marston to counteract low dissolved oxygen events	EA		100		100	●	●	●		Planning permission granted by Local Authority. Design work for building etc has been completed. Permanent bulk storage to be in place by Sept 00. This facility to be automated in phases over the following three years.	F
4.3 Encourage creation of off-line refuges for fish	EA	Developers	U*	●	●	●	●	●		Progress delayed. One scheme planned to be undertaken during 00/01.	F

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
4.4 Road run-off											
Monitor road run-off quality within target catchments identified by the above study	EA		U	●	●	●				See 4.1 above.	
Provide additional pollution prevention and treatment systems on new road schemes	EA, DETR, HA	LAs, Other road builders	U*	●	●	●	●	●		Eg planned pollution alleviation measures part of the BNRR construction programme.	
Review Midlands-link motorways de-icing programme and seek improvements as necessary	EA	DETR, HA	R*	●	●	●	●	●	Ongoing	Event sampling programme for 99/00 winter completed using improved sampling methods. More representative results to be discussed with HA/DETR soon.	F
4.5 Industrial Sites											
Regular site visits and awareness campaigns	EA, STW Ltd		R*	●	●	●	●			National Best Practice Guide for trading Estates produced and being used locally.	
4.6 Sewerage Systems											
Monitor surface water sewers for wrong connections and correct where found	STW Ltd, EA		U*	●	●	●	●	●		Ongoing. Surveys completed on the Hatchford Brook, Tipton Brook and Oldbury Tame.	
Identify problem CSOs for inclusion in improvement programmes (See Issue 6)	EA		U	●	●	●	●	●		See Issue 6.	

Issue 5: Sustainable Urban Drainage

Objective: To encourage and promote the appropriate use of source control techniques to reduce the impact of urban run-off

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
5.1 Workshops/seminars between Agency, LAs, Water Companies to discuss adoption issues	EA	LAs, Water Cos, DETR	R*	●						Workshop given to Birmingham Council. Presentation given to House Builders Federation and National Forestry. Progress has been made with the Water Company on adoption issues.	N/A
5.2 Develop pilot projects using source control techniques	LAs	EA	R*	●	●	●	●	●		Newhall Valley Country Park Housing Site, Blythe Valley Business Park and Quinton Meadows Office Park are used as pilot sites where SUDS have been successfully used.	N/A
5.3 Publicise pilot projects	EA	LAs, Developers	R*		●	●	●	●		The 'pilot sites' are made known to developers and used as examples in presentations.	N/A
5.4 Promote use of CIRIA 156 'Manual of Good Practice on Infiltration Drainage' with LAs and Others	EA	LAs	R*	●	●	●	●	●		Ongoing promotion in dealing with developers and Local Authorities.	N/A
5.5 Identify source control suitability area maps	EA		15	15						Project team has identified Birmingham as the area to develop the first map. Groundwater monitoring data of the Sherwood Sandstone aquifer has been collated. This data will be used in conjunction with the CIRIA hydrogeological model to assess the feasibility of producing the SUDS maps. This will take place when Source Control Suitability Maps preparation is complete.	F
5.6 Produce and publicise source control suitability area maps	EA		U		●	●					
5.7 Promote conservation use of balancing areas and swales.	EA		U	●	●	●	●	●	Ongoing	Conservation use of balancing areas and swales promoted opportunistically via intra-agency liaison.	F

Issue 6: Investment by Severn Trent Water Limited to improve water quality

Objective: Improvement of the sewerage system to reduce environmental pollution by regulation, and through targeting future investment

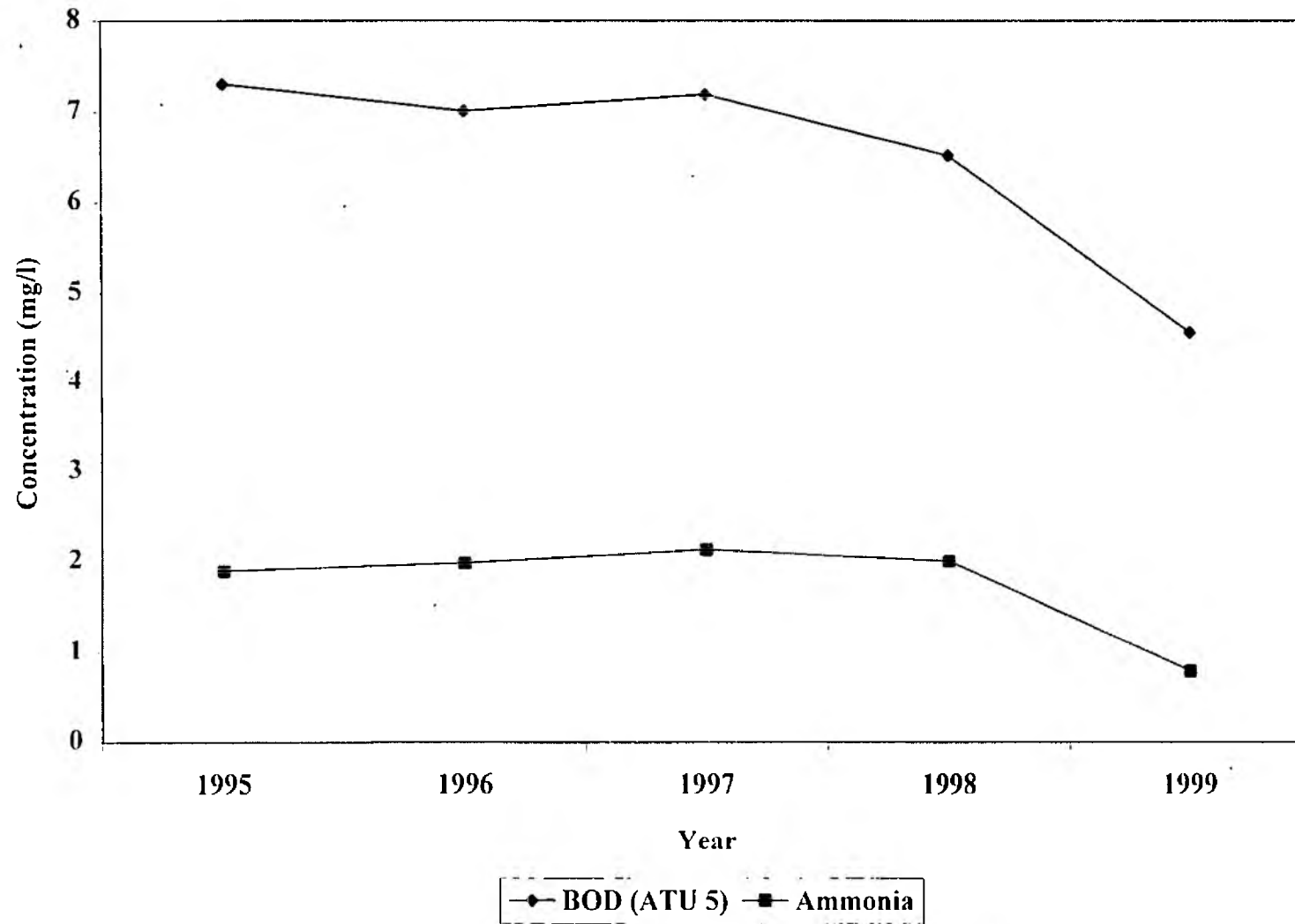
Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
6.1 Monitor implementation of the AMP2 improvement schemes listed below and assess water quality commencing 1 year after completion of the scheme:	EA		R							All improvement works now completed. Scheme performance being monitored.	F
Spring Road CSO, Walsall				•	•						
Green Lane CSO, Walsall					•						
Hildicks Crescent CSO, Goscote				•	•						
Brasshouse Lane CSO, Smethwick				•	•						
High Street/Brasshouse Lane CSO, Smethwick				•	•						
Stony Lane CSO, Smethwick				•	•						
Bradbury Road Pumping Station				•	•						

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
Black Country Trunk Sewer: A major improvement scheme which should improve the performance of a number of sewer overflows.	STW	EA	R	●	●					The Perry Hall to Saltley link sewer has been completed and opened in May 2000. A significant reduction in the number of foul sewer overflow events can be expected in the affected area.	P
Minworth STW					●					AMP improvements to Minworth and Coleshill STWs has resulted in significant improvements in downstream water quality in the River Tame, particularly in respect of BOD and ammonia levels (see graph).	P
Coleshill STW					●						
6.2 Complete submission for schemes to be considered by OFWAT under AMP3	EA		R	●						Submission completed 1999. The AMP 3 list has been finalised and agreed as part of the National Environment Programme. This will lead to the improvement of schemes listed at 6.3 below.	C

Actions	Responsibility		Total Cost (£K)	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	Future	Progress	Funding Status
	Lead	Other									
6.3 Monitor implementation of the AMP3 improvement schemes listed below and assess water quality commencing one year after completion of the scheme 95 CSOs/SSOs 3 Pumping Stations 4 storm tanks -Shustoke -Goscote -Coleshill -Minworth 7 continuous discharges -Barston STW -Balsall Common STW -Berkswell STW -Spring Bk STW (Earlwood) -Ray Hall STW -Willenhall STW -Shustoke STW	EA		R							The AMP3 programme is vast compared to AMP2. Initial designs for some schemes being considered.	P

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
6.4 Hockley Brook UPM	STW Ltd	EA Consultants	U	●	●	●				UPM scoping study complete. Additional survey work may be undertaken in context of full UPM study	U
6.5 Undertake a detailed Urban Pollution Management Study of the catchment	STW Ltd	EA Consultants	Timetable to be determined in 1999							Timetable remains to be determined.	P

River Tame at Lea Marston



The graph shows water quality in terms of Biological Oxygen Demand and total Ammonia for the River Tame at Lea Marston. This point is a General Quality Assessment sampling point and is located downstream of both Coleshill and Minworth sewage treatment works. It is clear that over the AMP 2 period improvements to the final effluent quality from both of these works has had a significant impact on water quality.

Issue 7: Lea Marston Purification Lakes

Objective: To review the future operation of Lea Marston Purification Lakes

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
7.1 Continue to review current operations and practice at Lea Marston with a view to achieving a sustainable operation	EA		R	●	●	●	●			Review has been completed. Works being undertaken in accordance with programme. A report covering 1999 is under preparation by consultants. Subject to review this report to be repeated in future years for comparative purposes.	F
7.2 Continue to examine upstream water quality and seek to eliminate pollution sources across the catchment	EA	STW Ltd, LAs	R	●	●	●				Investigations on-going – see 10.2 and 4.4. (THIS ACTION TO BE DELETED).	
7.3 Remediation of low dissolved oxygen events (see Issue 4)	EA		100	100	●	●	●	●		See 4.2. (THIS ACTION TO BE DELETED).	
7.4 Prepare a Conservation and Recreation Management Plan for the Lea Marston Lakes site and seek partnership opportunities for the development and management of non-operational areas	EA	WCC	U	●	●					Management Plan produced. Tree planting has been agreed in collaboration with Hams Hall Trust. A fishery has been developed in Coton Hall Lake. Extensive signing is being created to ensure safe access.	P

Issue 8: River Flows and Water Quality in the River Blythe

Objective: To protect and enhance a Site of Special Scientific Interest and safeguard an important source of drinking water

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
8.1 Monitor for the presence of pesticides in the catchment and implement actions to deal with detected problems at source	EA		R	●	●	●	●	●		Report nearing completion. Following an earlier awareness campaign initial findings suggest some reduction in the frequency with which pesticides concentrations exceed 0.1 mg/l.	F
8.2 Continue nitrate and phosphate monitoring in particular d/s of the Eastcote Brook	EA		U	●	●	●	●			Model awaiting completion. Consideration is being given to enhanced sewage treatment at up to four sewage works within the Blythe catchment to further reduce nutrient (nitrate and phosphate) discharge.	F
8.3 Review results of earlier diatom and macrophyte survey. Carry out further investigations where necessary (following improvements to Barston STW)	EA		U	●	●	●				Sampling of macrophytes and diatoms twice per year is ongoing. Results to be assessed after year 2000 samples have been taken and analysed. Recovery from the excess nutrient loading is expected to be a long process.	F
8.4 Agree a continuous operating regime at Earlswood Lakes with British Waterways	EA, BW		R*	●	●					Memorandum of understanding agreed. Awaiting signature from external parties.	N/A

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
8.5 Implement recommendations of Water Level Management Plan	EA		U	●	●	●	●			Completed.	C
8.6 Review land spreading of sewage sludge and other wastes in the Blythe catchment	EA	BW, Riparian Owners	U	●						Not completed. Now expected during 00/01.	P
8.7 Agree a conservation strategy for the River Blythe SSSI and implement its recommendations	EA, EN	LAs, Riparian Owners, BW	U	●	●	●	●	●	Ongoing	Conservation strategy for the River Blythe SSSI agreed. Implementation of recommendations ongoing.	P

Issue 9: Excess Nutrient Levels in Sutton Park Pools

Objective: To protect the water environment in Sutton Park, Site of Special Scientific Interest and National Nature Reserve

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
9.1 Continue chemical monitoring and sewer event monitoring upstream of Longmoor and Bracebridge Pools	EA	STW Ltd	R*	●	●					Significant reduction (none recorded), in overflow events to Sutton Park as a result of AMP 2 work at Bridle Lane and Thornhill Park. Water Quality Monitoring to start April 2000 for 12 month period.	F
9.2 Carry out feasibility study on construction of silt traps/settling pools on all surface water inflows to the park	B'ham CC, STW Ltd	EA, EN	U*	●	●					No progress	P
9.3 Investigate methods for nutrient removal from pools	B'ham CC	EN, EA	U*	●	●					No progress	P
9.4 Implement recommendations from existing Water Management Plan	B'ham CC	EN, EA	U*	●	●					No progress	P
9.5 Produce and implement Water Level Management Plan	B'ham CC	EN, EA	U*	●	●					Water Level Management Plan produced. Implementation subject to partnership approach.	P
9.6 Review associated abstraction licences in the vicinity of Sutton Park	EA	SSW	U	●						Licences issued in 1993 for two public water supply sources were time limited for seven years in order to determine any long term effects on water levels towards Sutton Park. The licences will be reviewed in the next 4-5 months	P

Actions	Responsibility		Total Cost (£K)	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	Future	Progress	Funding Status
	Lead	Other									
9.7 Consider sewerage improvements (tank storage) to improve drainage within the park, reducing the potential for sewer surcharging	STW	EA			●	●				Public consultation taking place	P

Issue 10: The Current Quality of Rivers and Canals

Objective: To improve river water quality to meet strategic objectives and to make further water quality improvements

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
10.1 Investigate failures in water quality caused by dangerous substances on the following reaches: R Tame Wolverhampton Arm, Bescot -Oldbury Arm (Lea Bk), d/s Brassways - u/s Ford Bk Bescot - d/s Minworth STW - d/s Coleshill STW Ford Bk -- d/s PottersClay Sneyd Bk – AnsonBridge Rough Bk – Rushall Walsall Canal – Pleck Rd Chemical Arm Canal	EA		U	●	●	●				<p>No progress</p> <p>Report completed; post project appraisal (delete)</p> <p>As below</p> <p>Awaiting remediation of discharges from old landfill sites to reduce copper levels</p> <p>No explanation found – further sampling carried out</p> <p>Completed (delete) Awaiting remediation of discharge of minewater at Slacky Lane nickel level</p> <p>Some zinc discharges have already been removed and negotiations with a company to direct their consented discharge to foul sewer are continuing</p> <p>To be infilled permanently; no action envisaged (delete)</p>	C

Actions	Responsibility		Total Cost (£K)	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	Future	Progress	Funding Status
	Lead	Other									
10.2 Investigate the reasons for RQO failures at the following sites: R Tame - Coton Lane - Kingsbury Road Tipton Brook - Alexandra Rd Griffins Brook - Bourville - Stirchley Bourn Brook - Pershore Road Plants Brook - Pype Hayes Stubbers Green River Blythe - Ryton End - Sandalls Bridge Eastcote Brook - Hampton Bridge River Cole - Trifford Mill	EA		U							<p>Move to Burton, Nuneaton and Tamworth LEAP</p> <p>No progress</p> <p>No progress</p> <p>No progress</p> <p>Investigative sample results are awaited to further isolate the source of high BOD</p> <p>No progress</p> <p>No progress</p> <p>No progress</p> <p>No progress</p>	

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
B'ham/Wolv Canal - Sheepcote St - Western Rd Bridge Tame Valley Canal - Holloway - Salford Bridge - Newton Rd Walsall Canal - Bull Bank Lane - Ryders Green Lane Ridgeacre Canal - Phoenix St Grand Union Canal - Lapworth - Catherine de Barnes Stratford on Avon Canal - Hockley Heath Daw End Branch Canal - Aldridge - Clayhanger Wyrley and Essington Canal - Slacky Lane					•	•				Eutrophication Action Plans have been undertaken and funding has been applied for. Progress delayed subject to outcome of funding bid	

Actions	Responsibility		Total Cost (£K)	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	Future	Progress	Funding Status
	Lead	Other									
New stretches added under 10.2										No progress unless otherwise stated	
Slacky Lane					●	●					
-Rough Brook					●	●					
River Bourn					●	●					
-u/s Shustoke					●	●					
River Cole					●	●					
-Stratford Road					●	●					
-Coleshill					●	●					
Hatchford/Kingshurst Bk					●	●					
River Rea					●	●					
-Northfield					●	●					
Hockley Bk					●	●				UPM scoping study completed	
-Woodburn Road					●	●					
River Tame,					●	●					
Wolverhampton Arm					●	●					
-d/s Waddens Bk					●	●					
Grand Union Canal					●	●					
-Nechells					●	●					
Worcester Birmingham Canal					●	●					
-Persore Road					●	●					
Titford Canal					●	●					
-Wolverhampton Road					●	●				BW investigating as lead partner	

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
10.3 Upgrade river and canal objectives, where justified, to protect water quality	EA		R	Qualifying stretches and timetable to be announced following national review of RQO determination						The Agency is developing a policy to allow review of RQOs. This policy will need DETR approval. The AMP2 improvements at Minworth and Coleshill may lead to a raising of the RE class downstream of Lea Marston works. A report is being produced assessing the water quality monitoring data available with regard to the improvement schemes. Future monitoring programme agreed. Increased and year round abstraction at Shardlow being sought by STW	F
10.4 Assess the effectiveness of canal de-silting operations following Project Aquarius and Digbeth Canal improvement schemes	BW	EA	U	•	•						F
10.5 Formulate and carry out investigative work resulting from the organics survey report	EA		U	•	•						F

Issue 11: The Effect of the West Midlands – Tame Catchment on Downstream Water Quality

Objective: To improve river water quality from the catchment so that it does not compromise downstream quality requirements

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
11.1 Formulate and carry out investigative work resulting from the organics survey report	EA		U	●	●					(THIS ACTION TO BE MOVED TO 10.5)	F
11.2 Review consents to ensure compliance with EC Directives: - Urban Waste Water Treatment - Dangerous Substances - Habitats - Groundwater - Fisheries - Surface Water Abstraction	EA	STW Ltd, Discharge consent holders	U	●	●	●	●	●	2005	Reviews for all the relevant consents to be undertaken between 2000 – 2005 as required by EU legislation and AMP 3 requirements. Major relevant issue of Minworth and Coleshill cosent review already completed 3/2000. In future years this will not be reported via the LEAP as it has become part of the Agency’s routine activities. (THIS ACTION TO BE DELETED)	
				●	●	●	●	●	2005		
				●	●	●	●	●	2005		
				●	●	●	●	●	2005		
11.3 Investigate and seek to control the impact of diffuse run-off into the catchment following the Tame initial UPM study. Consider: - Control of urea from motorways - Urban run-off - Contaminated land drainage - Waste management companies	EA	HA, STW Ltd, LAs, Industry	U	●	●	●	●	●		See other issues/actions for progress See 4.4 See Issue 4 See Issue 12 See Issue 18 (THIS ACTION TO BE DELETED)	

Actions	Responsibility		Total Cost (£K)	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	Future	Progress	Funding Status
	Lead	Other									
11.4 Carry out catchment surveys to detect sources in 11.3	EA		U	●	●	●	●			See 11.3 above. (THIS ACTION TO BE DELETED) (THIS ACTION TO BE MOVED to 6.5)	
11.5 Undertake a detailed Urban Pollution Management Study of the catchment	STW Ltd	EA, Consultants	U	Timetable to be determined in 1999							

THIS ISSUE TO BE REMOVED

Issue 12: Contaminated Land

Objective: To remediate and minimise the impact of land contamination on the environment and work towards its beneficial re-use

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
12.1 Progress remediation of contaminated sites											
a. Slacky Lane - Investigate all potential remediation schemes and determine costs of practical options	EA, Walsall MBC		U	●	●	●				Good progress was made with all relevant partners until the end of last year when changes in the law required the Agency to review all the sources of funding. Work to resolve this issue can begin again in early summer 2000.	P
- Seek funding	EA, Walsall MBC	Landowners, Developers	U		●	●					
- Prepare joint development and funding briefs with relevant partners	EA		U	●	●	●					
- Implement steering board recommendations											
b. Bentley Mill Lane - Undertake further investigations to establish contaminant pathways	EA	Landowners, Developers	30*	15	15					Good progress made with potential developer seeking planning permission which includes provision for collection and treatment of contaminated groundwater.	P
- Work with potential developers to promote remediation at the site	EA, Walsall MBC	Landowners, Developers	U	●	●						
- Where appropriate seek funding to undertake remediation	EA, Walsall MBC	Landowners, Developers	U	●							
- Set up partnership group	EA, Walsall MBC	Landowners, Developers	U	●							

Actions	Responsibility		Total Cost (£K)	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	Future	Progress	Funding Status
	Lead	Other									
12.2 Prepare and deliver a campaign to inform stakeholders of their and Agency obligations under the Contaminated Land Provisions	EA	LAs	U	●	●	●				Introduction of the Contaminated Land Provisions has been delayed until April 2000. Whilst a formal campaign has not been undertaken, all Local Authorities in the LEAP area have been contacted with a view to developing a partnership approach. Meetings have been held with West Midlands LA stakeholders. Seminars/workshops have been run by the Agency in Midlands Region and a Process Handbook produced for use by LAs.	F

Issue 13: The Impact of Rising Groundwater beneath Birmingham

Objective: To identify the extent, risks and potential uses of rising groundwater beneath Birmingham

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
13.1 Set up working group to pursue available development options	EA, B'ham CC	Other interested parties	U	●						Group to be set up once Agency contingency plan has been finalised	P
13.2 Continue development of a contingency plan for the issue of rising groundwater. Generate increased public awareness of the issue	EA, B'ham CC	Members of working group	5*	5						Draft plan developed	P
13.3 Liaise with and assist potential abstractors to ensure the best use of a valuable resource	EA	Potential Abstractors	R*	●	●	●	●	●	Ongoing	There are now a number of applicants who are interested in developing sources within the Birmingham aquifer. Discussions are ongoing with all applicants	P

Issue 14: Baseflow Contributions to the River Tame

Objective: To quantify the interaction between surface waters and groundwaters in the Coal Measures aquifer of the West Midlands Tame

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
14.1 Review existing hydrogeological/hydrological information and make recommendations for further works	EA		15			15				Funding constraints have deferred the running of this project by at least a year.	P
14.2 Resulting from the review - Drill observation boreholes - Undertake gauging survey	EA		69			9	60			See above	
14.3 Reinstall James Bridge Gauging Station on the Wolverhampton Arm of River Tame	EA		150	Timetable to be determined for completion date in 2003						Level gauges installed. Timetable for station reinstatement to be advised.	F
14.4 Define water requirements within the aquifer and consider future demands	EA		U		•	•	•	•	•	(Action not programmed in 99/00).	

Issue 15: Water Resources Development Strategy for Canals

Objective: To produce a water resources strategy to maintain sufficient and efficient use of supplies in the local canal systems

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
15.1 Production of a Water Resource Development Strategy											
Review of draft National Water Strategy published by BW in December 1997	BW	EA	U	●						More details required. Discussions ongoing with BW.	P
Undertake hydrological modelling of the canal system to confirm the current resource calculation	BW	EA	U	●	●	●	●			Hydrological model produced for the canals in the Midlands Region covering the Birmingham Canal Navigation and the arms going outwards to Droitwich, Leamington, Stratford, Wolverhampton, Coventry, Stourport, Worcester, Tamworth and Stafford, with linkage to Grand Union reservoirs. This model has a 30 year timescale with runoff sequences based on Hysim Runoff Model.	P
Where appropriate re-negotiate operating agreement to cover abstractions from sensitive sources	BW, EA		U	●	●	●				Review of some feeders to the system have been undertaken. Memoranda of understanding for the River Swift and the Saredon Brook are being produced.	P

Issue 16: Litter and the aesthetic pollution of rivers and canals

Objective: To reduce litter and improve the overall appearance of rivers and canals

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
16.1 Continue development of GQA aesthetics monitoring programme	EA		U	Timetable to be determined						This years survey is being undertaken for the Y2K State of the Environment report. There are no plans to do it every year	F
16.2 Implement GQA aesthetics monitoring programme as required	EA		U	Timetable to be determined							
16.3 Promote clean up initiatives through: - The encouragement of stewardships by voluntary groups and others - The disposal of unauthorised tipped material and reduction of its future re-appearance through site management - Promote measures to reduce sewage derived debris by reduction at source	EA, LAs	TBG, Groundwork, BW	U	•	•					Progress delayed	P
	EA, LAs, BW, Riparian Owners		U	•	•						
	STW Ltd	EA, TBG, Product Mfrs	U	•	•						
16.4 Develop a local education strategy and establish partnerships to deliver it	EA	LAs, Community Groups, WTs, Others	U	•	•					No progress made to date. Action to be taken forward in the context of the Area Education Focus Group as resources allow.	P

Issue 17: Enclosure of Waste Transfer Activities

Objective: To reduce the nuisance associated with the operation of commercial transfer stations

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
17.1 Undertake a review of all licences for waste transfer stations and prioritise the sites in terms of the need for enclosure	EA		R	●						All open-site transfer stations identified.	
17.2 Promote the enclosure of waste transfer activities	EA	Operators, Planning Authority	U	●	●					Operators contacted and potential for enclosure discussed.	
17.3 Modify Waste Management Licences at the sites concerned	EA		U	●	●					No action taken or now intended.	

THIS ISSUE TO BE REMOVED

Issue 18: Little Packington Landfill Site

Objective: To assess the possible impact of Little Packington Landfill Site

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
<p>18.1 Assess impact of site on River Blythe and Colehill and Bannerly Pools SSSIs by:</p> <ul style="list-style-type: none"> - Review of existing/ current data - Use of risk assessment model (developed by independent consultants with input from Agency's Regional Groundwater section) - Sampling and analysis from appropriate locations 	EA, Operator		R	•						Groundwater and surface water surveys carried out to date indicate no significant current impact. Verification of site risk assessment model by Regional staff and site operators consultants ongoing. A Regulation 15 Review of the site is imminently underway.	F
			U*	•						Limited progress on development of a groundwater flow model in 1999, no contact with EA since then. Status and possible future use of model unknown at present.	
			U	•	•					NB. Model is being prepared to assess groundwater flow and possible water quality/quantity impacts from the site NOT specifically to assess impact on SSSIs. It is planned to use the model in assessing risks of different leachate levels within the site to groundwater and surface water.	
<p>18.2 Assess impact and potential movement of PCBs from landfilled PCB bearing wastes</p> <ul style="list-style-type: none"> - Review existing data - Use of risk assessment model - Additional sampling/ analysis from appropriate locations 	EA, Operator		R	•						Surveys to date indicate no current significant impact.	F
			U*	•							
			U	•	•						

Actions	Responsibility		Total Cost (£K)	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	Future	Progress	Funding Status
	Lead	Other									
18.3 Develop and implement a leachate management strategy using, in part, the outputs from the above computer models (see 18.1)	EA, Operator, EN	STW Ltd	U	●	●					Ongoing, subject to verification of the Site Risk Assessment Model.	P
18.4 Implement strategy and monitor	EA, Operator	EN				●	●	●	Ongoing	Applications submitted for direct discharge of treated leachate to enable maintenance of leachate levels within the site. Ongoing as above.	U F

Issue 19: Fly-Tipping

Objective: To develop a consistent approach to fly-tipping within the LEAP area. To maximise limited resources, and to develop public awareness of the problem

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
19.1 Carry out campaigns to publicise the Duty of Care targeted at the following sectors:	EA	LAs	U								
- Registered Waste Carriers				•						Study undertaken. Contacts with a number of newspapers has led to checking of Waste Carrier Status by advertisers (Work not yet undertaken)	F
- Commercial Premises				•	•					Study undertaken which highlighted the need to raise awareness amongst waste tyre producers of Duty of Care (Work not yet undertaken)	F
- Waste Tyre producers					•						
- Itinerant community					•						
19.2 Review the results of the above campaign and repeat as necessary based on the incidents of fly-tipping	EA, LAs		U	•	•	•	•	•		Further work planned, not yet begun at present, with Waste Tyre producers and local newspapers in respect of advertising of Registered Waste Carriers	F
19.3 Liaise with local authorities and others to implement the Agency and local authorities' protocol on fly-tipping	EA, LAs, Police		U	•	•					Agency actions compliant with protocol. Liaison ongoing to promote protocol as widely as possible	F

Issue 20: Sustainable Waste Management

Objective: To reduce the amount of waste produced in the West Midlands-Tame area, 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 and energy generation

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
20.1 Work closely with local authorities, industry and commerce to identify and implement joint initiatives and working arrangements	EA, LAs, Local Businesses		R*	●	●	●	●	●		Ongoing regular liaison between EA and West Midlands Operations Group. Agency staff also contribute to LA21 groups and meetings of Local Authority Environmental Co-ordinators. Agency staff are instrumental in establishing other initiatives in the area such as Waste Minimisation Clubs and those specific to industrial business parks.	P
20.2 Following completion of the waste survey, provide data collected to LAs to assist them in developing their waste strategies and local plans	EA		R	●	●	●				The survey was completed in March 1999. The data from the survey will be available from mid 2000.	N/A
20.3 Monitor and report on local household, industrial and commercial recycling figures, relating to the area and to historical data	Audit Commission, EA, LAs		10*	●	●	●	●			Ongoing information obtained is shared by all three lead bodies	N/A

Issue 21: Air Quality Monitoring

Objective: To establish the current level of air quality monitoring in the West Midlands-Tame LEAP area

No LEAP actions

Regional Progress

Issue 22: Industrial Heavy Metal Pollution in Pleck Walsall

Objective: To assess the historical and on-going levels of heavy metal pollution in and around the Pleck area of Walsall in order to address public concerns and provide a sound basis for proportionate action by health and environmental authorities and industry

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
22.1 Compile and review the available data on heavy metal pollution in the area	EA	LA		●						Available data has been compiled and reviewed.	C
22.2 Directional air sampling programme	EA		15*	●						Sampling undertaken over 12 month period.	C
22.3 Soil sampling and analysis	EA			●						Two sets of soil samples have been undertaken – in early and late 1999 and results analysed.	C
22.4 Preparation and publication of report	EA		R	●						Report due to be completed by end of June 2000. Scale of report reduced due to plant closures.	F
22.5 Assessment and development of action plans	EA, LA	LA, Health Authority, Industry	R	●	●					Closure of IPC process has led to a pause in the programme to look at developments in air quality	U
22.6 Implementation of action plans	EA, LA	Health Authority, Industry	R		●	●	●	●	Ongoing	As above	U

Issue 23: Odour Problems in Sandwell

Objective: To improve responses to complaints regarding odour problems from industry in the Sandwell area

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
23.1 Establish joint working group on odour problems	EA	Sandwell MBC	R*	●						Some significant improvements have been achieved via day to day IPC regulation. However limited resources and the low priority of the issue have meant that progress has not been made, nor is progress likely	
23.2 Review complaint records held by both enforcing authorities	EA, Sandwell MBC		R*	●							
23.3 Survey of potential odour sources to categorise odour types and locations affected	EA, Sandwell MBC		R*	●	●						
23.4 Report issued, and joint methodology for odour source identification established	EA, Sandwell MBC		R*		●						
23.5 Modify Authorisations (when necessary) to control identified sources	EA, Sandwell MBC		R*			●	●	●			

THIS ISSUE TO BE REMOVED

Issue 24: Review of Flood Defences on the River Tame

Objective: To review and improve flood defences on the River Tame

Actions	Responsibility		Total Cost (£K)	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	Future	Progress	Funding Status
	Lead	Other									
24.1 Complete the ongoing mathematical modelling exercise to determine flood levels on the whole length of the River Tame including a review of the operation of the Bescot controlled washlands	EA		25	25	2					Flooding in August 99 required the model to be recalibrated to ensure accuracy for predicting larger floods. Model will be delivered early 00/01 after which a review of the operation of the washlands will take place	F
24.2 Complete ongoing asset survey report of the River Tame Flood Defences	EA		368	148	220					Visual Condition Interim Report delivered Jan 2000. Defences in poor condition have either been remedied, programmed or recommended for renewal	F
24.3 Undertake capital or revenue works to provide appropriate standard of flood protection for River Tame Flood Defences	EA		U		●	●	●	●		Requirement for capital / revenue works will be established following delivery of River Tame mathematical model.	U
24.4 Reinstate James Bridge Gauging Station (See also 14.3)	EA		150	Timetable to be determined for completion in 2003						See 14.3 (THIS ACTION TO BE DELETED)	

Issue 25: The Proliferation of Surface Water Balancing Systems in Solihull

Objective: To assess the effects of the proliferation of surface water balancing systems in Solihull

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
25.1 Use existing mathematical model to assess the potentially adverse effects of any proposed balancing systems	EA	Solihull MBC	U	●	●	●	●	●	●	Existing model incorporates all existing and planned balancing systems. No further balancing has been proposed as yet. Model to be used as required.	F
25.2 Develop a policy for surface water balancing in the Blythe catchment	EA	Solihull MBC	U	●	●					This action has not been progressed due to Solihull MBC losing their agency with STW and consequential staff changes. Relationships are now being forged with new staff.	N/A

Issue 26: The Future Management of Park Hall Farm

Objective: To review the future management of Park Hall Farm

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
26.1 Produce a Management Strategy to include further development of the Tame Walkway	UWT, EA	LAs	15*	10	5					No progress	P
26.2 Continue negotiations with UWT on leasing the site	EA, UWT		R*	●	●					Discussions progressing very slowly.	P

Issue 27: Water Level Management Plans

Objectives: To review the requirement for water level management plans within the LEAP area
Seek out any shortfalls and encourage the relevant authorities to take the necessary action

Actions	Responsibility		Total Cost (£K)	99/00	00/01	01/02	02/03	03/04	Future	Progress	Funding Status
	Lead	Other									
27.1 Update list of SSSIs requiring Water Level Management Plans	EN	EA	R*	●						Completed.	C
27.2 Discuss any outstanding Water Level Management Plans	EN	EA	R*	●						MAFF produced additional guidance to operating authorities in October 99 indicating District Councils were only responsible for WLMPs on sites they owned or had carried out works which affected the sites.	P
27.3 Produce Water Level Management Plans	EN, LA	EA	U	●						EN sites completed. The additional MAFF guidance of October 99 resulted in there being very few sites for the LAs and they are aware of them.	P
27.4 On completion of Agency plans begin work on action lists	EA	EN	U	●						Action List completed.	C
27.5 Full plan review to be undertaken in 2002	EN	EA, LA	U				●			The additional MAFF guidance has significantly reduced the LAs involvement.	P

Issue 28: Extend the Flood Warning Service within the West Midlands – Tame Area

Objectives: 1 To increase the number of recipients of direct warnings

2 To increase the areas in which a full flood warning scheme 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 the existing flood warning service area	EA		R		●		●		Revisit periodically		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 -Implement programme	EA		R		●						
					●	●	●	●	ongoing		F
28.3 Extend area covered by a full flood warning service	EA		U			●	●	●	ongoing		F

5.0 Future Reviews

We will review progress again next year and aim to publish our second Annual Review of the West Midlands –Tame LEAP in June 2001.

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