

local environment agency plan

LOWER MERSEY

ANNUAL REVIEW

FEBRUARY 1999



ENVIRONMENT AGENCY

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ENVIRONMENT
AGENCY

Lower Mersey Local Environment Agency Plan



ENVIRONMENT AGENCY



CONTENTS

	Page
The Vision	2
1 The Environment Agency	3
2 The Local Environment Agency Plan (LEAP) Process	5
3 Issues and Options for Action	6
Appendices: Glossary	
What the Agency does and does not do	

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THE VISION

The Environment Agency has a vision of "a better environment in England and Wales for present and future generations."

From this, the vision for this Local Environment Agency Plan (LEAP) area is of a sustainable environment capable of supporting diverse natural species and habitats, providing opportunities for recreational usage and access, and one which is valued by local people.

The Environment Agency will work in partnership with area users to realise the full environmental potential of the Lower Mersey area and fulfil the vision. The aim will be to create and maintain a balanced environment which will meet the Agency's overall aim of contributing to the worldwide goal of Sustainable Development, which has been defined as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs". The Agency will continue to maintain the close working relationship with the Mersey Basin Campaign, to pursue this environmental initiative.

The vision for the area is centred on an environmental quality that will have improved to a level that will support a healthy aquatic environment, and diverse species and habitats

The treating, keeping, movement and disposal of controlled waste, in the area, will be regulated so as to prevent pollution of the environment, harm to human health, and serious detriment to amenity. Controlled waste in the area will be managed in accordance with the principles of sustainability, in particular by reducing the amount of waste produced, making the best use of the waste that is produced, and choosing waste management practices which minimise the risk of immediate and future environmental pollution and harm to human health.

Watercourses will be managed to provide flood protection whilst maintaining naturally diverse river corridors. Sea and tidal (coastal) defences will be maintained through a co-ordinated strategy that ensures adequate flood protection whilst maintaining and improving the ecological diversity of the area. Wherever physically possible culverts will be opened to remove physical barriers, for wildlife, from the watercourses. New development will be regulated by Agency controls, and through liaison with local planning authorities, to provide open river corridors with development sited to reduce the risk of flooding.

Surface and groundwater resources will be managed to enable sustainable cost-effective use that will ensure no unacceptable deterioration in quality or detriment to any existing water users, watercourses or other groundwater dependant features.

The watercourses will support wide recreational and amenity uses, such as, angling, water sports and walking with continuous green corridors. The ecological value of the area will improve, landscape quality will be conserved and restored and cultural heritage, including archaeological sites, will be protected.

In achieving this vision of the Lower Mersey area the Agency will continue to advise and work in partnership with organisations and enforce, where necessary, the relevant regulations.

1. THE ENVIRONMENT AGENCY

The Environment Agency has a wide range of duties and powers relating to different aspects of environmental management. It is required and guided by Government to use these duties and powers in order to help achieve the objective of sustainable development. The Brundtland Commission defined sustainable development as *"... development that meets the needs of the present without compromising the ability of future generations to meet their own needs"*.

At the heart of sustainable development is the integration of human needs and the environment within which we live. Indeed the creation of the Agency itself was in part a recognition of the need to take a more integrated and longer-term view of environmental management at a national level. The Agency therefore has to reflect this in the way it works and in the decisions it makes.

Taking a long-term perspective will require the Agency to anticipate risks and encourage precaution, particularly where impacts on the environment may have long-term effects, or when the effects are not reversible. The Agency must also develop its role to educate and inform society as a whole, as well as carrying out its prevention and enforcement activities, in order to ensure continuing protection and enhancement of the environment.

Although the Agency only has duties and powers to protect some environmental resources, it will need to contribute to other aspects of environmental management even if these are, in the first instance, the responsibility of others. The Agency can only do this effectively by working in partnership with and through others in order to set common goals and to achieve agreed objectives.

The Agency is committed to a programme of Local Environment Agency Plans (LEAPs) in order to produce a local agenda of integrated action for environmental improvement. These LEAPs will also allow the Agency to deploy its resources to best effect and optimise benefit for the local environment.

The Agency's aims are to:

- achieve major and continuous improvements in the quality of air, land, and water.
- encourage the conservation of natural resources, animals and plants.
- make the most of pollution control and river-basin management.
- provide effective defences and warning systems to protect people and property against flooding from rivers and the sea.
- reduce the amount of waste by encouraging people to re-use and recycle their waste.
- improve standards of waste disposal
- manage water resources to achieve the proper balance between the country's needs and the environment.
- work with other organisations to reclaim contaminated land.
- improve and develop salmon and freshwater fisheries.
- conserve and improve river navigation (not in this area).

- tell people about environmental issues by educating and informing.
- set priorities and work out solutions that society can afford.

To achieve these aims, the Agency must work with, or seek to influence, central government, local government, industry, commerce, farming, environmental organisations, riparian owners and the general public.

Successful management of the environment requires consideration of a wide range of interests and requirements that may sometimes be in conflict. The Agency will manage the environment through our main functions, which are:

- pollution prevention and control;
- waste minimisation;
- management of water resources;
- flood defence;
- improvement of salmon and freshwater fisheries;
- conservation;
- navigation (not in this area);
- use of inland and coastal waters for recreation.

Appendix 2 gives more details of our responsibilities and those of other organisations.

What a LEAP is for

A 'LEAP' is the Environment Agency's integrated local management plan, for identifying and assessing, prioritising and solving local environmental issues related to the Agency's functions, taking into account the views of the Agency's local customers. The outcome of the process is a local agenda of integrated action for environmental improvement in order to optimise benefit for the local environment.

The Agency is the competent authority for managing and regulating the water environment, for regulating waste, major industrial processes, and contaminated land. We have duties to protect and enhance biodiversity in everything we do, to protect landscape and heritage, and to promote inland navigation and recreation. It is these areas that relate to our functions and dictate the fields in which we can raise specific issues.

2 THE LOCAL ENVIRONMENT AGENCY PLAN (LEAP) PROCESS

The Agency has embarked on this process to:

- Be open and accountable
- Develop liaison and partnerships
- Raise awareness of environmental issues
- Prioritise issues and establish plans for improving areas.

There are three stages to achieve this:

- The Local Environment Agency Plan Consultation Report (a separate Environmental Overview, available on request contains background information)
- The Local Environment Agency Plan five year Action Plan
- The Annual Review.

Constraints

The completed plan will inevitably be subject to some limitations.

To ensure improvements and overcome the problems in the area, actions, which in many cases are the responsibility of other organisations and individuals, will be necessary. The Agency does not have the powers to make the necessary changes, but will use its influence to improve the state of the area wherever possible.

How this plan fits

The South Area of North West Region has been split into seven LEAP areas. This plan is bounded by the Weaver/Dane, Mersey/Bollin and Sankey/Glaze LEAPs in the South Area, the Alt/Crossens LEAP in Central area and the Dee LEAP in the Environment Agency Wales. There will be LEAPs in place to cover the whole of England and Wales by the end of 1999.

Contacting the Agency

If you would like to comment on this LEAP, or know more about this and other LEAPs, please contact:

Environment Planner (LEAPs)

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3 ISSUES AND OPTIONS FOR ACTION

The issues we are putting forward within this LEAP are environmental problems that fall within the areas of responsibility of the Agency. They have been grouped according to the Agency's principal and immediate concerns as set out in our document 'An Environmental Strategy for the Millennium and Beyond' Which are:

- Addressing Climate Change
- Improving Air Quality
- Managing our Water Resources
- Enhancing Biodiversity
- Managing our Freshwater Fisheries
- Delivering Integrated River Basin Management
- Conserving the Land
- Managing Waste
- Regulating Major Industries

Issue List

3.2 Addressing Climate Change

No specific Issues

3.3 Improving Air Quality

No specific Issues

3.4 Managing our Water Resources

- Issue 1. Effective use of water resources.
- Issue 2. Management of agricultural water usage.

3.5 Enhancing Biodiversity

- Issue 3. The need for continued habitat improvement and retention of existing important habitat types to protect and increase biodiversity.
- Issue 4. Invasive non-native pest species.
- Issue 5. Extent of channelised and over-managed watercourses creating loss of habitat and amenity.

3.6 Managing our Freshwater Fisheries

Issue 6. Lack of sustainable fish populations.

3.7 Delivering Integrated River Basin Management

- Issue 7. Adverse impact of discharges from wastewater treatment works (WwTW).
- Issue 8. Adverse impact from industrial sites and trading estates.
- Issue 9. Adverse impact of contaminated surface water discharges.
- Issue 10. Adverse impact from overflows on the sewerage network.
- Issue 11. Pollution and loss of habitat caused by agricultural activity.
- Issue 12. Deterioration in groundwater quality due to intrusion of saline waters.
- Issue 13. Increasing numbers of properties at risk from flooding, due to development of the flood plain.
- Issue 14. Rising groundwater levels increasing the risk of pollution and flooding.
- Issue 15. Adverse impact of urban run-off and drainage from major roads and motorways.
- Issue 16. Adverse impact on water quality from private sewerage and sewage systems.
- Issue 17. Culverts causing flood risk and loss of habitat.
- Issue 18. Poor access to watercourses for maintenance works and recreational activities.

3.8 Conserving the Land

Issue 19. Adverse impact of contaminated land on the environment.

3.9 Managing Waste

- Issue 20. Illegal waste disposal activity.
- Issue 21. Lack of awareness of sustainable waste management.

3.10 Regulating Major Industries

Issue 22. Adverse impact of industrial discharges on water quality.

Key to issue tables:

- > Greater than.
- Action in the year indicated.
- R Recurring, non-additional cost to annual budgetary provision.
- U Unknown cost at this time.
- U(i) Individual costs will be identified and agreed during negotiations.
- U(ii) Capital costs will be identified during investigations and surveys.
- K £1,000.

3.2 Addressing Climate Change

Climate change is an issue that has no boundaries and is truly international in scale. Within a local planning document such as a LEAP it can only be addressed by looking at local contributions to a global problem. Addressing climate change in the UK will require action by everyone, from the Department of the Environment, Transport and Regions, through the Local Authorities, to business and every member of society. As part of its overall aim of contributing to sustainable development, the Agency is addressing climate change as part of its work. The Agency has set this as one of the key themes in its Environmental Strategy that includes the following objectives:

- help to ensure that the Government's greenhouse gas emission reduction targets are met;
- develop methods to improve our estimates of the emissions of methane into the atmosphere from landfill sites;
- promote tax incentives to reduce energy production from burning fossil fuels;
- set an example by reducing our own energy and fossil fuel consumption;
- invest in research to predict the likely effects of climate change on the environment of England and Wales, and how to manage them;
- provide improved mapping of low-lying coastal areas at risk from sea-level changes;
- develop techniques to identify changes in plant life, using remote sensing techniques, to measure the effects of different weather patterns in sensitive areas; and
- contribute our knowledge and expertise to national and international forums dealing with climate change.

Much of the Agency's existing work and the proposals contained within this plan will help to achieve some of these objectives. For example, we are working to reduce our vehicle use and to improve the efficiency of our vehicles to reduce releases of the gasses that contribute to climate change. Agency staff in the area have also been looking at their own impacts by taking part in a one year project called Action at Home, which is part of the Global Action Plan. This was a voluntary scheme aimed to encourage positive action for the environment, by encouraging people to change their everyday activities.

We have not, however, identified any specific local issues relating to addressing climate change and therefore there are no issues in this section. As previously stated many of the issues raised in this LEAP have an impact on climate change, but if you can think of specific issues in this area please let us know.

3.3 Improving Air Quality

Air quality is another issue that knows no boundaries. Its freedom to travel means that problems can spread away from points of origin, although specific problem areas can be created. In a local planning document it is possible to address specific points of origin and problem areas, but it is not possible to address problems coming in from outside the area. On a local scale responsibility for air quality is split between the Agency and Local Authorities. The Agency is responsible for the regulation of major industries, whilst local authorities regulate minor industries, control domestic smoke, evaluate local air quality and produce local air quality management plans. As part of its overall aim of contributing to sustainable development, the Agency is addressing climate change as part of its work. The Agency has set this as one of the key themes in its Environmental Strategy that includes the following objectives:

- help the government deliver its Air Quality Strategy;
- ensure emissions from the major industrial processes to the atmosphere are reduced;
- ensure specific emissions of sulphur dioxide and oxides of nitrogen, which contribute to acid rain are reduced;
- discourage the use of solvents in industry, which contribute to the production of ozone, the major photochemical pollutant; and
- set an example in reducing emissions from vehicles by reducing our own mileage and increasing the use of public transport.

Parts of the Agency's existing work and the proposals contained in this plan will help achieve some of these objectives.

3.4 Managing our Water Resources

ISSUE 1 INEFFECTIVE USE OF WATER RESOURCES

Water is supplied into the public water supply system to meet demand. The demand is generated by customers using water and losses through leakage from the distribution network.

Historically water has been a cheap commodity for industry and an unlimited, uninterrupted supply is viewed as a right by domestic customers. These factors, together with domestic charging schemes, have contributed to a culture of inefficient usage of water and little recognition of its true value.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Reduce leakage to economic levels	NWW Ltd.	Environment Agency	U(A)	•	•	•	•	•
2. Introduce demand management	NWW Ltd.	Environment Agency	R(B)	•	•	•	•	•
3. Reduce domestic leakage and demand	General Public, NWW Ltd., Environment Agency		R(C)	•	•	•	•	•

ISSUE 2 MANAGEMENT OF AGRICULTURAL WATER USAGE

Agriculture is a prime user of both surface and groundwater for irrigation and other farming practices. Irrigation is the most critical of agricultural uses as it is consumptive and demand is at its highest in summer when river flow is low and the impact on the watercourse is greatest. The licensing system balances the needs of the environment with those of the abstractor to minimise any environmentally damaging effects.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Promote the efficient use of water resources in agriculture(a)	Environment Agency, Farming Community, MAFF, NFU		5	•				
2. Encourage winter storage	Environment Agency, MAFF, NFU		R	•	•	•	•	•

(a) = The Agency has run a series of seminars in 1997/98 to Farmers promoting the efficient use of water; a further seminar will be run in November 1998.

3.5 Enhancing Biodiversity

ISSUE 3 THE NEED FOR CONTINUED HABITAT IMPROVEMENT AND RETENTION OF EXISTING HABITATS TO PROTECT AND INCREASE BIODIVERSITY

A diversity of natural features, such as meanders, riffles, pools, emergent vegetation and bankside cover within wide river corridors; ponds and wetland habitats; trees, hedgerows and haymeadows; are required to sustain viable populations of a wide range of wildlife species. By creating new habitats and removing threats to existing habitats, species will be encouraged to reach their target distribution and status.

Water vole numbers and their distribution have reduced sharply over recent decades. Plans for this species are being developed both locally and nationally and we will adopt their recommendations.

The black poplar is now considered to be the most endangered native timber tree in Britain. The native gene-pool needs to be protected. We will seek to plant native black poplars in appropriate locations (eg. along banks of R. Gowy and R. Birket, Wirral).

The natterjack toad became locally extinct at Crosby and Bootle many years ago, but still holds onto Hightown just outside this LEAP area (within Alt-Crossens CMP area). Future opportunities to re-establish the species at Crosby will be explored in partnership with the Wildlife Trusts, the local authority and English Nature. The translocated population at Red Rocks, Wirral is being monitored by Cheshire Wildlife Trust.

Update of actions since October 1997

A number of partners, including Local Authorities, Cheshire Wildlife Trust, JCAS, GMEU, the Environment Agency, English Nature and other conservation organisations, have come together to plan and implement the Cheshire, Merseyside, Halton and Warrington Pilot Local Biodiversity Network. The aim of the project is to make habitat and species data readily available to organisations and individuals who require it, with appropriated safeguards in place where necessary (eg. restricted access to sensitive/confidential information etc). It is believed that this will become a valuable source of information for educational purposes, promote conservation by improving the accessibility of relevant data and allow for the more efficient allocation of resources. It is intended that this should ultimately form part of the National Biodiversity Network.

The Cheshire Econet projects is ongoing and, when complete, will make a large amount of environmental information easily accessible to organisations that require it.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Contribute to the development of initiatives Biodiversity eg. LBAPs, Species Action Plans, Local Biodiversity Audits, and Species Recovery Programs	Local Authorities, Cheshire Wildlife Trust, JCAS, EN, RSPB, specialist local groups	Environment Agency (A.R. Lee)	R(A)	•	•	•	•	•
2. Further the conservation of important species and habitats, (eg. Black poplars, barn owls, bats, natterjack toads) through opportunist projects, as funds become available	Wildlife Trusts, Local Authorities, local wildlife organisations and specialist groups	Environment Agency, (A.R. Lee)	U(B)					
3. Identify, record and monitor the distribution and status of the water vole and otter within the study area in order to protect and enhance populations	Environment Agency Cheshire Wildlife Trust, JCAS	EN, Local specialist groups, local authorities, Cheshire Agenda 21	U(C)					
4. Work in partnership and exchange available information with other organisations to protect and promote vulnerable landscape and river corridor features (eg. via River Valley Initiatives)	Environment Agency (A.R. Lee)	Cheshire Wildlife Trust, JCAS, EN, FRCA, FWAG, Local specialist groups, local authorities, RiVa 2005, RSPB, National Trust, CPRE, Merseyside Museums, Cheshire Econet, CLA, NFU, BTCV	20	20	•D	•	•	

A = As and when required.

B = As and when funds become available. These will be reported on in future reviews of this plan.

C = Funds may be made available for specific surveys. These will be reported on in future reviews of this plan.

D = Future budgets have not yet been confirmed. These will be reported on in future reviews of this plan.

Work already carried out in the study area includes:

- planting of Black Poplars and other native trees alongside the River Gowy in partnership with FWAG;
- provision of a baseline survey of otter distribution and habitat survey data for the River Gowy to enable monitoring of the otter population, in partnership with Cheshire Wildlife Trust, and creation of otter holts along R. Gowy;
- part funding of Cheshire and Wirral Biodiversity Audit for Cheshire Wildlife Trust;
- part funding Cheshire Peatland Inventory for Cheshire County Council;
- the Agency is a partner in the North West Biodiversity Steering Group, Cheshire Local Agenda 21 group, the Sustainable Cheshire Forum, Cheshire Wildlife Working Group, Cheshire and Wirral Amphibian and Reptile Group and Cheshire Barn Owl Group.

ISSUE 4 INVASIVE NON-NATIVE PEST SPECIES

There are several examples of both plant and animal species that have been introduced into this country and are now causing problems to the native flora and fauna through competition, predation or disease.

In this area these include:

Mink – Cowy area

Signal crayfish – Cowy area

Giant hogweed – Wirral area

Japanese knotweed – throughout

Himalayan balsam – throughout

New Zealand swamp stonecrop (*crassula helmsii*) – Merseyside area

Water fern (*azolla spp.*) – Merseyside area.

Update of actions since October 1997:

The giant hogweed control programme is still ongoing

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Investigate the distribution of mink in the study area and assess current problems associated with their presence	MAFF, Wildlife Trusts, Manchester Metropolitan University	Environment Agency (A.R. Lee)	U(A)	•				
2. Assess the current status of crayfish in the area	Cheshire Wildlife Trust	Environment Agency (A.R. Lee)	U(B)	•				
3. Investigate the extent of Japanese Knotweed, Himalayan Balsam, Giant Hogweed, Crassula and Azolla	Environment Agency (A.R. Lee)	General public Cheshire Wildlife Trust, JCAS, ranger services, landowners	R	•	•	•	•	
4. Develop 'best practice' guidelines for field staff to prevent the spread of non-native plants, from site to site, during site visits, sampling and maintenance operations	Environment Agency (A.R. Lee)	English Nature, Ranger services, Wildlife Trusts	1	1				

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
5. Carry out appropriate control programme for Giant Hogweed	Environment Agency	Local authorities, ranger services, landowners	U(C)	•	•	•	•	
6. Produce leaflet for garden centres in area to explain threat to native flora by planting invasive, non native plants	Environment Agency (A.R. Lee)		U(D)	•				

A = Unknown cost because this information is spin off from other projects, for example, MAFF study of mink in Cheshire and information collected via otter and water vole surveys.

B = A project proposal is being submitted at present.

C = Money will be allocated to sites when the need is identified.

D = This will be done as and when resources become available.

ISSUE 5 EXTENT OF CHANNELISED AND OVER-MANAGED WATERCOURSES CREATING LOSS OF HABITAT AND AMENITY

Many watercourses in the area have been straightened, deepened and shortened. To create more space for development and agriculture and to drain the land more effectively, banks have been reinforced or reprofiled, long lengths have been floodbanked and relatively few river corridor habitats have been left undamaged. The lack of variety and natural features also means that rivers are less attractive and can be less valued.

The Environment Agency works to protect those stretches of watercourse and river corridor which retain some value for wildlife. We also aim to enhance those that are more degraded. Some stretches may be suitable for rehabilitation.

Update of actions since October 1997

The Prescot Brook river rehabilitation project is now complete. Works undertaken included:

- Installation of a reedbed to treat an ochreous discharge and to provide valuable habitat for birds and invertebrate.
- Creation of a new wildlife pond and associated wetland habitat.
- Provision of interpretation boards, a footpath and a viewing platform for use by the general public.
- Refurbishment of headwalls and bridges.
- Tree and herbaceous planting.

Despite problems with vandalism the project was a success – there is visibly less ochre present in the brook and, within the next year or two, the new pond and wetland habitat should be maturing nicely. The new footpath and viewing platform were being heavily used even before the completion of the project. This project was the result of a partnership between the Environment Agency, North West Water Ltd and Knowsley Borough Council.

The Sustainable River Management R&D project is now underway using three pilot sites in the North West.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Identify stretches suitable for enhancement and rehabilitation	Environment Agency (A.R. Lee)	Local Authorities, Groundwork, Cheshire Wildlife Trust, JCAS	R	•	•	•	•	•

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
2. Identify and investigate sources of funding for known projects	Environment Agency (A.R. Lee)		2					
3. Implement appropriate enhancement and rehabilitation schemes	Environment Agency (P.D. Younge)	Local Authorities, Groundwork, Mersey Forest, Forestry Authority	U(A)					

A = Depends upon actions 1 and 2.

3.6 Managing our Freshwater Fisheries

ISSUE 6 LACK OF SUSTAINABLE FISH POPULATIONS

Water quality within Ditton and Wirral Brooks, and to a lesser extent in the River Gowy, is poor and therefore these watercourses do not meet their habitat potential for maintaining sustainable fisheries.

Water quality improvements would increase the diversity and quality of the fish populations present and make available more habitat for the establishment of further self sustaining fisheries.

Update of actions since October 1997

Routine fisheries surveys of Ditton Brook and River Gowy catchments are planned for summer/autumn 1998 and 2000 respectively. The results of these surveys will be used to assess whether stocking is appropriate in these watercourses. The 1997 survey of Wirral Brooks indicated insufficient improvements in water quality for stocking of these waters to be practicable.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Investigate the potential and encourage the stocking of fish as water quality improves sufficiently to support a sustainable coarse fishery	Environment Agency (A.R. Lee)	Fishery owners, Angling organisations	R	•	•	•	•	•
2. Continue routine monitoring of fish populations to identify problem, or improved, areas and measure any stocking success	Environment Agency (A.R. Lee)	Fishery owners, Angling organisations	4.25	0.5	1.5	1.5	0.75	•

3.7 Delivering Integrated River Basin Management

ISSUE 7 ADVERSE IMPACT OF DISCHARGES FROM WASTEWATER TREATMENT WORKS (WwTW)

North West Water Ltd. are undertaking improvements on a number of wastewater treatment works in the Lower Mersey to reduce the organic load to the estuary.

Update since October 1997

At Widnes and Warrington the secondary treatment plants have been built and the improvement works have been completed. Halewood works is now closed and the effluents diverted to Liverpool's Sandon Dock treatment works. The construction of a new secondary treatment plant at Sandon Dock commenced in the summer of 1998.

On the Wirral bank of the Mersey work is in progress to improve the treatment works at Birkenhead, Bromborough and Meols. The present treatment works at Wallasey will be converted to pump sewage effluent to Birkenhead for treatment.

Officers from the Environment Agency are studying the discolouration and foaming present below Howley Weir in Warrington. Methods to reduce the colour and foam are being considered. The sources of the colour and foam are discharges further inland to the Manchester Ship Canal and Mersey.

The Environment Agency is in the process of prioritising WwTWs that need improvement where the discharge is considered to have an impact on the receiving watercourses. This list will be put forward as part of the next Asset Management Plan (AMP3) for improvements from the year 2000.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Assess the impact of WwTW on rivers failing the RQO or an EU Directive	Environment Agency (S.C. Lever) <i>WQ planner</i>		R	•	•	•	•	•
2. Prioritise works needing improvements in AMP 3 using environmental benefit assessment	Environment Agency (S.C. Lever) <i>WQ planner</i>		R	•				
3. Once completed monitor and assess the water quality following improvements at the WwTW	Environment Agency (S.C. Lever) (R. Lamming)		R		•	•	•	•
4. Investigate the foaming problem at Howley Weir	Environment Agency NWW Ltd.	WRc	U(ii)	•				

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
5. Investigate reductions in colour of the Manchester Ship Canal and Mersey	Environment Agency		R	•				
6. Investigate the source of Non-ionic detergent causing EQS failures	Environment Agency (R. Lamming)		R	•				

WRC – Consultants

ISSUE 8 ADVERSE IMPACT FROM INDUSTRIAL SITES AND TRADING ESTATES

There are a large number of trading and industrial estates in the area covered by this LEAP. In many cases pollution of a watercourse can occur through ignorance or neglect.

The Environment Agency seeks to reduce contamination of surface water discharges by promoting good housekeeping on trading estates and through pollution prevention guidance. In some cases, where known problems exist, The Agency in negotiation with site owners, the Local Authorities and North West Water seek to rectify the situation through the installation of interceptor devices or other engineering solutions.

Update since October 1997

All the units on the Astmore Estate were visited by Environmental Protection Officers as part of an industrial site survey. The investigation identified a number of problems on the estate and Agency Officers made recommendations to rectify them. The survey resulted in a comprehensive map of the estate drainage that will assist in the identification of sources of contamination.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Undertake Industrial site and estate surveys, visit units and identify drainage problems (a) North Cheshire Trading Estate, Wirral	Environment Agency (R. Lamming)		R	•	•	•	•	•
			R	•				
2. Promote site improvement and pollution prevention	Environment Agency (R. Lamming)		R	•	•	•	•	•
3. Rectify identified problems	Owners, Local Authorities, NWW Ltd.		U					•

ISSUE 9 ADVERSE IMPACT OF CONTAMINATED SURFACE WATER DISCHARGES

The rectification of wrong connections is undertaken by Local Authorities as Agents for North West Water Limited. NWW Limited make available funds for the correction of the problems, however, this work is not part of the company's capital programme and only when funds are available can the priority work be undertaken.

Update since October 1997

The Environment Agency in the North West Region has compiled a list of the worst 60 identified contaminated discharges. These have now been ranked on their environmental impact, and prioritised on how significant the effect of the discharge is on the local watercourse. This list includes contaminated overflows on the Wirral at Upton, Ellesmere Port and Irby.

Work is currently ongoing in the Ellesmere Port area on wrongly connected drainage to the Manchester Ship Canal.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Identification and prioritisation of wrong connection problems	Environment Agency (R. Lamming)	Local Authority	R	•	•	•	•	•
2. Correction of wrong connections	NWW Ltd.	Local Authority, householders, site owners	U	•	•			•

ISSUE 10 ADVERSE IMPACT FROM OVERFLOWS ON THE SEWERAGE NETWORK

The increase in residential and commercial development over recent years has resulted in increased flows in the sewerage network. In older systems there may be inadequate sewer capacity for the volume of effluent. Problems with blockages in the drains can also result in the premature operation of the storm overflows.

NWW Ltd. will be carrying out work on a number of sewerage networks up to the year 2000. As part of the next Asset Management Plan (AMP3) the Environment Agency has identified further problem areas that will be proposed for improvement from the year 2000.

Update since October 1997

Sewerage work undertaken by NWW Ltd in Runcorn has resulted in the abandonment of five unsatisfactory overflows. These are replaced by one overflow with storage to prevent any discharges occurring, except in exceptional conditions.

NWW Ltd, as part of an Urban Pollution Management Strategy, will be carrying out a drainage survey of the sewerage network in the Hoylake area that will assist in determining what are the problems and how to improve unsatisfactory overflow discharges.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Reduce the number of unsatisfactory combined sewer overflow (a) Hoylake sewerage survey	NWW Ltd.		U	•	•	•	•	•
2. Assess and monitor work undertaken	Environment Agency (S.C. Lever)		R	•	•	•	•	•

ISSUE 11 . POLLUTION AND LOSS OF HABITAT CAUSED BY AGRICULTURAL ACTIVITY

Many waterside fields are ploughed and cultivated to the very top of the bank leaving no buffer against spray drift, run off, disturbance and erosion. An uncultivated bankside strip can provide wildlife habitats and a bank protected by natural vegetation is likely to be more stable and prevent excessive erosion that can cause damaging siltation downstream.

Nitrogen can be removed from field run off and drainage by passing through vegetated buffer strips. Removal of phosphorus is less successful. The efficiency of these strips is reduced if land drains are present and continue to flow directly to the watercourse.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Identify watercourses where uncultivated buffer strips would be most beneficial	Environment Agency (A.R. Lee)	FRCA, FWAG, NFU, Wildlife Trusts, Local Authorities	3	1.5	1.5			
2. Identify landowners willing to create uncultivated strips along watercourses, in partnership with grant awarding organisations	Environment Agency (A.R. Lee)	FRCA, FWAG, NFU, Wildlife Trusts, Local Authorities, Forestry Authority	4			2	2	
3. Promote good farming practice	Environment Agency (S.C. Lever)	FRCA, NFU, FWAG, Wildlife Trusts, RSPB	R	•	•	•	•	•

ISSUE 12 DETERIORATION IN GROUNDWATER QUALITY DUE TO INTRUSION OF SALINE WATERS

Prior to the licensing controls introduced by the Water Resources Act, 1963, groundwater abstraction was largely unregulated. In the past abstraction has exceeded natural recharge in and around the Lower Mersey area, effectively 'mining' groundwater. As a result, in some areas, groundwater levels have been depressed to below sea level. In places adjacent to the Mersey Estuary this has caused a reversal of the hydraulic gradient, allowing saline waters from the estuary to flow into the aquifer. Other sources of old, poor quality (saline) groundwater are also present at depth in certain parts of the aquifer. This can be intercepted and mobilised by 'over-pumping' from deep boreholes.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Investigate and monitor problem and establish priorities for action	Environment Agency		U(A)	80	60			•
2. Abstract only sustainable yield and promote good practice and reduce leakage	Environment Agency, Licence Holders		R	•	•	•	•	•

A = Two projects are in place to look at the whole of the West Cheshire Aquifer and saline intrusion will be looked at within these projects. Phase 1 is now underway at a budgeted cost of £80K. Phase 2 will follow and has a budget of 60k.

ISSUE 13 INCREASING NUMBERS OF PROPERTIES AT RISK FROM FLOODING, DUE TO DEVELOPMENT OF THE FLOOD PLAIN

There is increasing pressure for the development of flood plains within urban areas.

Many existing homes and properties, within the natural flood plain, are thought to be protected, because they are behind flood defences. However, they remain vulnerable to flooding, from breaching or overtopping of flood defence structures.

Our overall aim in relation to floodplains is to secure and where necessary to restore the effectiveness of floodplains for flood defence and environmental purposes. As such we will continue to object to development within floodplains, and seek to ensure that policies relating to floodplain protection, incorporated into Local Plans and UDPs, are enforced.

Our Policy Document: *Policy and Practice for the Protection of Flood Plains* (April 1997) sets out the Agency's flood defence policies in relation to river and coastal floodplains and explains the reasoning behind them.

The Lower Mersey LEAP area is contained within two S105 project areas.

- The Middle and Lower Mersey S105 project for which a budget of, £161,000 is estimated for the whole area. The work on this project is estimated to be completed in October 2000. Although the surveys required might be completed earlier if the money is available.
- The Cheshire S105 project which is scheduled to run from January 2000 to November 2000 contains the Gowy catchment and the Wirral. No specific budget details are available for this work at this time.

Meanwhile, when existing properties are perceived to be at risk, work is continuing on the identification of areas suitable to be considered for the provision of a specific flood warning service.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Identify areas at risk (Section 105)	Environment Agency	Local Authorities	161 (A)	•	•			
			U(B)		•	•		

A = The present timetable for the survey of the Middle & Lower Mersey S105 project.

B = The present timetable for the survey of the Cheshire S105 project.

** Environment Agency Policy Document: *Policy and Practice for the protection of Floodplains*.

ISSUE 14 RISING GROUNDWATER LEVELS INCREASING THE RISK OF POLLUTION AND FLOODING

Groundwater levels are rising in parts of the catchment as a result of the cessation of minewater pumping, due to the closure of local deep coal mines and the reduction or cessation of groundwater abstraction from the Permo-Triassic sandstone aquifer by the water supply undertaker (NWW Ltd.) and former industrial users.

Where natural (pre-pumping) groundwater levels were originally at or close to ground level full recovery poses potential problems of flooding and/or pollution.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Investigate problem and establish priorities for action ¹	Environment Agency, NWW Ltd.	Mersey Rail, Coal Authority	R	35	60	•	•	•
2. Investigate the feasibility of re-establishing the pumping of groundwater and treating for utilisation for other purposes ²	NWW Ltd. Environment Agency, MAFF, Local Authorities		U					

¹ The Agency is currently monitoring groundwater levels. An investigation into rising groundwater in Merseyside and South Lancashire and the risk from mine closures is currently underway, part of which will be within this LEAP area.

² Leaking sewers and water mains are contributory factors in urban areas. Mersey Rail has already implemented a pumping scheme to keep their tunnels dry. The situation is being monitored and partnership solutions are being sought.

ISSUE 15 ADVERSE IMPACT OF URBAN RUN-OFF AND DRAINAGE FROM MAJOR ROADS AND MOTORWAYS

A number of major roads cross the area covered by this plan. On a number of watercourses there is a recognised impact from road drainage. The effect of these intermittent discharges on the water quality of small watercourses is not fully known. On new road schemes the installation of interceptors and stormwater controls is promoted at the planning stage where appropriate.

One of the problems that the Agency has is that no single database contains the information on all the motorway drainage overflows. If the information was easily accessible Agency staff could put into place emergency measures far quicker knowing which outfall a motorway section drained to.

Update since October 1997

Information has been collected on some stretches of road drainage and the associated watercourses.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Collect information on drainage outfalls for major roads	Environment Agency (R. Lamming)		R	•	•	•	•	•
2. Identify watercourses where problems from road drainage occur	Environment Agency (R. Lamming)		R	•	•	•	•	•
3. Develop a database of drainage outfall	Environment Agency (S.C. Lever)		U					•

ISSUE 16 ADVERSE IMPACT ON WATER QUALITY FROM PRIVATE SEWERAGE AND SEWAGE SYSTEMS

From the 1st April 1996 sewerage undertakers (NWW Ltd.) have a responsibility to consider, if appropriate, provision of first time sewerage in a locality where environmental and amenity problems exist. This does not cover discharges from one or two dwellings.

In some cases the provision of a sewer is not cost efficient or environmentally beneficial considering disturbance from pipe laying, siting of the pipeline and pumping stations. Improvements may be made by undertaking better maintenance, improving the present plant or even moving the discharge point. The Agency provides information and guidelines on small sewage treatment plants and septic tanks, as do other bodies including The National Trust.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Collect evidence on the impact of the discharges	Environment Agency (R. Lamming)		R	•	•	•	•	•
2. Ensure new developments include adequate proposals for sewerage	Environment Agency (R. Lamming)		R	•	•	•	•	•
3. Promote better maintenance and use of tank friendly products	Environment Agency (R. Lamming)		R	•	•	•	•	•

ISSUE 17 CULVERTS CAUSING FLOOD RISK AND LOSS OF HABITAT

Culverts can prevent or impede the free flow of water and wildlife along watercourses. In urban areas culverts can cause flooding to property due to blockage or collapse, unless regular maintenance is carried out to keep them clear. The detection of pollution is complicated when surface water systems discharge within culverts

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Identify and gather information on all culverts suitable to be opened up when the opportunity arises	Environment Agency (A.R. Lee)	Local Authorities Mersey Basin Campaign, Landowners, Groundwork, River Valley Initiatives, Developers	R	•	•	•	•	
2. Install debris screens and telemetry as appropriate on culvert entries	Environment Agency (P. Younge)		266					126
3. Reduce flows into culverts by attenuating flows, storing flood, waters or providing alternative routes for flood flows	Environment Agency (P. Younge) Local Authorities, NWW Ltd, Owners	Developers Owners	U(A)	•	•	•	•	

A = As and when opportunities arise. These will be reported in future reviews of this plan.

The Agency's policy is that culverts should be opened up and restored to open river corridors wherever possible.

ISSUE 18 POOR ACCESS TO WATERCOURSES FOR MAINTENANCE WORKS AND RECREATIONAL ACTIVITIES

Poor access to stretches of watercourse can impede regular maintenance, emergency works and recreational activities. Rivers and streams may become neglected and undervalued where people cannot work along them. Development to the tops of banks leaves no habitats for wildlife. However, the provision of linear green spaces along watercourses can act as a buffer against damaging activities as well as providing access for maintenance and recreational purposes.

Update of Actions since October 1997

1. Road signs

The Environment Agency gave funding to the sum of £8,000 for road signs naming rivers and for waymarking signs. 31 locations for the signs have been identified (17 on the River Birket and tributaries and 14 on Dibbinsdale Brook and tributaries). Wirral Metropolitan Borough Council and the Highways Agency are to survey the sites in the near future to confirm costings and the suitability of locations.

2. Waymarking signs

Waymarking signs have been designed. There will be a mix of wooden finger posts where a path leaves the road, 'way marking' along streams/rivers and possibly directional arrows in residential areas. 37 sites have been identified as possible locations. The Working Group will next decide on the overall policy that they plan to follow for the future management of the signs.

3. Waterside Wirral

A book entitled Waterside Wirral has been created jointly by Mersey Basin Trust (including members of RiVa 2005), the Ramblers Association and Bluecoat Press. Waterside Wirral is the first in a series of books about watercourses in the Mersey Basin. It focuses on routes for walkers, cyclists and horse riders along rivers, streams and valleys and includes general information about Wirral's natural history, streams and rivers and maps of the area. The book has just been published and is now available for purchase by the general public at a cost of £4.99.

4. Walks Folders

The Agency funded the production of information folders (£395) which are to contain leaflets on walking routes on the Wirral. The majority of leaflets are free, however consideration is currently being given as to whether to include priced leaflets. The final pack should be available in autumn 1998.

5. Rights of Way Wish List

A Rights of Way Wish list has been created for the Wirral Metropolitan Borough Council area. The list includes possibilities for the creation of both new footpaths and the linking of existing rights of way to make longer or circular routes. A similar list is to be created for the Ellesmere Port and Neston Borough Council area.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Identify where improvements to public access are necessary and encourage the creation and extension of linear routes. There is currently an on-going project on the Birket, Rivacre Brook and Dibbinsdale Brook	Environment Agency Local Authorities	Developers, Owners RiVa 2005	U(A)	•	•			
2. Investigate the potential for meeting the needs for signage and interpretation boards on and near to river crossings across public footpaths and help implement	RiVa 2005	Environment Agency, Groundwork Trusts, Local Authorities, Riparian Owners, Mersey Basin Campaign	U(B)	•	•			
3. Increase awareness within public of watercourses	Environment Agency	RiVa 2005, Schools, Groundwork Trusts, StreamCare, River Valley Initiatives	R	•	•	•	•	•

A and B = Costs to RiVa 2005 which is partially funded by the Agency.

As a core duty we continue to seek to increase public awareness of the existence, nature and purpose of watercourses.

Through the development control process and the land drainage byelaws we encourage Local Authorities, developers and landowners to provide and enforce access strips along watercourses.

Partnerships exist with RiVa 2005 for increasing public awareness of watercourses.

3.8 Conserving the Land

ISSUE 19 ADVERSE IMPACT OF CONTAMINATED LAND ON THE ENVIRONMENT

The Environment Agency operates in accordance with the provisions and duties of the Environment Act, 1995. This involves the Agency and Local Authorities in the identification, regulation and remediation of contaminated land, particularly sites that pose a threat of serious harm or pollution.

Update since October 1997

Following a groundwater survey of the Hoole Bank acid tar lagoon further investigation is taking place to assess the potential risk to the environment.

A project to look at the possibility of remediating Stewards Brook, Widnes was set up between the Environment Agency and Halton Borough Council.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Undertake detailed investigations		Environment Agency (R. Lamming)	U	•	•	•	•	•
(a) PCB contaminated land at BICC Helsby	BICC		U(A)	•				
(b) Hoole Bank acid tar lagoon	Environment Agency (R. Lamming)	Chester Action Programme	50(B)	•				
(c) Stewards Brook Phase 1 Feasibility Study	Environment Agency (R. Lamming)	Halton Borough Council	20(B)	•				
2. Initiate and coordinate action over sites	Environment Agency (R. Lamming)	Local Authority Landowners	U	•	•	•	•	•
3. Remediation of sites	Local Authorities	Environment Agency Landowners	U(C)					•
4. Develop a database of sites	Environment Agency (S.C. Lever)		U(D)					•

A = Cost to BICC.

B = Collaborative initiative.

C = Dependant upon availability of funds and resources.

D = Work presently ongoing, future costs are unknown.

3.9 Managing Waste

ISSUE 20 ILLEGAL WASTE DISPOSAL ACTIVITY

In common with many other areas, there is a significant problem of illegal waste disposal activity, including 'flytipping'. A wide range of wastes are deposited on all kinds of open sites, and into watercourses.

As well as the obvious detriment to amenity, flytipping often brings the risk of environmental pollution, physical injury and damage to health. In rivers, debris can build up and block the flow of water, especially in culverts and under bridges, increasing the risk of flooding to roads and property.

The Environment Agency has a range of enforcement and control measures, as well as the ability to work in partnership with others to tackle this problem.

Update of Actions since October 1997

A survey of flytipping activity across the South Area highlighted the continuing seriousness of the problem and the need to increase liaison and partnership.

In spring 1998, the Agency joined forces with Liverpool City Council, Tidy Britain Group and Merseyside Police for a high-profile campaign called Operation Flycatcher. The objectives were to identify, educate and if necessary take action against flytippers through a combination of surveillance and roadside checks, supported by extensive media coverage and the provision of a freephone incident reporting number. The results were very positive, with measurable decreases in flytipping activity and associated clear up costs for Liverpool, and the campaign is continuing. It is believed to be the first of its kind in the UK, and has attracted considerable interest from other parts of the country.

The Agency continues to work with the police and others in carrying out roadside checks, enabling officers to give advice on legislation and take action against offenders. South Area officers participated in a national campaign – Operation Mermaid – as well as more local checks in Halton and Wirral.

The Agency continues to support Water Watch and Stream Care initiatives.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Participate in initiatives to improve awareness and information on best waste management practice and facilities, and discourage illegal activity	Environment Agency (R Lamming) Local Authorities	Owners, Residents, Waste Management Companies, Police, Community Groups, Voluntary Groups, Water Watch, StreamCare, Tidy Britain Group	R	•	•	•	•	•
2. Promote the control of unauthorised access to problem sites and watercourses	Environment Agency (R. Lamming, P. Younge) Owners	Local Authorities	R	•	•	•	•	•

As part of its core duties, the Agency will continue routine maintenance to remove debris from watercourses, and take action against those responsible for illegal waste disposal generally.

The Environment Agency Emergency Hotline is available for reporting serious incidents – 0800 807060.

ISSUE 21 LACK OF AWARENESS OF SUSTAINABLE WASTE MANAGEMENT

In December 1995, the Government published 'Making Waste Work – a strategy for sustainable waste management in England and Wales'. The objectives are to:

- reduce the amount of waste that society produces;
- make the best use of the waste that is produced;
- minimise the risks of immediate and future environmental pollution and harm to human health;
- increase the proportion of waste managed by the options towards the top of the waste hierarchy – Reduction, Reuse, Recovery (including recycling, composting and energy recovery), and finally Disposal.

The Government's commitment to sustainable waste management, and in particular waste minimisation, is reiterated in the June 1998 consultation paper 'Less Waste, More Value'. The Agency will have a key role in delivering this strategy at the local level.

Update of Actions since October 1997

The Agency encourages and supports sustainable waste management in a number of ways. Nationally, a detailed Waste Minimisation Good Practice Guide has been produced, together with a video and booklet entitled 'Money for Nothing'. These are available to companies on request and have been promoted locally.

South Area staff have also received training in waste minimisation and have given information and advice to companies either individually, or through local business clubs and other environmental organisations. A South Area Waste Minimisation and Recycling Directory has been produced and made widely available. Agency Officers also liaise with Local Authorities, in particular Recycling Officers and Local Agenda 21 Coordinators to promote sustainable waste management throughout the Area.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. Promote the environmental and economic benefits of sustainable waste management to industry, commerce, householders and others	Environment Agency (S. Lever) Central Government, Local Government	Business Links, Groundwork, Community and Voluntary Sectors, Others	R	•	•	•	•	•
2. Promote, encourage and participate in waste minimisation and other initiatives and projects involving a range of waste producers and facilitators	Environment Agency (S. Lever) Local Government, Business Links, Groundwork		R	•	•	•	•	•

3.10 Regulating Major Industries

ISSUE 22 ADVERSE IMPACT OF INDUSTRIAL DISCHARGES ON WATER QUALITY

A direct discharge to a watercourse from an industry is controlled by a Consent to Discharge or by an Integrated Pollution Control (IPC) Authorisation. The discharges are monitored for compliance with the limits included in the Consent or Authorisation. Certain substances identified in the EU Directive for Dangerous Substances have an environmental impact at quite low levels. The Agency in discussion with various Industries is looking to reduce the use and presence of these substances in the environment.

The Environment Agency undertakes regulatory monitoring to see if the standards set in EU Directives for Dangerous Substances are being met, and what reductions have to be made to achieve the environmental quality standards (EQSs). There have been some failures to achieve the environmental quality standards set in the Directives and UK legislation. In these cases the Agency are investigating the reasons for the failures.

Update since October 1997

A review of trade discharge consents in the Gowy Catchment was undertaken leading to a number of consents being revoked or altered to reflect changes in policy and environmental needs.

The 1,2 Dichloroethane (1,2 DCE) investigation undertaken in 1997 was inconclusive, further work is being undertaken in 1998 to identify the reason(s) for the failure. A report is to be produced in the next few months.

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
1. On new developments promote discharges to sewer	Environment Agency (R. Lamming)		R	•	•	•	•	•
2. On new and existing discharges negotiate discharge consents that will ensure environmental needs are being met	Environment Agency (R. Lamming)		R	•	•	•	•	•
3. Investigate and control the release of substances by regulation and enforcement	Environment Agency (R. Lamming)		R	•	•	•	•	•

Action	Responsibility		Total cost (£K)	1998/99	1999/2000	2000/01	2001/02	Future
	Lead	Other						
(a) New treatment by BICC Helsby to treat contaminated effluent	Environment Agency (R. Lamming) IPC		U	•				
(b) Investigate the EQS failure of 1 2 DCE to the Manchester Ship Canal	Environment Agency (R. Lamming)		R	•				
(c) Investigate EQS failure of TBT in the Mersey Estuary	Environment Agency (R. Lamming)		R R	• •				
(d) Investigate the EQS failure of copper in Ditton Brook	Environment Agency (R. Lamming)		R	•				
4. Minimise waste from industry, recycle or reuse materials	Environment Agency (R. Lamming)	Company	R	•	•	•	•	•
(a) BICC treatment plant will reduce waste to Arpley Landfill			U					
5. Set up procedures for prompt response to works malfunctions or accidents	Environment Agency (R. Lamming)	Company	R	•	•	•	•	•
(a) Oil Spill Emergency Clean-up	(A)	Environment Agency, Mersey Mersey Basin Campaign other oil companies	U	•	•	•	•	•

1 2 DCE = 1 2 Dichloroethane.

TBT = Tributyltin compounds.

A = This is a partnership made up of: Mersey Docks and Harbour Company, Manchester Ship Canal, Garston ABP, Ship and port Owners, Ship Canal users, Shell UK, Cargill plc and the Institute of Chartered Ship Brokers. They have advisers from Merseyside and Cheshire Fire Brigades, HM Coastguard and the Environment Agency. The scheme will allow the three ports of Liverpool to fulfill their obligations, following the Donaldson inquiry, to provide oil contingency planning and clean up contingency.

APPENDIX 1: GLOSSARY

AQUIFER

A layer of underground porous rock which contains water and allows water to flow through it.

CHANNEL

A cutting in land along which a river flows.

CONFLUENCE

Point where two, or more, rivers meet.

CONTROLLED WASTE

Household, commercial or industrial waste from a house school, university, hospital, residential or nursing home, shop, office, factory or any other trade or business. It may be solid or liquid, but not necessarily hazardous or toxic.

CULVERT

A man-made structure, for example a pipe, carrying a watercourse underground.

FAUNA

Animal life.

FLORA

Plant life

FRESHWATER FISH

For the purpose of the Salmon and Freshwater Fisheries Act 1975, fish other than salmon, brown trout, sea trout, rainbow trout and char.

LANDFILL

The deposit of waste into, or onto, land which can then be restored to some other use.
The predominant method for the disposal of controlled waste in the UK.

MAIN RIVER

Some, but not all, watercourses are designated as Main River. Main River status of a watercourse must first be approved by MAFF. The Environment Agency has the power to carry out works to improve drainage or protect land and property against flooding on watercourses designated as Main River.

MARGINAL

At the water's edge

POOL

A deep slowing flowing section of a river or stream.

PRODUCER RESPONSIBILITY

A business-led approach, which may be underpinned by legislation, to achieve the reuse, recovery and recycling of waste

RIFFLE

A shallow, but fast flowing part of a river or stream.

RIPARIAN

Of, or on, the banks of a river.

RIPARIAN OWNER

Owner of land abutting a river or lake. Normally riparian owners own the bed of river to the mid point of the channel.

RIVER CORRIDOR

Stretch of river including its banks and the land close by.

SPECIAL WASTE

A strictly defined group of controlled wastes, which are considered to be particularly dangerous or difficult, usually by virtue of hazard or toxicity, and therefore subject to additional controls.

TOPOGRAPHY

Physical features of a geographical area.

TRANSFER STATION (Waste Disposal)

A licensed depot where controlled waste is stored and sorted for disposal or recycling.

TREATMENT

The physical, chemical or biological processing of certain wastes to reduce volume or pollution potential before recovery or disposal.

WASTE MINIMISATION

Reducing the quantity and/or hazard of waste produced.

APPENDIX 2

What the Agency does and does not do

Aspect of the Environment	What the Agency <i>is</i> responsible for:	What the Agency <i>is not</i> responsible for*:
Sustainable Development	<ul style="list-style-type: none"> • Overall remit for the promotion of sustainability • Supporting Local Agenda 21 initiatives 	<ul style="list-style-type: none"> • Developing and promoting Local Agenda 21 (<i>LA21 Groups/LAs</i>)
Waste Management	<ul style="list-style-type: none"> • Regulation of waste sites • Advising Government regarding the National Waste Strategy 	<ul style="list-style-type: none"> • Planning for future waste disposal sites or incinerators (<i>LAs</i>) • Local waste recycling and minimisation schemes (<i>LAs</i>) • Collecting household waste (<i>WCAs</i>)
Air Quality	<ul style="list-style-type: none"> • Regulation of major industrial processes, for example, power stations 	<ul style="list-style-type: none"> • Regulation of minor industrial processes (<i>LAs</i>) • Controlling domestic smoke (<i>LAs</i>) • Evaluating local air quality (<i>LAs</i>) • Producing Air Quality Management Plans (<i>LAs</i>)
Noise		<ul style="list-style-type: none"> • Controlling noise nuisances (<i>LAs</i>)
Groundwater Quality	<ul style="list-style-type: none"> • Licensing discharges to groundwater • Regulating special contaminated land sites 	<ul style="list-style-type: none"> • Compiling and maintaining contaminated land registers (<i>tbd</i>) • Restoring contaminated land sites (<i>land owners</i>)
Surface Water Quality	<ul style="list-style-type: none"> • Licensing discharges to surface water • Responding to pollution incidents 	<ul style="list-style-type: none"> • Disposal of sewage (<i>Water Companies</i>)
Water Resources	<ul style="list-style-type: none"> • Licensing groundwater and surface water abstractions 	<ul style="list-style-type: none"> • Drinking water quality and supply (<i>DWI/Water Companies</i>)
Flooding	<ul style="list-style-type: none"> • Maintenance to prevent fluvial flooding • Advising on floodplain issues • Regulating work affecting main rivers 	<ul style="list-style-type: none"> • Regular river maintenance, for example, litter removal and tree management (<i>riparian owners</i>) • Regulating work affecting ordinary water courses (<i>LAs</i>) • Surface water flooding from highways etc (<i>LAs</i>)
Planning/ Development Control	<ul style="list-style-type: none"> • Consultee on certain planning applications 	<ul style="list-style-type: none"> • Determining planning applications (<i>LAs</i>) • Producing Development Plans (<i>LAs</i>)

Aspect of the Environment	What the Agency is responsible for:	What the Agency is not responsible for*:
Contaminated Land	<p><i>When the relevant part of the Environment Act '95 is implemented:</i></p> <ul style="list-style-type: none"> • Advising Government and LAs on contaminated land • Enforcement Authority for 'special sites' 	<p><i>When the relevant part of the Environment Act '95 is implemented:</i></p> <ul style="list-style-type: none"> • Enforcement Authority for all contaminated land apart from 'special sites' (LAs) • Identifying contaminated land (LAs) • The cost of remediating contaminated land (<i>person causing contamination or land owner</i>)
Litter	<ul style="list-style-type: none"> • Clearing litter to minimise flood risk on main rivers 	<ul style="list-style-type: none"> • Clearing litter on river banks and towpaths (<i>riparian landowners</i>)
Fisheries	<ul style="list-style-type: none"> • Maintaining, improving and developing fisheries • Rod licensing • Emergency fish rescues • Monitoring fisheries quality 	<ul style="list-style-type: none"> • Commercial fisheries • Regulating fish farms (MAFF)
Recreation	<ul style="list-style-type: none"> • General remit to promote recreation on coastal and inland waters • Agency owned land and structures 	<ul style="list-style-type: none"> • General maintenance of footpaths and cycleways (<i>land owner</i>)
Navigation	<ul style="list-style-type: none"> • No responsibility in this area • Water quality and conservation value of canals 	<ul style="list-style-type: none"> • Day-to-day management of canals (<i>BW and canal companies</i>)
Archaeology	<ul style="list-style-type: none"> • General remit to take into account archaeological issues when making decisions 	<ul style="list-style-type: none"> • Responsible for management of historical structures and conservation areas (<i>owner/EH/LAs</i>) • Production of archaeological strategies (<i>EH/LAs</i>)
Conservation	<ul style="list-style-type: none"> • General remit to promote nature conservation and biodiversity • Lead organisation for certain BAP species 	<ul style="list-style-type: none"> • Designation of SSSIs (<i>EN</i>) • Day-to-day management of SSSIs (<i>land owner</i>) • Management of AONBs (<i>CoCo</i>)

* where appropriate the organisation that is responsible is shown in brackets.

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Warrington WA4 1HG
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Fax: 01925 415 961

NORTH AREA OFFICE

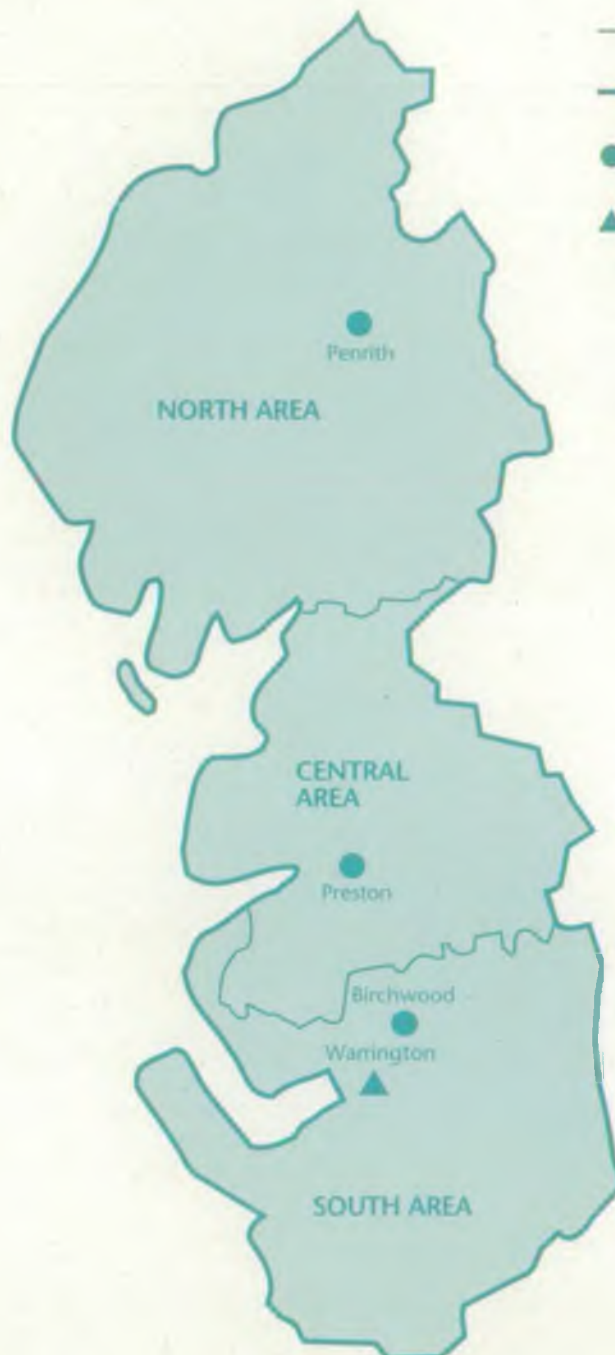
Environment Agency
Ghyll Mount
Gillan Way
Penrith 40 Business Park
Penrith
Cumbria CA11 9BP
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Fax: 01768 865606

CENTRAL AREA OFFICE

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For general enquiries please call your local Environment Agency office. If you are unsure who to contact, or which is your local office, please call our general enquiry line.

**ENVIRONMENT AGENCY
GENERAL ENQUIRY LINE**

0645 333 111


The 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water.

**ENVIRONMENT AGENCY
EMERGENCY HOTLINE**

0800 80 70 60



**ENVIRONMENT
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