EA-Southern LEAPs

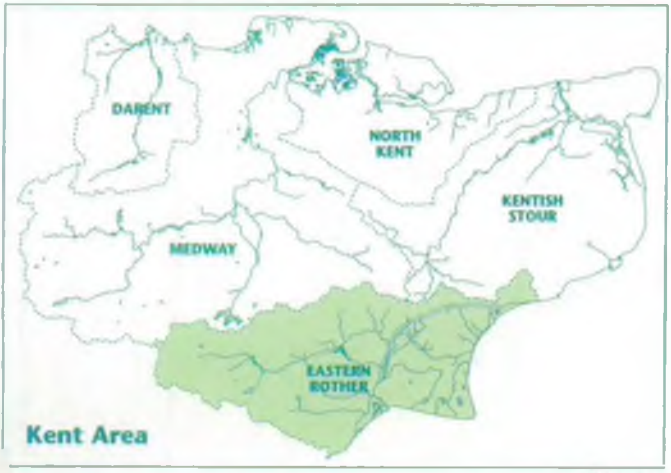
BOX 2

local environment agency plan

EASTERN ROTHER

FEBRUARY 2001

ENVIRONMENT AGENCY



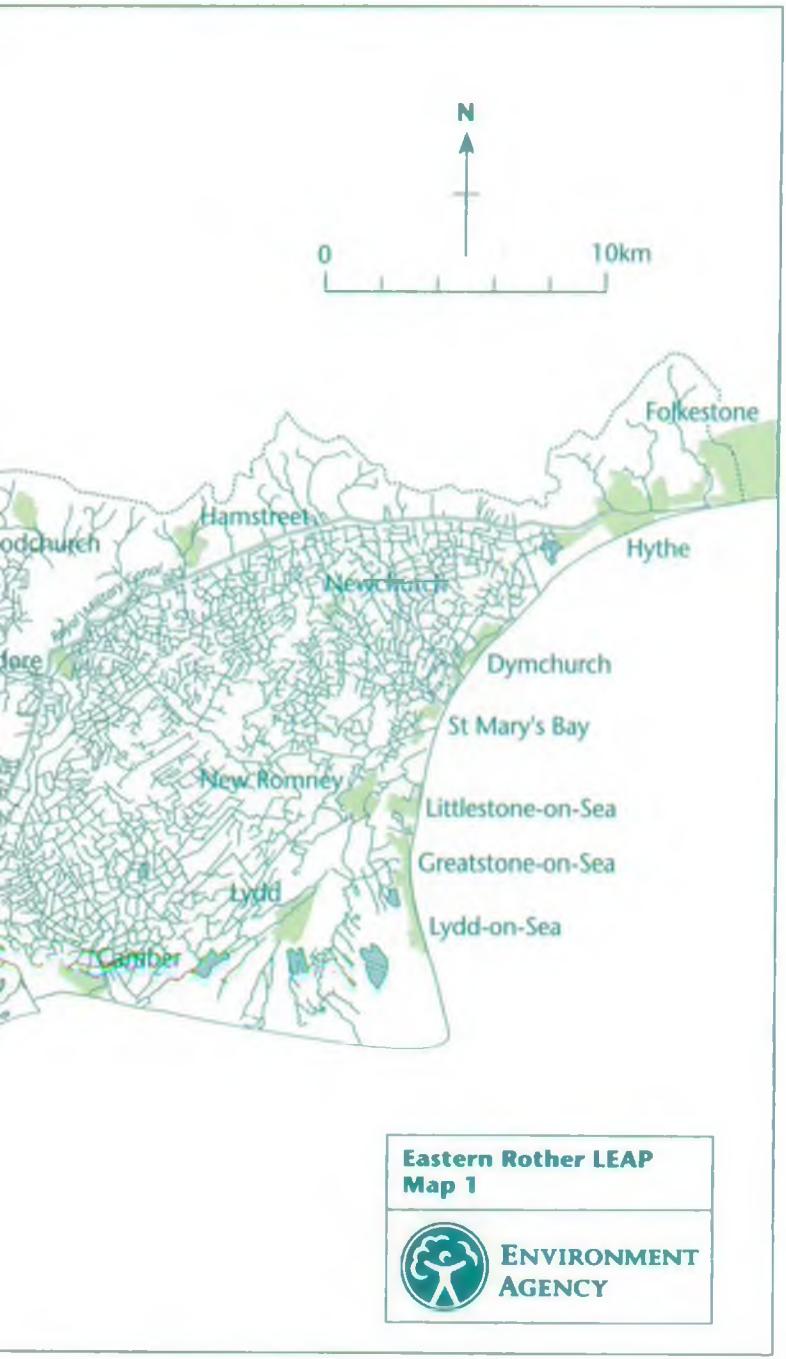
Catchment Overview

KEY

- Catchment boundary
- Watercourse
- Canal
- Built up area

Wadhurst
Tenterden
Rolvenden
Hawkhurst
Ticehurst
Mayfield
Burwash
River Dudwell
River Rother
Northiam
Four Oaks
Broadoak
Robertsbridge
Peasmarsh
Heathfield
Darwell Res
Powdermill Reservoir
Brede
Rye
River Brede
Battle
Winchelsea
Baldslow
Fairlight
Hastings

Catchment Overview



Eastern Rother LEAP
Map 1

ENVIRONMENT AGENCY

FOREWORD

Welcome to the Local Environment Agency Plan (LEAP) for the Eastern Rother. This LEAP examines issues specific to the Eastern Rother catchment in support of the more strategic and broader-based issues identified in the Kent Area LEAP.

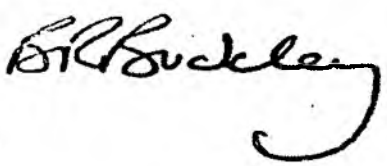
One of the fundamental objectives of the LEAP process is to involve all interested parties in working with the Agency in planning for the future well-being of the local environment. This ensures that decisions on the future management of the LEAP area are based on a range of views from interested parties. As a result, this document has been produced after public consultation following the launch of the Consultation Draft in December 1999.

We are grateful to the many people who responded to the draft document. Their comments have enabled us to evaluate the issues raised in the original report and refine them into an action plan framework which sets out the work that the Agency intends to carry out in the catchment, resources permitting, in partnership with others over the next 5 years. Actions identified in the plan will be monitored and progress reviewed annually.

Many of the issues in this plan can not be resolved by the Agency alone and are over and above the statutory duties of the Agency. This highlights the need for co-operation bringing together the complementary responsibilities, objectives and resources of different groups. The work of the Agency is increasingly being implemented through partnerships as it is recognised that we can achieve more by working together.

I hope you find this LEAP interesting and informative. I am convinced that the implementation of the actions in this LEAP will lead to improvements in the environment of the Eastern Rother catchment in the new millennium. If you have any comments or wish to become involved in addressing the issues raised, we would like to hear from you.

Thank you for your involvement in the LEAP process.



Dr Binny Buckley
Kent Area Manager

CONTENTS Page

1. INTRODUCTION

1.1. THE ENVIRONMENT AGENCY

The Environment Agency was established on 1 April 1996 as a result of the Environment Act 1995. The Agency was created by merging the expertise of Her Majesty's Inspectorate of Pollution (HMIP), the Waste Regulation Authorities, the National Rivers Authority (NRA) and several small units of the Department of the Environment. The Agency therefore provides a more comprehensive approach to the protection and management of the environment by integrating the regulation of air, land and water. The Agency's overall aim is to protect and enhance the whole environment and thus contribute to the goal of sustainable development in England and Wales.

1.2 THE ENVIRONMENT AGENCY'S ENVIRONMENTAL VISION

In January 2001, the Environment Agency launched its new environmental vision, taking the lead from the Government's Strategy for Sustainable Development. The Agency's Vision document is a long term aspirational framework for action setting out objectives to achieve the Agency's vision of sustainable development.

The Vision sets out our direction of travel, but is also says a lot about how will go about our work. Our approach is to do the things we do ourselves in the most efficient way possible, while at the same time unlocking resources and enthusiasm through effective partnerships with national and local government, local communities, businesses, environmental groups and others.

> **The Agency's vision for the environment and a sustainable future is:** *a healthy, rich and diverse environment in England and Wales, for present and future generations.*

The Environment Agency and its partners need to rise to the challenge of sustainable development. The Agency will respond by:

- Raising awareness of sustainable development issues;
- Meeting challenging targets set by Government, the European Union and international agreements for reducing pollution, protecting human health and improving environmental quality;
- Improving and simplifying the UK's approach to environmental regulation;
- Improving the efficiency of inspection, monitoring and information provision;
- Working together better, by making partnerships with business, public bodies and community organisations a central part of our activities;
- Working to raise awareness of how to reduce environmental impacts;
- Continuing to encourage the courts to impose tougher penalties for environmental crime;
- Helping people and organisations of all kinds, including industry and communities, to reduce the production of waste and pollution;
- Becoming a more efficient organisation, targeting work where it will be most beneficial and taking account costs and benefits; and
- Planning for likely climate changes, to minimise risks from threats such as increased flooding.

The Environment Agency aims to be the champion for the environment, within the context of economic growth and social progress, while working towards this vision in partnership with others. Listed below are our nine themes we are targeting for a healthier future.

The fundamental goals we want to help achieve:

- a better quality of life; and
- an enhanced environment for wildlife

The environmental outcomes for which we are striving:

- cleaner air for everyone;
- improved and protected inland and coastal waters; and
- restored, protected land with healthier soils.

The changes we will seek:

- a 'greener' business world: and
- wiser, sustainable use of natural resources.

The risks and problems we will help manage, prevent and overcome:

- limiting and adapting to climate change; and
- reducing flood risk.

The route for delivery of the Vision is mapped out in a series of 'Framework For Change' documents which outline the steps that need to be taken in the short and medium term to move towards this Vision. A Framework document has been produced for each of the nine themes listed above, together with specific documents for the various industry sectors and community groups with which we work (Waste Management, Agriculture, Small and Medium Enterprises (SME) and Process Industries).

Achieving sustainable development in the Eastern Rother catchment requires long term planning, careful balancing of priorities and the commitment of everyone that uses or manages the environment. The Eastern Rother LEAP will help contribute to the principle of sustainable development through integrated management and improvement.

2. THE LEAP PROCESS

2.1. LOCAL ENVIRONMENT AGENCY PLANS (LEAPs)

LEAPs take a long-term view of local environments and set out a five-year plan of action for solving local issues. They are non-statutory plans based on river catchments that help to fulfil the Agency's principal aim of contributing to sustainable development through integrated environmental management and improvement. LEAPs sit alongside existing statutory and non-statutory plans from other organisations and recognise that partnership working between the originators of such plans is the key to achieving their collective aims.

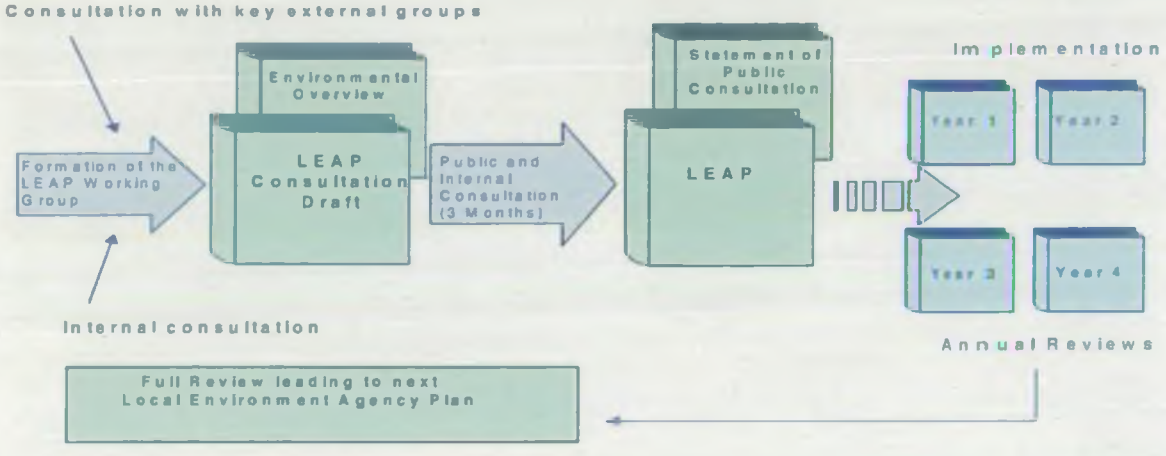
The LEAP is not designed to reflect the Agency's routine activities within the plan area. The Agency's everyday work commits substantial resources to managing the environment, including extensive monitoring and survey operations. The Agency is not responsible for regulating every aspect of the environment and for certain issues, other organisations have primary responsibility.

The Agency is committed to a programme of LEAPs as they enable the Agency to identify, assess, prioritise and solve local environmental issues, taking into account the views of local stakeholders. These will also allow the Agency to deploy its resources to best effect and optimise benefit for the local environment.

LEAPs replace the Catchment Management Plans that were produced by the former NRA and build on their success by covering all the Agency's functions. The LEAP process and documents that it comprises are shown below. LEAPs also have a role in:

- Promoting openness and accountability
- Developing closer links with public/community and other organisations
- Educating and informing the public on local environmental issues
- Realising the environmental potential of the area

Figure 1: The LEAP Process



2.2. KENT AREA APPROACH

An over-arching Kent Area LEAP has been produced addressing significant strategic issues that are common across several catchments in the Area. Specific local issues are then dealt with in a series of catchment LEAPs as follows:

Eastern Rother Darent Kentish Stour Medway North Kent

Copies of the Kent Area and catchment LEAPs are available from the Kent area office, details of which are provided in Chapter 7 (Future Review and Monitoring) on page 38 of this document.

2.3. THE EASTERN ROTHER LEAP DOCUMENTS

This **Eastern Rother LEAP** sets out a programme of action which the Agency and partner organisations intend to carry out over the next five years in order to protect and enhance the local environment of the catchment. As with all such programmes, funding for these actions will be subject to availability and to changes in priority, within the Agency and externally, both locally and nationally.

The LEAP has been developed from the Consultation Draft and although it is intended to be a stand alone document, it is best used in conjunction with the documents detailed below which support it and from which it has been developed. The LEAP transforms the proposals put forward in the Consultation Draft into agreed actions in light of comments received during the consultation process. It will guide the Agency's activities in the area for the next five years and will hopefully influence the activities of other key bodies. Where more background information or greater detail of an issue is required, reference should be made to the Environmental Overview.

The Consultation Draft is the main focus for public consultation, concentrating on the prioritisation of environmental issues relevant to the Agency and the identification of possible options for action necessary to restore/improve the local environment.

The Environmental Overview is a factual description and analysis of the local environment, looking at the impact of stresses on the state of this environment. It provides background to the identification of the environmental issues of importance in the Eastern Rother for public consultation.

The Statement of Public Consultation details the results of the consultation process and the influence it has had on the development of the final LEAP.

Regular monitoring and updating are an integral part of the LEAP process. Progress in implementing LEAP actions will be monitored and reported on in a published **Annual Review**. This will also identify any additional actions needed to maintain progress in light of any changes in the LEAP Area and whether any actions need removing or amending where they are no longer appropriate.

After five years, sooner if required, the Agency will carry out a major review of the progress that has been made. At this stage the Agency will produce a new LEAP Consultation Draft to reflect these changes and to further improve the local environment.

3. REVIEW OF THE CONSULTATION PROCESS

3.1. LEAPS AND PUBLIC CONSULTATION

A fundamental objective of the LEAP process is to involve all parties interested in working with the Agency to plan for the future wellbeing of the local environment. The Agency is committed to the process of public consultation on all of its LEAPs. This section provides a brief overview of the three-month consultation period. A separate "Statement of Public Consultation" provides more specific details of the influence of the public consultation process on the development of the final document.

3.1.1. Initial Consultation

A number of organisations were consulted during the preparation of the Consultation Draft and several meetings were held with relevant organisations. The draft was put together using data and information supplied by area and regional staff and the Agency's National Centre for Environmental Data and Surveillance.

3.1.2. Launch Publicity

The LEAP was launched on 8th December 1999 at the Thomas Peacocke Community College in Rye, East Sussex. Over 400 invitations were sent out to key stakeholders and approximately 70 people attended on a wet and windy evening, which was considered to be a good turn out. Press releases generated interest from a number of local newspapers and radio stations. Over 400 Consultation Drafts were sent out to individuals and a broad range of organisations. Copies of the Consultation Draft and Environmental Overview were sent to the main libraries in the LEAP area to stimulate more widespread interest. As the consultation period was drawing to a close, a "last chance to comment" press release was issued and this again generated local media coverage.

3.1.3. The Kent Environment Group (AEG)

Members of the Kent AEG represent local authorities and the wide range of interests of the Agency's customers, including anglers, farmers and local businesses. The purpose of the AEG is to advise the Agency on local environmental issues and opportunities for partnerships, and to provide feedback on Agency initiatives, including LEAPs. To this extent, the AEG is a form of partnership with the public and its contribution is highly valued by the Agency. The AEG was kept informed of the progress of the plan and given the opportunity to comment and shape the document by providing advice and information at key stages.

3.2. SUMMARY OF RESPONSES

A total of 51 different consultees responded to the Consultation Draft. All comments have been considered and where appropriate and practicable, incorporated into the Plan. A number of consultees expressed an interest in partnership working and they have been included in the actions tables. Details of consultees who responded to the Eastern Rother consultation can be found in Appendix II on page 40 of this document.

Errors and omissions were also drawn to our attention. A number of issues picked up as having been omitted had already been considered as issues in the over-arching Kent Area LEAP. It is hoped that the relationship between the two documents has been clarified in this document. A number of consultees welcomed the Agency's commitment to integrated environmental management and congratulated the Agency on producing a comprehensive document.

4. THE EASTERN ROTHER CATCHMENT

4.1. INTRODUCTION

And east till doubling Rother crawls
To find the fickle tide,
By dry and sea-forgotten walls,
Our ports of stranded pride.

(from Sussex, Rudyard Kipling 1902)

Administratively the Eastern Rother catchment is divided almost equally between Kent and East Sussex. It lies in the South West corner of the Agency's Kent Area and is the third largest catchment in the area, with a land area of 970 km^2. The catchment has the lowest population density in the Kent Area (approximately 175/km^2). This is due to its rural nature with predominantly mixed arable and sheep farming. With rainfall averaging 754mm per year there are good conditions to sustain arable farming. The industry in the catchment is found predominantly along the Rother mainly between Rye and Rye Harbour.

The main river in the area is the Rother, which rises near Rotherfield in East Sussex and flows eastwards through the High Weald and then skirts Romney Marsh. About halfway along its course the river changes its character from an upland stream to an embanked channel with much of its length below the high tide level. The tidal limit of the Rother reaches as far as Scots Float, at Playden, where there is a tidal sluice and lock. Further up stream the river is embanked to provide storage for floodwater. The Rivers Tillingham and Brede join the Rother Estuary at Rye to form a drying harbour extending 4 kilometres out to the sea, with access only possible close to high tide. As well as the River Rother catchment the area also includes the marshes (Romney, Walland and Denge Marshes referred to collectively as Romney Marsh) bounded by the Royal Military Canal.

The area also includes a range of unique and greatly contrasting landscapes, from the ancient woodland of the Wealden valleys in the west, to the flat alluvial marshland dissected by dykes in the east. The coastline in the south includes the important, but environmentally fragile, shingle promontory of Dungeness as well as popular beaches such as Camber.

Industries and other human activities, such as traffic through the catchment and the agricultural land use, make their impact on the environment through discharges to air, water and land. There are few industrial discharges in the catchment with the main area of industrial activity situated along Rye Harbour Road. Southern Water provides sewage treatment works, discharging to the Eastern Rother catchment, for the main towns such as Tenterden although there are still a large number of small private discharges in unsewered rural areas.

There are 22 licensed active waste facilities in the Eastern Rother catchment but waste is also transported out of the catchment to landfill, which remains the principal means of disposal for domestic waste arisings.

Many of the characteristics that are considered to make up the traditional English landscape, which is increasingly threatened in the South East, are still present in the Eastern Rother catchment. The aim of this LEAP is to provide the Environment Agency's framework for a sustainable future in this area to preserve these features, whilst considering the range of human and natural pressures that impact on it. This will take account of the need to protect and enhance the countryside whilst ensuring that any developments both inside and adjacent to the catchment are carried out in a sensitive way with minimal affect to the area and its resources.

5. A BETTER ENVIRONMENT THROUGH PARTNERSHIP

5.1. INTRODUCTION

The Agency is well placed to influence many of the activities affecting the environment through the Environment Act 1995 (EA95) and other associated legislation. The Agency must work in partnership with others to ensure that, where appropriate, the actions identified in Section 6 of this document are implemented and the environmental issues addressed. The Agency cannot achieve these aims alone as it has neither the statutory powers, nor the resources or technical expertise. For this reason it will continue to work in partnership with local authorities and other organisations.

The Environment Agency's Vision recognises that the Agency can unlock resources and enthusiasm through effective partnerships with local government, local communities, business, environmental groups and others.

5.2. CURRENT PARTNERSHIPS AND PROJECTS IN THE LEAP AREA

In addition to the general partnership opportunities presented in the Kent Area LEAP there are a variety of current projects in the Eastern Rother LEAP area involving partnership between the Agency and different organisations. A selection of these partnerships is summarised below:

5.2.1 Kent Air Quality Partnership and Sussex Air Quality Steering Group

Part IV of the Environment Act 1995 places responsibility for local air quality management on the local authorities. They are required to carry out a three stage review and assessment of air quality within their boundaries, taking into account factors from neighbouring areas. The Agency is a consultee to this process. The review must assess whether it is likely that air quality objectives laid down in the Air Quality Regulations (SI 1997 No 3043) will be complied with by the 31 December 2005. If it is likely that one or more of the objectives will be breached the local authority is required to designate that area where the breach is likely to occur as an air quality management area. An action plan must be prepared which sets out the measures required to achieve these objectives.

The Agency's role is one of liaison, support, technical consultation and provision of data relating to Part A IPC processes. Part B processes (those with a lower potential to pollute) are already regulated by local authorities under the Local Authority Air Pollution Control (LAAPC) provisions of the Environmental Protection Act (EPA) 90 Part 1.

The Kent Air Quality Partnership covering is an existing forum that promotes co-operation and co-ordinated action on air quality issues. It is the custodian of an emissions inventory and air quality model which are now being used to facilitate member local authority Air Quality Reviews. The Agency is a full member of the partnership and Kent County Council (KCC) provides secretarial facilities. The air quality model is also used by KCC to assist with planning decisions by evaluating the impact of proposed developments.

A similar partnership, the Sussex Air Quality Steering Group (SAQSG), fulfils an equivalent role in both the Sussex counties. This Group comprises the local authorities, East and West Sussex County Councils and the Environment Agency together with other co-opted parties (eg. representatives from Gatwick Airport) and acts as custodian for an emissions inventory that is used to facilitate modelling work. Whilst most of the partners conduct ambient air quality monitoring there is no co-ordinated monitoring network across Sussex similar to the one in Kent. The SAQSG is currently considering the benefits and implications of establishing such a network.

5.2.2 Romney Marsh Countryside Project

The Agency is a funding partner of the Romney Marsh Countryside Project (RMCP) together with English Nature, Shepway District Council, South East England Development Agency (SEEDA) and the Kent Rural Development Area (RDA) amongst others. The RMCP aims to help care for the special beauty and wildlife of the Romney Marsh, Walland Marsh and Dungeness.

The aims of the RMCP are:

- To conserve the wildlife and landscape of the Marsh, working with farmers, local communities, land owners and businesses. The RMCP helps to care for both small pockets of wildlife and large protected sites;
- To help to manage the Marsh waterways and wetlands for their landscape and wildlife;
- To work with local groups and societies to improve the footpath and bridleway network;
- To encourage people to enjoy and understand the countryside through guided walks, cycle rides, countryside events and children's activities; and
- To enable people to care for the countryside through volunteer events, publicity and interpretation.

The RMCP has encouraged the uptake of Countryside Stewardship grants by farmers to install the desired buffer strips. It also undertakes survey work, including River Habitat Surveys and water vole survey and monitoring, habitat management and the promotion of recreation. From April 2000, the RMCP has employed a Green Tourism Officer for the Romney Marsh for a 7 year contract.

5.2.3 Rye Harbour Nature Reserve

The Rye Harbour Local Nature Reserve occupies much of the land to the west of the Rother between Rye and the sea. It includes the 157ha Local Authority owned area between Rye Harbour Village and Winchelsea Beach. In 1970 it was designated as a nature reserve by East Sussex County Council, which is responsible for its management.

The Rye Harbour Nature Reserve is an area where wildlife is specially conserved. The remainder of the SSSI supports commercial, agricultural and recreational pursuits. The reserve is noted for the fine coastal shingle vegetation (over 350 recorded species of flowering plants) and some 270 recorded species of birds.

A management committee funded by East Sussex County Council and including representatives from the Environment Agency, administers the nature reserve. The committee employs a warden with funding from the friends of Rye Harbour Nature Reserve and grants from the Agency.

5.2.4 Two Bays Initiative

The Two Bays initiative is a wildlife project that aims to study and enhance the habitats and species in the Rye Bay area and across the Channel in the Baie de Somme, Picardy, France. The initiative recognises that wildlife does not occur in isolation and moves across borders into neighbouring countries. The Environment Agency is a partner in this project which is part funded by the European Community European Regional Development Fund.

5.2.5 Rye Bay Countryside Office

The Rye Bay Countryside Office is funded by East Sussex County Council to improve the quality of the environment in the Rye Bay area. It therefore covers those parts of the Rother catchment within East Sussex. The Office's principle aims include conservation of wildlife and landscape and improving access and enjoyment across 20 parishes between Hastings and the Kent border, including management of the dunes at Camber. The work mainly involves liasing with parishes and the local community, carrying out small scale management projects and promoting recreation such as nature trails throughout the area.

5.2.6 Fisheries Consultative Group

Many development schemes have significant implications for fisheries and the Agency will work with anglers, riparian owners, developers and local authorities to protect fisheries. In particular the Environment Agency works closely with the Kent Fisheries Consultative Association (KFCA) which contains representatives sitting on the Agency's Regional Fisheries, Ecology, Recreation, Navigation and Conservation Committee and the Kent Environmental Group (AEG). In turn the KFCA serves four catchment fisheries groups including one for the Eastern Rother.

A Royal Military Canal Fisheries Users Group has been set up to provide a forum for fisheries interests and the Agency to proactively solve issues arising on the canal.

5.2.7 Waterwatch

Agreement has been reached with the police that the Waterwatch group (similar to Neighbourhood Watch groups) which was originally established on the Great Stour will be extended county wide, to include all of the Rother catchment falling under the jurisdiction of the Kent police.

The respective parties involved in Waterwatch communicate by telephone and in addition post information on an electronic mailboard to maintain a useful flow of intelligence. The partners also have specific joint arrangements for addressing poaching issues.

Representatives of organisations wanting to belong to the Waterwatch group should contact the Fisheries section of the Agency in Kent for more information.

5.2.8 Farming and Wildlife Advisory Group

In collaboration with Kent and East Sussex County Councils, the Environment Agency Kent Area Office has supported the advisory work of the Kent and Sussex Weald Farming and Wildlife Advisory Group (FWAG) since 1994. This is in recognition of the high percentage of advice provided to landowners relating directly to the protection, enhancement and creation of watercourses and wetlands. The work delivered contributes to Agency conservation aims through, for example, the production of farm reports, Countryside Stewardship applications and farm biodiversity action plans.

5.2.9 SUSTRANS

SUSTRANS, or Sustainable Transport, works through practical projects such as the National Cycle Network and Safe Routes to Schools. Their aim is to design and build safe routes for cyclists and walkers to provide journeys to work, school and for leisure. There have been a number of routes proposed in the Rother area, including paths for cyclists and walkers from Camber to Pett, passing through Rye and crossing the Royal Military Canal. The Agency has a duty to incorporate recreation facilities into its work wherever it is feasible, and as a result, plays a significant role in the way recreational cycling develops along waterside locations.

5.2.10 Rye Partnership

The Rye Partnership was established in 1996, bringing together key stakeholders to develop a local community response to the socio-economic problems prevalent in the area. The Environment Agency is a member of this partnership, which includes various councils and local interest groups.

The partnership has successfully delivered and supported many small scale projects and undertook extensive consultations with local people to provide the foundation of a strategy and a resultant development programme. To date, the partnership has successfully delivered a number of its objectives, including the production of interpretation leaflets, habitat improvement works, access control to the Nature Reserve and environmental studies of the special Rye shingle.

In 1999, the Rye Partnership successfully submitted a bid for Single Regeneration Bid (SRB) funding to address the lack of socio-economic opportunities in the Rye Bay area. A bid for INTERREG money was submitted in 2000 to deliver further work in the Rye Bay Area, including supporting Countryside Stewardship schemes. INTERREG is one of the European Community initiatives under the European Regional Development Fund (ERDF) and the European Social Fund.

5.2.11 Internal Drainage Boards

Land Drainage and Sea Defences have had an essential part to play in the development of Romney Marshes. The area is considered to be "The Cradle of Land Drainage in England" and can boast the oldest Drainage Authority in England – The Corporation of Romney Marsh – The Lords, Bailiff and Jurats – known as The Lords of the Level for short. The Corporation has been in existence for nearly 750 years and their work has enabled the Romney Marshes to become productive and important for agriculture. Wildlife has also flourished and developed as a consequence of the successful drainage system and the marshes have become of great interest to environmentalists.

The ancient Corporation exercised its land drainage and sea defence functions from New Hall, Dymchurch until the Land Drainage Act 1930 created Catchment Boards and Internal Drainage Boards. Since the creation of these Boards they have undertaken the drainage and sea defence works and the Corporation is now only a ceremonial body.
The Internal Drainage Boards still operate but the functions of the Catchment Boards have been taken over by a succession of Authorities. The relevant successor authority is now the Environment Agency, which acts as agent for the Internal Drainage Boards carrying out the works on behalf of the five Boards:

- Romney Internal Drainage Board;
- Walland Internal Drainage Board;
- Denge & Southbrooks Internal Drainage Board;
- Rother Internal Drainage Board;
- Pett Internal Drainage Board.

Proposals have now been approved to merge these Boards into a single one and the decision is currently awaiting Ministerial approval. If this approval is granted, it is hoped that the single IDB will come into effect on 1st April 2001, to be known as the Romney Marshes Area IDB.

5.2.12 Harbour of Rye Advisory Committee (HORAC)

The Environment Agency manages and is the Harbour Authority for the Harbour of Rye. HORAC represents users, including recreational, commercial and fishing interests, local authorities and conservation interests who advise the Agency on matters connected with provision and improvement of the harbour facilities.

5.2.13 Kent Sustainable Business Partnership

The Agency is a partner in the Sustainable Business Partnership project, led by Kent County Council, which seeks to target small and medium businesses in the area. The Kent Sustainable Business Partnership has recently been awarded funding from European (Objective IV) ADAPT funds which will enable the project to continue and develop.

The European Social Fund provides part funding for projects aimed at helping the unemployed and those at risk of unemployment to find jobs or to adapt, as the name implies, to changing employment conditions. Objective IV allows this assistance to be given to businesses too. Rising environmental standards, including legislative changes, are becoming an increasing challenge for businesses. The ADAPT programme seeks to assist pre-emptive action to ensure that such environmental needs are met.

5.3 Summary

Many other partnerships occur or are planned within the Agency, all of which are designed to deliver the mutual objectives of the partners involved. The Agency has a diverse network of relationships with many national, regional and local organisations as well as landowners and the general public. One significant area for future development will be the building of partnerships to aid environmental education. It is through these partnerships that we are able to contribute fully towards the goal of sustainable development.

5.4 FUTURE PARTNERSHIP PROCESS

Meeting the challenge of achieving sustainable development in the Eastern Rother area will require the Agency and partner organisations to develop an appropriate policy framework, together with a high level of public interest and support. This stage of the LEAP process identifies actions developed with consideration of the comments and suggestions of consultees, that can be undertaken in partnership with a range of organisations. The Agency welcomes new partnership opportunities and would be pleased to hear from individuals or organisations with any such proposals.

6. ACTIONS FOR THE EASTERN ROTHER

6.1. INTRODUCTION

Implementation of the LEAP is based on delivery of the actions identified as required to address the 13 key environmental issues that are of particular significance to the catchment.

The intended actions are presented with proposed timescales, anticipated costs, Agency lead contact(s) and the identification of potential partners. As far as possible, actions are specific, measurable, agreed, realistic and time-defined. In most cases actions are over and above the statutory responsibilities of the Agency and are not matters that can be addressed by the Agency through its day to day work. As such, the plan represents the non-routine investment by the Agency and others in the catchment.

Where possible, costs have been outlined for the period covered by the plan. This does not necessarily reflect the total cost of the schemes to the Agency and is sometimes an estimate, to be more accurately costed later. A number of the actions will require feasibility studies and an appraisal of options prior to work commencing. In some cases, depending on the outcome of these studies, further action may not be required. The document is produced in good faith recognising current priorities both within the Agency and in other organisations. The implementation of the actions will be subject to, amongst other things, availability of financial and human resources. The letters "MP" appearing in the column headed Agency Cost, denote manpower resources only, with no additional cost to the Agency's annual budgetary provision.

6.2. ENVIRONMENT AGENCY BUSINESS PLANNING PROCESS

It is the Agency's intention to implement all actions, however, activities need to be prioritised in conjunction with the Agency's core duties via the annual Business Planning Cycle. In addition, the Agency is jointly responsible with other identified organisations and individuals for implementing the actions in this plan. A number of the actions rely on external funding and are also heavily dependent on the changing priorities of partnership organisations. The Annual Review process enables the Agency to regularly assess progress and incorporate changing local and national priorities as necessary.

6.3. THE ACTIONS TABLES

Each of the issues identified in the Action Tables that follow is accompanied by a short explanatory text, but please refer to the Environmental Overview for more background information. Many of the issues and actions are inter-related which reflects the need for integrated environmental management. Cross-referencing between issues and actions has been carried out where appropriate.

Previous LEAP Action Plans have grouped Actions against each of the Environment Agency's nine environmental themes, as set out in the "Environmental Strategy for the Millennium and Beyond", with each theme being depicted by a symbol.

As a result of the publication of the Environment Agency's new vision in January 2001, which includes a new set of themes, the old nine themes listed within the strategy are not incorporated in this Action Plan.

Future LEAP Annual Review documents will link the LEAP Actions for all catchments to the nine themes listed in the new Environmental Vision and Frameworks for Change so that progress against each Agency theme can be measured.

6.4. RELATIONSHIP BETWEEN THE KENT AREA AND EASTERN ROTHER LEAPS

The Kent Area LEAP is the strategic over-arching Action Plan that deals with issues that are common to at least three catchments in the area. Catchment LEAPs detail issues and actions that are specific to the catchment. There are three basic relationships between issues in the two layers of LEAPs as detailed below:

- A generic issue in the Kent Area LEAP where actions addressing the issue cover activity in the Eastern Rother. The issue does not appear again in the Eastern Rother LEAP with the exception of Issues and for which text is included to ensure comprehensive coverage of significant issues.
- A generic issue raised in the Kent Area LEAP with particular relevance to the Eastern Rother catchment and therefore addressed with specific actions in this catchment LEAP.
- A local issue of relevance to less than three catchment LEAPs and therefore not addressed in the Kent Area LEAP but addressed in the Eastern Rother LEAP.

AREA OF INTEREST	KENT AREA LEAP	EASTERN ROTHER LEAP
FLOOD MANAGEMENT	Issue 1: Standard of flood and coastal defences will not be adequate for predicted effects of climate change	Issue 10: Maintaining the sea defences on coastal areas.
	Issue 20: Maintenance of existing flood defences	
MANAGING WATER RESOURCES	Issue 2: Sustainable water resources management and the effects of climate change	Issue 2: Future climate changes could give rise to a need for additional winter storage to improve water availability for agriculture.
	Issue 4: Deterioration in the balance of water resources	Issue 3: The need to address water company demands whilst protecting the needs of the environment.
	Issue 5: Forecast demand – growth; impact on the overall balance of public supplies	Issue 1: Risk of loss of aquifer capacity at Denge from saline intrusion (tidal surges).
IMPROVING AIR QUALITY	Issue 3: Need for increased knowledge of impacts of Agency regulated industrial releases on air quality	Actions in Kent Area LEAP cover Eastern Rother catchment.
ENHANCING BIODIVERSITY	Issue 6: Protection and enhancement of biodiversity	Issue 4: Riverine biological decline in the River Line.
	Issue 8: Protection and enhancement of important wetlands	Issue 5: Pressures on natural habitats on Romney Marsh and how to achieve the Agency's biodiversity objectives.
MANAGING FRESHWATER FISHERIES	Issue 7: Illegal movement of freshwater fish through Kent	Issue 6: Impact of structures on the passage of migratory fish.

CONSERVING THE LAND	Issue 11: Deterioration in the condition of land drainage	Issue 11: Impacts from land contamination along Rye Harbour Road.
	Issue 21: Development pressures on environmental resources	Issue 13: British Gypsum Mountfield mine abandonment - regulation/ environment study.
	Issue 22: Contaminated land to be made suitable for development use	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 23: Environmental impact of the Channel Tunnel Rail Link (CTRL)	
WATER QUALITY	Issue 12: Water quality improvements	Issue 8: The impact of the Bewl to Darwell Transfer and its effects, such as on water quality and fish health
	Issue 13: Improving bathing beaches	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 14: Coastal oil pollution	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 17: Pollution prevention	
	Issue 29: Danger of contamination of water for drinking water	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 10: Reduction in river baseflow producing a loss of dilution capacity	
INTEGRATED RIVER-BASIN MANAGEMENT	Issue 9: Declining flows in Kent area rivers	Issue 7: Nutrient rich discharges causing weed growth on Romney Marsh plus weed growth and fish deaths in extreme summers in the Royal Military Canal.
	Issue 15: Increased managed access to the water for recreation	Issue 9: Pressure from the tourist industry in the area.
	Issue 16: Protection of Archaeological Heritage	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 19: Development pressures and sustainable surface water management	Actions in Kent Area LEAP cover the Eastern Rother catchment.
ENVIRONMENTAL AWARENESS	Issue 18: Lack of knowledge of significant environmental issues in Kent area	Actions in Kent Area LEAP cover the Eastern Rother catchment.
SUSTAINABLE WASTE MANAGEMENT	Issue 24: Sustainable Wastes Management	Issue 12: Future waste disposal methods at British Gypsum from the manufacturing process.
	Issue 25: Waste management facilities	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 26: Sites claiming exemption from waste management licensing	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 27: Pollution from the metal recycling (scrap) industry	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 28: Land application of sewage sludge	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 30: Sustainable management of landfill gas	Actions in Kent Area LEAP cover the Eastern Rother catchment.
	Issue 31: Risk of illegal waste disposal (flytipping)	Actions in Kent Area LEAP cover the Eastern Rother catchment.

ISSUE 1: RISK OF LOSS OF AQUIFER CAPACITY AT DENGE FROM SALINE INTRUSION (TIDAL SURGES).

The most recent predictions from the Climate Change Impacts Review Group (CCIRG) indicate the following:

- reduced summer rainfall and increased winter rainfall;
- increased frequency of strong winds which will lead towards increased wave height and a greater frequency of tidal surges;
- relative sea level rise at a rate of 6mm per year – attributed partly to rising sea level and partly to the geographical tilting of the British Isles.

During tidal surges, the freshwater/salinity interface rises and if the natural groundwater levels are low, the salinity of the water at the fringes of the aquifer increases. Problems are also caused by waves overtopping the shingle defences and the CCIRG reports that these incidents are likely to increase in frequency. Under normal rainfall conditions, the aquifer is fully replenished and the potable water quality restored. The nature of the aquifer, with its minimal vegetation cover and exposed gravel ridges, means that recharge will occur after all major rainfall events, including those in the summer months. Over the last ten years however, salinity in the eastern fringe of the aquifer has increased during tidal surges and there is evidence that the water quality balance is not being regularly restored. This may in part be due to the increased frequency of prolonged drought periods.

A rise in sea level could therefore have a major effect on the interrelationship of the freshwater/saline interface in the aquifer. Groundwater levels may rise and create more open water in the shingle depressions. This in turn will increase the evaporative losses and reduce the water available for supply.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Implement periodic reviews of aquifer status as part of the Kent Area Catchment Abstraction Management Strategy (CAMS) and assess the potential for extending the life of the aquifer. • *(Agency Lead: Area Water Resources Manager)*	Stable water table levels and aquifer quality.	Deployable output sustained at existing levels.	2001-2004	Water Company, British Energy, BNFL, EN, Mineral extractors, RSPB.	MP

ISSUE 2: FUTURE CLIMATE CHANGES COULD GIVE RISE TO A NEED FOR ADDITIONAL WINTER STORAGE TO IMPROVE WATER AVAILABILITY FOR AGRICULTURE.

Present climate change predictions are that winters will become wetter and summers will become drier. Under these conditions the quantities of water available to abstractors in the summer will be reduced but the need for water, particularly for stock watering and crop irrigation practices, will be increased. A possible solution to this problem would be to increase the amount of winter storage in the catchment so that the storage can be filled during the winters and the water used in the summer.

At present the Water Resources function of the Agency actively encourages abstractors (especially spray irrigators) to construct winter storage reservoirs as it is felt that this makes better use of the water resources in the area. This is particularly important on Romney and Walland Marshes where there are Habitat Directive conservation sites which may be impacted by summer abstraction.

During the winter months the levels in the marsh ditches are kept low to maximise flood storage. This inevitably reduces the total volume of water that could otherwise be made available for use during the summer and therefore ditch storage may be less suitable than off-line storage. It may therefore be appropriate for the Agency to provide general guidance on situations where creation of winter storage could prove effective for irrigation or other agricultural users. A more site specific filling regime would be drawn up by Water Resources in consultation with Flood Defence.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Devise and implement a strategy to identify appropriate off-line storage areas and guidelines for their design and filling regime. • *(Agency Lead: Area Water Resources Manager)*	Identification of areas which have the potential for sustainable storage. Agreement of guidelines with all partners. Strategy to include consideration of saline intrusion and archaeological site	Enhanced reliability of water supply to farmers. Reduction in costs of feeding water in summer.	2001-2004	IDB's, EN, MAFF, CLA, Crown Estates, Landowners.	£15k

ISSUE 3: NEED TO ADDRESS WATER COMPANY DEMANDS WHILST PROTECTING THE NEEDS OF THE ENVIRONMENT.

Four water companies provide water in the Eastern Rother catchment: namely Folkestone & Dover Water Services (FDWS), Mid Kent Water plc (MK), Southern Water (SWS) and South East Water Ltd (SEW).

The water resources in the catchment are primarily surface water with Darwell Reservoir being the prime source. The groundwater resources are limited due to the composition and structural complexity of the Hastings Beds aquifer. The Denge gravels act as an important local source of groundwater.

At present, all of the water companies have a supply/demand deficit for those parts of their zones falling within the Rother Catchment and import water into the area. Southern Water enhances the yield of Darwell Reservoir with a transfer from Bewl Water. Folkestone & Dover import water from the Chalk aquifer to the north via a new trunk main. Mid Kent Water bring supplies into the area from Bewl Water and from Lower Greensand boreholes in the Ashford area. The extent of the supply/demand deficit is exacerbated by Southern Water and South East Water having large demands to the west of the area which have historically been supplied by water from the Rother Catchment, e.g. Hastings and Eastbourne.

Therefore, in general, the water demands within the Rother Catchment are dispersed and do not coincide with the major demand centres of the individual water companies. In other words, the Rother Catchment is at the end of the water company distribution systems. This can mean that water is either imported into or exported from the catchment depending upon the structure of the distribution system.

The demand for water in the Rother Catchment is also increasing due to the environmental demands within its lower reaches. Walland Marsh and Dungeness are designated sites under the Habitat Directive and thus it is the responsibility of the Agency under the National Environmental Programme to ensure that the water requirements for these sites are protected. There is also a requirement for the release of freshwater through Scots Float Sluice to encourage runs of migratory trout and ensure the completion of the freshwater stage of their lifecycle.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Draw up and promote an action plan to undertake water balancing to assess total environmental water requirements and total long-term safe yield while implementing resource management. Develop plan as part of the Kent Area Catchment Abstraction Management Strategy (CAMS). • *(Agency Lead: Area Water Resources Manager).*	Satisfy Water Resources Audit.	Achievement of a sustainable balance between water use and environmental enhancement.	2001-2005	Water Companies, Power stations, LA's, KCC, EN.	£30k

ISSUE 4: RIVERINE BIOLOGICAL QUALITY IN THE RIVER LINE

The discharge from the abandoned Mountfield gypsum mine is rich in sulphates. This discharge is now regulated by an Environment Agency discharge consent, conditions of which include continual improvement to the quality of the discharge to bring the water quality into line with the Surface Water Abstraction (Drinking Water) Directive. The receiving River Line, a headwater tributary of the River Brede, which discharges to the River Rother at Rye, has elevated sulphate levels. Improvement works have been undertaken by the Agency with the full co-operation of British Gypsum Limited, the operator of the mine, and significant improvements have been made around the Whatlington Road area, though further work is still required in other areas.

An examination of the fish stocks in the River Line has revealed a small but valuable stock of wild brown trout and the water quality is not perceived to have an immediate major impact upon fisheries in that area. The same is not the case for aquatic invertebrates. Upstream of the mine discharge, the fauna meets or exceeds the expected standard with 35 taxa represented over a 5 year period. Immediately downstream the fauna is impoverished with only 15 taxa found.

The concentration of sulphate in the discharge is not constant but varies somewhat and the different species of invertebrate each have a different sensitivity to the toxic sulphate ion. An on-going study is into its fourth year of survey.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Prepare and implement an improvement plan including continued and additional environmental monitoring. • *(Agency Lead: Team Leader Tactical Planning, Team Leader Environment Protection, Team Leader Biology and Fisheries Scientist).*	Marked improvement in aquatic invertebrate populations upstream of Eatenden Lane. Increase in brown trout populations. Compliance with Surface Water Abstraction (Drinking Water) Directive. Action at least two biological surveys per year together with an annual update report.	Improved biodiversity and water quality of River Line. Compliance with Surface Water Abstraction (Drinking Water) Directive.	2001-2003	Landowners, British Gypsum.	£1,000

ISSUE 5: PRESSURES ON NATURAL HABITATS ON ROMNEY MARSH AND HOW TO PROTECT AND ENHANCE THE WATER-RELATED BIODIVERSITY AND LANDSCAPES OF THE CATCHMENT.

In the United Kingdom, over 100 species of wildlife are known to have been lost this century. Many more small, inconspicuous species are likely to have been lost. The need to tackle the global decline in biodiversity was recognised in 1992 with the signing of the Biodiversity Convention by over 150 world leaders. This requires the development of national plans for the conservation and sustainable use of Biodiversity. Biodiversity: The UK Steering Group Report was published in 1995 and a growing number of county plans have been produced, including the Kent Biodiversity Action Plan (BAP) and the Sussex BAP.

Due to the legislation under which the Agency operates our conservation activities are primarily devoted to wildlife associated with the water environment. Nationally, it has decided to give priority to allocating our resources to implementing actions that contribute to the UK plan and we are taking part in the Biodiversity process in the following ways:

- UK contact for a range of habitats and species, several of which occur in the Rother catchment. As contact , our responsibilities include stimulating action to achieve targets, monitoring and reporting of progress.

- Joint lead partner for a range of habitats and species where we our responsible for preparing detailed work plans, directing resources and over seeing implementation.

The Area LEAP includes a number of actions relevant to the Rother catchment and should be read in conjunction with this LEAP. These include how we are meeting the responsibilities placed upon us under the Habitat Regulations, are producing and implementing water level management plans, are improving the biodiversity of watercourses and are initiating and supporting water-related biodiversity projects. In the Area LEAP we also outline that we are contributing to the preparation and review of the Sussex and Kent BAPs and that in partnership with others we hope to set catchment specific targets for key water related habitats and species. In this way it is hoped that all those interested in the wildlife of rivers and ditches will work together towards common goals.

The Agency sees the Farming and Wildlife Advisory Group (FWAG), Two Bays Project and Romney Marsh Countryside Project (RMCP) as key mechanisms for delivering actions on the ground within the Rother catchment. The RMCP for example leads around 50 countryside activities for volunteers each year. A significant commitment to continue to support the core work of countryside projects and the FWAG High Weald Advisor is also given in the Area LEAP.

Many actions within the Rother LEAP will help towards achieving the aims of biodiversity and particular attention is drawn to Issue 10 on maintaining sea defences. However, there are a number of additional actions that the Agency wishes to undertake within the catchment. Rather than repeat general actions from the Kent and Sussex BAPs, in this LEAP we highlight those specific local actions where we see most need to devote our conservation resources over the next few years.

As predominantly agricultural, the lower reaches of the Rother catchment and ditches on Romney Marsh have in the past been significantly modified by land drainage operations. These areas are targeted for both river restoration and the creation of grazing marsh as identified in the national grazing marsh plan. Some wetland wildlife does still flourish in the refuges of the ditches and Romney Marsh is now recognised as a water vole strong hold - a species in serious decline throughout much of the country. A specific water vole action is therefore deemed appropriate. Improvement of bankside habitat is now widely recognised as a priority. Actions in which we are a partner include promotion of buffer strips, collaborative venture with land owners to create nesting sites and hunting habitat for Barn Owls and supporting opportunities to improve or create marsh warbler habitat to help link colonies in East Kent with those in West Sussex.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Investigate and support opportunities for river restoration in the Rother catchment. • *(Agency Lead: Conservation and Recreation Officer and Fisheries Scientist).*	At least 1,000 metres of river restored over the life of the plan. Additional instream deflectors installed and bankside habitats created.	Improved functioning of river corridors through new partnerships. Increased cover, biodiversity and productivity.	2001-2005	Landowners, Business, LA, IDBs, RMCP, River Restoration Centre (RRC)	£10k
2. Where partnership opportunities arise, encourage the creation of grazing marsh and reedbeds in areas from where they have been lost as well as at new sites. • *(Agency Lead: Team Leader Conservation and Recreation).*	At least one site created by 2003/2004.	Meeting UK and County BAP actions and targets. Successful partnership approach adopted.	2002-2005	Landowners, farmers, RSPB, EN, RMCP, RBCO, IDB's.	£20k

Action	Targets	Benefits	Timescale	Partners	Cost
3. Work with partners to complete a Water Vole survey of the catchment and seek opportunities to improve habitat protection and management. • *(Agency Lead: Conservation and Recreation Officer).*	Complete water vole survey of catchment by 2001. Full participation in the production of relevant plans and strategies to ensure inclusion of water vole conservation policies. Agency position on monitoring, habitat management and mink control agreed by 2003.	Improved understanding of the significance of the water vole population. Information on other BAP species, such as the Water shrew, greater water parsnip and marsh mallow also gathered. Integrated approach to water vole habitat conservation. Compliance with legislation. Meeting UK and County BAP targets.	2001-2005	SEORP, RMCP, Two Bays Project, Landowners, LAs, FWAG, FRCA, ADAS, County Trusts.	£60k
4. Support opporutnities to create buffer strips alongside watercourses throughout the catchment. • *(Agency Lead: Team Leader Conservation and Recreation and Fisheries Scientist).*	Creation of at least 10 km of buffer strips over the life of the plan through support for Romney Marsh and Rother River Valleys as target areas for agri-environment schemes. Encourage inclusion of buffer strips in Countryside Stewardship applications. Set the Romney Marsh Countryside Project a target to promote buffer strip creation and management.	Improved habitat for BAP species, reduced use of fertilisers, less pollution and less damage of watercourses. Improved bankside stability. Improved quality of fisheries.	2001-2005	Farmers, FWAG, RMCP, MAFF, FRCA, RBCO, EN.	£8k
5. Devise and implement a programme of senstive ditch management of watercourses maintained by the Agency in the catchment, particularly on Romney and Walland Marshes. • *(Agency Lead: Team Leader Operations and Enforcement and Team Leader Conservation and Recreation).*	Devise and implement programme and monitor progress and outcomes of programme.	Increased biodiversity through habitat protection and creation. Provides opportunity for consensus building between interested parties	2001-2005	Landowners, Farmers, IDBs.	£5k

Action	Targets	Benefits	Timescale	Partners	Cost
6. Extend the Agency Barn Owl Box Scheme to all suitable areas of the catchment. • *(Agency Lead: Conservation and Recreation Officer).*	Publicise the Box Scheme during 2001-2003. Ensure all potential sites are assessed against set criteria. Provide and help install 20 boxes at suitable sites with habitat management prescriptions 2001 - 2004. Monitor success 2001 - 2005.	Increased number of nesting pairs. Continuously improving continuity of habitat restoration network. New partnerships.	2001-2005	Landowners, Hawk and Owl Trust, RMCP, RBCO, RSPB, SOS.	£5k
7. Seek and support opporutnities to create and manage marsh warbler habitat where appropriate throughout the catchment. • *(Agency Lead: Team Leader Conservation and Recreation).*	Assist in survey work 2001-2005. At least two habitat enhancements supported through the life of the plan.	Increased number of nesting pairs. Continuously improving continuity of habitat restoration network.	2001-2005	Landowners, RSPB, RMCP, RBCO, SOS, County Trusts, FWAG	£5k
8. Promote information campaign establishing dialogue between farmers and contractors. • *(Agency Lead: Team Leader Conservation and Recreation and Team Leader Customer Contact).*	Increase in uptake of Countryside Stewardship schemes. Recorded changes in farming practices to benefit the environment.	Reduced siltation of watercourses, less bank erosion, more effective buffer strips. Enhanced biodiversity.	2001-2003	Landowners, Farmers, CLA, RMCP, FWAG, Countryside Projects, Two Bays Project	£6k
9. Devise and adopt a protocol relating to the control of water levels at structures (weirs, sluices etc.). Promote protocol to releavant users through targeted external campaigns and to Agency staff through Intergrated Management Systems. • *(Agency Lead: Fisheries Scientist and Team Leader Operations and Enforcement).*	Clear written procedure on structure operation and associated responsibilities.	Consistent Agency response for structure operation and complaint management. Improved efficiency in managing enquiries and complaints - enhanced customer satisfaction.	2001-2003	Private sluice operators. All Agency functions.	MP

ISSUE 6: IMPACT OF STRUCTURES ON THE PASSAGE OF MIGRATORY FISH.

There are many man-made dams and mills found on the watercourses in the Eastern Rother catchment and historically these have had a number of different uses. Some structures are still used today, for example to prevent saline intrusion and to gauge river flows. Without these structures many of the lower reaches of the Rother catchment would revert to tidal estuaries, with the subsequent loss of a considerable freshwater habitat and flooding to many properties and farmland.

Each of these structures forms a barrier to the free passage of fish within a river system and may obstruct the distribution of other species, such as water voles and crayfish. The acknowledged migratory fish species are sea trout and eels but in practice many of the fish species in rivers and estuaries migrate, albeit short distances, to spawn and feed.

Where salmon or sea trout are present the Agency has the power to have owners of weirs install fish passes, at their own expense, where they fall into a state of disrepair and have to be reconstructed for more than half their length. The Agency would otherwise have to find the full cost of demolition or modification itself, including the installation of any fish pass, if it felt that an obstruction needed to be overcome.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Actively promote the provision of fish passes at all new structures, both Agency and privately owned. • *(Agency Lead: Team Leader Planning and Improvements, Team Leader Development Control and Fisheries Scientist).*	Provision of fish passes at all new structures Ensure all new flood defence structures do not adversely effect the migration of fish.	Fish migration is not impeded. Availability of open river corridor for all flora and fauna.	2001-2005	Agency functions, landowners.	£2k
2. Identify and prioritise existing flood defence structures where modifications may be undertaken to reduce the impact on migratory fish through modification or removal of structures. • *(Agency Lead: Team Leader Operations and Enforcement and Fisheries Scientist).*	Accurate database of structures and action required obtained. Identify a programme of mitigation works.	Reduce the impacts of flood defence operations on the migration of fish. Enhanced forward planning process. Improved passage of migratory fish.	2001-2003	Landowners, RMCP, Angling Clubs, Agency functions.	£7k

ISSUE 7: NUTRIENT RICH DISCHARGES CAUSING WEED GROWTH ON ROMNEY MARSH PLUS WEED GROWTH AND FISH DEATHS IN EXTREME SUMMERS IN THE ROYAL MILITARY CANAL.

In the Rother catchment nutrient rich discharges, which encourage plant growth, arise from the numerous discharges of good quality treated effluent, as well as from leaching of nitrates from agricultural land. Under dry weather conditions these discharges constitute a major proportion of the river flow. For a large part of the year the Rother does not flow via Blackwall Bridge and out to the estuary through Scots Float Sluice. Instead the flow passes up the Potmans Heath Channel where it is pumped via the Reading Sewer into the Royal Military Canal. From here it is fed into the watercourses on the Romney Marsh.

The static water conditions and the presence of nutrients are ideal for excessive proliferation of some water weeds, such as duckweed, which blanket competitor plants and may ultimately deoxygenate the water causing the death of aquatic invertebrate animals, fish and other plants. Because there is low flow in the Rother from Potmans Heath to Scots Float, in hot dry summers there are frequent algal blooms with associated problems due to lack of dissolved oxygen.

The creation of buffer strips alongside watercourses will benefit water quality by reducing nutrient enrichment from agricultural run off. Issue 5, Action 4 of this LEAP details how the Agency will support opportunities to create such buffer strips by encouraging their inclusion in Countryside Stewardship applications and through the work of the Romney Marsh Countryside Project.

To address this issue, water quality monitoring will be undertaken on the Royal Military Canal and surrounding ditches. If this monitoring determines that eutrophication is as a result of discharges from local sewage treatments works (serving populations of more than 10,000 people), then stretches of water may be designated as Sensitive Areas under the Urban Waste Water Treatment Directive. As such, nutrient stripping may be required, funded through the water companies' AMP programme. Where eutrophication is determined to be from agricultural sources, the canal may be considered for inclusion as a potential site under the Agency's eutrophication Strategy. Farm inspections are likely to be undertaken through public sector funding received from the Treasury for management and improvement of waters with significant RE water quality failures (RE - River Ecosystem).

The wider issues of integrated management of all aspects of the Royal Military Canal are incorporated into Issue 9, Action 4. This Action describes how the Agency will participate in the development of an integrated management plan for the future use of the Canal.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Identify the locations where excessive weed growth occurs and may cause eutrophication and remove by mechanical means. • *(Agency Lead: Team Leader Operations and Enforcement and Conservation and Recreation Officer)*	A reduction in incidents where fish are placed in distress from low oxygen levels.	An increase in the value of the fishery and a reduction in the number of emergency mitigation actions required.	2001-2005	Landowners, English Heritage, Angling Clubs, other Agency functions.	£16k
2. Review management of water levels and flows to identify practices to optimise flow in the summer. • *(Agency Lead: Team Leader Operations and Enforcement and Area Water Resources Manager).*	Improved understanding of flow management practices and potential improvements to benefit flow rates and oxygenation.	Increased flow rates through the canal. Reduced plant growth and elimination of fish kills.	2001-2005	Landowners, LA, IDB's.	£5k
3. Initiate a water quality monitoring programme for the ditches surrounding the Royal Military Canal. • *(Agency Lead: Team Leader Environment Protection and Team Leader Tactical Planning).*	Availability of data sources showing spatial and temporal variation in water quality.	Data bank available to make informed decisions on water quality improvements in the canal and target areas of high impact through campaigns.	2001-2004	Farmers, Landowners	£10k
4. Investigate the contribution of nutrients from STWs in the catchment to weed growth. • *(Agency Lead: Team Leader Environment Protection and Tactical Planning Officer).*	Availability of data suitable to identify sources and impacts of nutrients.	Data available to determine sources of nutrients i.e. domestic drainage or agricultural run-off and target resources/campaigns to address impacts accordingly.	2001-2004	Agency Functions, Water Companies, Farmers.	£10k
5. Undertake farm inspections to implement pollution prevention programmes. • *(Agency Lead: Team Leader Environment Protection and Team Leader Tactical Planning).*	Identify and visit key farms in the catchment area. Reduce point source pollution from farms within catchment.	Reduced point source pollution. Improved water quality, oxygen levels and fish survival.	2001-2003	Farmers, Landowners.	£5k

ISSUE 8: THE IMPACT OF THE BEWL TO DARWELL TRANSFER AND ITS EFFECTS, SUCH AS ON WATER QUALITY AND FISH HEALTH.

Darwell Reservoir was constructed primarily as a pumped storage reservoir for water that is abstracted from the River Rother at Robertsbridge. The water is then treated at Brede Waterworks before being fed into the public supply. The Rother catchment upstream of the Robertsbridge intake has very few intensive arable farms and therefore very little trace of pesticide residue is found in the raw water.

Since the Bewl Water to Darwell Transfer pipeline has come into use, traces of pesticide residue have been found in the raw water, which were not found before. This is due to the presence of pesticide residues derived from the water transferred from the Medway catchment. In future this may require the provision of more advanced potable water treatment such as the use of activated carbon.

The impact of this transfer was considered before the connection was approved and the potential for the transfer of several species of fish parasites and aquatic plants was considered but subordinated to the need for the transfer. Whilst the Australian stonecrop, an exotic and prolific plant species in the Medway catchment has yet to be transferred, the fish parasite *Ergasilus sieboldii* has rapidly infected the trout and coarse fish stocks in the Darwell Reservoir. The fish parasite is classified by the Agency as one that can cause mortalities in fish stocks in certain circumstances and the Agency will not consent the stocking of infected fish unless the recipient water already contains the parasite (Salmon & Freshwater Fisheries Act 1975, Section 30). This parasite is particularly resistant and it is highly unlikely that the situation can be held or reversed.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Effectively utilise existing available reservoir monitoring data sources to analyse for traces of pesticide residues. • *(Agency Lead: Team Leader Environment Protection and Tactical Planning Officer)*	Identification of pesticide content and composition of reservoir. To monitor improvements in water quality.	Improved awareness of water quality will be used to influence any mitigation action required.	2001-2003	Water Companies.	£20k

Action	Targets	Benefits	Timescale	Partners	Cost
2. Continue monitoring for invasive fish species throughout the Rother catchment, including in the Darwell reservoir. • *(Agency Lead: Team Leader Fisheries Management and Enforcement and Fisheries Scientist).*	Reduced incidence of introduction of invasive fish species and subsequent disease to native stocks. Environment Agency to promote results of water company annually produced reports and feed information into National Database of Invasive Species.	Provides early warning of new introductions. Benefits long term fishery management. Improved understanding of the distribution of parasites and exotic species.	2001-2005	Water Companies, RMCP, Angling Clubs, Landowners.	£2.5k

ISSUE 9: PRESSURE FROM THE TOURIST INDUSTRY IN THE AREA.

The Rother catchment contains a long stretch of coastline running from the north of Hythe to just south of Fairlight. Such an extensive and unique coastline means that the area receives many visitors and holidaymakers each year who make use of the tourist attractions such as the historic town of Rye or the Romney, Hythe and Dymchurch Railway travelling along to the fragile environment of Dungeness.

In addition to the local dependence upon farming, sea fishing and quarrying, the tourist industry contributes significant funds to the local economy. However, with these benefits come the associated problems of congestion, extra demands for water and waste disposal, as well as the need to strike a balance between public requirements and the need to preserve areas of high nature quality such as the Rye Harbour Nature Reserve. Each demand needs careful consideration, planning, control and funding.

The recreational responsibilities of the Agency are to take account of recreation in all our activities, to ensure suitable land or water in our control is made available for safe use and a general duty to promote water-related recreation where desirable. This can be interpreted as meaning where compatible with our operational and environmental requirements and where there is consensus between all parties, especially landowners. It is also dependent on where both staff time and finance allow. It should be noted that at present there is no dedicated recreation officer in the Area and no specific recreation budget for the Rother catchment.

Many of the actions detailed in Issue 15 of the Area wide LEAP on managing access to the water environment for recreation are relevant to the Rother catchment. For example, acting a mediator on relevant issues where requested to do so by all partners involved, raising awareness about opportunities to enjoy water-related recreation and working with SUSTRANS and local authorities in developing the long-distance cycle network in a reasonable and

practical way. Water quality issues, which can be important for water based recreation, are also identified in Issues 12 and 13 of the Area LEAP. None of these actions are repeated here.

Much of how the Agency wishes to achieve water-related recreation benefits on the ground for all those who would like to participate, including the young and not-so-young, disabled and able-bodied, can only be achieved through partnership. One of the main challenges for this catchment will be to agree a balance between recreation and other interests and only promote a level of use that can be sustained by the environment. The catchment has a significant coastline and there are a number of stretches, including Dymchurch Sea Wall, Dungeness National Nature Reserve, Camber Sands, Rye Harbour Nature Reserve, and Fairlight Glen where the Agency will seek to support opportunities which benefit access to, and enjoyment of the coast. There is also pressure (as evident from the responses to the consultation draft of this LEAP) for improved access to inland waters, notably for canoeing. Whilst the Agency does not have a statutory navigation duty for any inland water within the catchment, an action is included to help facilitate discussion over this. We are however, the Harbour Authority for Rye Harbour for which a separate management plan has been produced. This outlines a number of actions, which are not repeated here.

The Agency has a number of land holdings in the catchment, including several small areas between Dymchurch and St Mary's Bay and is a partner in the enhancement of the A259 corridor. We also lease parts of the Royal Military Canal (RMC) west of West Hythe to local Angling clubs. This unique historical monument was built in the early nineteenth century to help protect Britain against Emperor Napoleon and his army that was threatening to cross the Channel. The longest section runs across the northern edge of Romney Marsh, while a second smaller section of the Canal runs from Rye across Pett Level to Cliff End. Ten miles of the rivers Brede and Rother Link these two sections. A specific action is included in this LEAP to participate in production of an integrated management plan for the RMC - an action identified in other plans such as the Local Agenda 21 - a strategy for the District and community of Shepway (2000-2005).

Action	Targets	Benefits	Timescale	Partners	Cost
1. Continue to support Rye Harbour Nature Reserve and the work of the Two Bays Project and seek to contribute to appropriate recreational benefits at coastal sites. • *(Agency Lead: Kent Area FER Manager and External Funding Manager).*	Attend steering meetings of Rye Harbour Nature Reserve. Participate in preparation of HLF bid to improve sustainable enjoyment of Dungeness National Nature Reserve.	Promotion of recreation through integrated approach. Improved access and enjoyment of coastal sites.	2001-2005	ESCC, District Councils, EN, RSPB, Local interest groups	£75k

Action	Targets	Benefits	Timescale	Partners	Cost
2. Continue the partnership with Shepway District Council to develop the A259 corridor strategy through visual improvement and enhanced enjoyment of the corridor between Dymchurch and New Hythe. • *(Agency Lead: Team Leader Operations and Enforcement and Conservation and Recreation Officer).*	Participation in development of A259 Strategy and completion of objectives of A259 corridor strategy. Production of plans for Agency land holding by end of 2000-2001. Sensitive management of Agency land holdings 2001-2004. Monitoring of progress - 2001-2004.	Increased recreational and environmental value of the corridor and Agency assets in this area. Improved landscape.	2001-2004	Shepway District Council, RMCP.	£18k
3. Assist in facilitating consensus building over access to navigable rivers within the catchment. • *(Agency Lead: Team Leader Conservation and Recreation).*	At least one meeting during the life of the plan.	Progress through consensus. Working in partnership.	2001-2004	Landowners, Interest Groups	£5k
4. Participate in the development of an integrated management plan for the future use of the Royal Military Canal. • *(Agency Lead: FER Manager).*	Full participation in production of the plan.	Working in partnership with an integrated approach. Promotion of sustainable recreation. Effective management of Royal Military Canal to benefit all users.	2001-2004	National Trust, LA, Shepway DC, Rother DC, EH, EN. Interest Groups, Angling Clubs.	£10k

ISSUE 10: MAINTAINING THE SEA DEFENCES ON COASTAL AREAS.

The shingle foreshore between Rye Harbour mouth and Fairlight is maintained by the Agency as a principal flood defence to the maritime marshes around Rye. Currents in the English Channel and Rye Bay continuously sweep the shore gravels to the east which, historically, have been known to block the mouth of the River Rother after major winter storms. The gravel is continuously moved from Nook Point to Cliff End and Dogs Hill throughout the winter to maintain the energy buffering capacity of the foreshore and protect the properties and Pett Level from flooding. In addition, timber groynes have been placed to reduce the erosion along the coast. This recycling operation relies on the build up of shingle along the Rye Harbour Nature Reserve frontage. The western arm of Rye Harbour retains shingle on Nook Beach and prevents it from blocking the mouth of the Rother and moving on to Camber Sands.

The integrity of the soft and hard sea defences at Camber, St Mary's Bay and Dymchurch is paramount in protecting the low lying residential, commercial and farm land of Romney Marsh. Current studies should identify any deficiencies in the coastal defences and make recommendations on the best means of managing the defences. Once this has been done the areas which have been identified can be looked at in more detail to assess the impact on the environment of any required work.

A number of Actions addressing this issue have been dealt with on an Area-wide basis in Issues 1 and 20 of the Kent area LEAP.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Work more closely with English Nature to ensure Agency operations are carried out in a sensitive way in areas of vegetated shingle. • *(Agency Lead: Flood Defence Officer and Conservation and Recreation Officer)*	Protocol in place by 2002. Monitoring of progress 2002-2004.	Improved liaison with English Nature. Reduced complaints and improved efficiency. Compliance with legislation.	2001-2004	EN, RHNR, Landowners.	£7k
2. Participate in the production of a pilot Coastal Habitat Management Plan (CHaMP) for the stretch of coast from Dungeness to Pett Levels. • *(Agency Lead: Flood Defence Manager and Team Leader Conservation and Recreation).*	Production of pilot CHaMP for stretch of coastline from Dungeness to Pett Levels.	Open and informed debate about the issues. Adoption of a consensus building approach.	2001-2005	CCMS, EN, LAs, Landowners, Local community.	£15k

ISSUE 11: IMPACTS OF LAND CONTAMINATION ALONG RYE HARBOUR ROAD.

Approximately 35 hectares of the land along Rye Harbour Road has been developed for industrial use over a period of 50 years. This industrialised area is currently the subject of an intensive investigation by the Environment Agency, funded by a grant from the DETR, working closely with local landowners. This has resulted in an extensive study of past and present industrial practices, and it is now evident that a significant area of this land is contaminated (especially the underlying groundwater). The Agency will ensure that landowners, local authorities, and other key individuals are consulted at every relevant opportunity.

Adjoining this area to the west lies a SSSI, forming part of the Rye Harbour Nature Reserve, which could also be adversely affected by contamination.

The Contaminated Land (England) Regulations 2000 came into force in England on 1st April 2000 and implement part IIA of the Environmental Protection Act 1990. The 2000 Regulations introduces a new regulatory regime for the identification and remediation of contaminated land. This new regime provides, for the first time, a statutory definition of "contaminated land" which is based on risks of significant harm to certain specified receptors, or pollution of controller waters. The regime adopts the principles of risk assessment and risk management to ensure that contaminated land is managed effectively based on its current use and environmental setting.

For all contaminated land, the relevant enforcing authority (whether the local authority or the Environment Agency) will establish who is responsible for the remediation of the land (these are called the "appropriate persons"). The enforcing authority will then consult and decide what type of remediation is required in each case and then ensure that this remediation is carried out, either through voluntary agreement or by serving a formal Remediation Notice. Where a remediation notice is served, the Enforcing Authority will then determine the proportion of the costs each of the appropriate person(s) should pay. The relevant enforcing authority is then required to maintain a register of the remediation undertaken.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Continue to monitor pollution levels to confirm both the depth and extent of contamination. • *(Agency Lead: Team Leader Environment Protection and Team Leader Programme Co-ordination).*	Detailed understanding of extent and significance of contamination. Continued removal of contaminated through maintenance of existing pollution prevention measures.	Information available to determine pollution pathways and inform remedial actions undertaken by Appropriate Person(s). Migration of pollutants in controlled waters prevented especially on the nearby SSSI.	2003-2004	Landowners, Industry.	£15k

Action	Targets	Benefits	Timescale	Partners	Cost
2. Implement a structured approach towards the successful regulation of existing sites. This will involve a pollution prevention programme. • *(Agency Lead: Team Leader Environment Protection, Team Leader PIR/RAS and Regional Groundwater Protection Section Head).*	Production and implementation of a Pollution Prevention Visit programme adopting integrated approach to site regulation.	Efficient use of Agency resources. Improved customer relations through integrated site regulation. Improved environmental quality through adoption of pollution prevention techniques.	2001-2004	Landowners, Industry, Business, Local Authority.	£30k

ISSUE 12: FUTURE WASTE DISPOSAL METHODS AT BRITISH GYPSUM FROM THE MANUFACTURING PROCESS.

British Gypsum has large and complex industrial sites situated within two important Sussex river valleys at Brightling and Mountfield with waste from both sites disposed of at Mountfield.

The Mountfield site has two landfill areas (one restored & one currently in use). Both these sites are built over a culvert, through which runs the River Line, a tributary of the River Brede. Waste generated leachate from both these landfill cells is currently discharged to woodland above the main river. The Environment Agency is working closely with British Gypsum to address issues of concern.

Actions by the Agency will include:

the implementation of a structured pollution prevention programme;
encouraging sustainable management of waste produced, ensuring that wherever possible, recycling processes are employed;
continuing to closely monitor water quality compliance and identify appropriate responses that may be necessary;
maintaining current environmental studies of the area;
working with the company to improve the leachate disposal methods in the future; (It is likely that leachate will be produced for at least another 50 years); and
working with the company to reduce the landfill burden, using new proven technologies that become available. Correct management of both landfill areas will serve to reduce the current level of landfill gas.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Continue to work with the company to develop an awareness towards identifying significant risks that could endanger potable water supplies. • *(Agency Lead: Team Leader Environment Protection and Team Leader Tactical Planning).*	Overall understanding of all the environmental risks associated with the mine.	Improve water quality of River Line. Compliance with the Surface Water Abstraction Directive.	2001-2004	British Gypsum Ltd, Water Companies.	£5k
2. Identify, through site visits, the key practices which pose waste management problems. • *(Agency Lead: Team Leader Environment Protection).*	Overall understanding of all the key issues relating to waste management associated with the mine.	Encourage recycling processes and reduce waste burden to landfill. Encourage awareness of pollution prevention measures. Improve water quality of River Line.	2004-2005	British Gypsum Ltd.	£5k

ISSUE 13: BRITISH GYPSUM MOUNTFIELD MINE ABANDONMENT - REGULATION/ENVIRONMENT STUDY.

The gypsum mine at Mountfield was abandoned in December 1998 due to a new source of raw material becoming available for the manufacture of plasterboard at Mountfield. This source is a by-product of power station pollution abatement technology and its use in the production of plasterboard is therefore reducing pressure on natural resources by offering a recycling option. Upon abandonment of the mine, the required notification was given to Her Majesty's Inspectorate of Mines.

In the long term, abandonment of mines can give rise to contamination of groundwater, which may ultimately affect surface water quality. Water from the mine has historically been pumped into the River Line under a Discharge Consent issued by the Environment Agency. This consent for discharge of mine water was varied in February 1997 when the Agency placed attached new conditions to the Consent. The conditions of this consent will be reviewed if environmental monitoring proves this to be necessary.

The Environment Agency has been working closely with British Gypsum to overcome difficulties experienced in achieving the consent conditions imposed on the varied consent issued in February 1997. These difficulties have been resolved and the discharge is now complying with the consent conditions.

Action	Targets	Benefits	Timescale	Partners	Cost
1. Determine the impact on water quality of the abandonment of the mine. • *(Agency Lead: Team Leader Operations and Enforcement & Conservation and Recreation Officer)*	Full understanding of impacts on water quality of mine abandonment.	Improved understanding of possible impacts of mine abandonment on water quality.	2000-2002	Landowners, EN, local groups.	£2k
2. Continue to conduct environmental impact assessments of the site on water receptors. • *(Agency Lead: Environment Protection Manager and Environment Planning Manager).*	Determine impact assessment of the mine on the surrounding water environment.	Improved understanding of environmental impacts of site on water receptors.	2001-2004	British Gypsum Ltd., Water Companies.	£25k

7. FUTURE REVIEW AND MONITORING

Regular monitoring and updating of the Plan are integral parts of the LEAP process.

The Agency is jointly responsible with other identified organisations and individuals for implementing the actions in this plan. The Agency will monitor implementation of the LEAP and report on progress in a published Annual Review, which will coincide with the Business Planning Cycle.

A summary of the Annual Review will be disseminated to all the key partners and other interested parties and will:

- examine the need to update the LEAP in the light of changes in the Plan area;
- compare actual progress with planned progress and explain the reason for any changes to the content or timing of individual actions;
- report on other matters including any legislative and classification scheme changes affecting the LEAP;
- identify any additional actions needed to maintain progress in light of any changes in the LEAP Area;
- determine whether any actions need removing or amending where they are no longer appropriate; and
- roll forward the detailed actions.

After five years, sooner if required, the Agency will carry out a major review of the progress that has been made. At this stage the Agency will produce a new LEAP Consultation Draft to reflect these changes to further improve the local environment.

APPENDIX 1: DUTIES, POWERS AND INTERESTS OF THE ENVIRONMENT AGENCY

The Environment Agency has a wide range of interests in the areas of water management, waste management and pollution prevention and control. Whilst many of these interests are supported by statutory duties and powers, much of the Agency's work is advisory, with the relevant powers resting with other bodies such as local planning authorities. The following list identifies the Agency's principal interests (full details are given in Appendix 1 of the Kent Area LEAP):

- Water Resources
- Flood Defence
- Water Quality
- Air Quality
- Radioactive Substances
- Waste Management
- Contaminated Land
- Conservation (including landscape and archaeology)
- Fisheries
- Recreation
- Navigation (in certain specified areas)

APPENDIX 2: INDIVIDUALS/ORGANISATIONS WHO RESPONDED TO THE CONSULTATION DRAFT

Ashford Borough Council
Brightling Parish Council
British Canoe Union - Head Office
British Canoe Union - East Sussex Local Access Officer
British Canoe Union - London and South East Region
British Gypsum
Chandler, Mr J R
Clean Rivers Trust
Coleman, G D
Country Landowners Association
Crowley, S
Defence Estates
Iden Parish Council
East Sussex County Council
English Heritage - South East Region
European Parliament - Baroness Nicholson of Winterbourne MEP
The Hawk and Owl Trust
Holman, Mr S
Hythe Town Council - Town and Cinque Port of Hythe
Inland Waterways Association - South East Region
Inland Waterways Association - Head Office
Kent County Council
Langrish, Mr F R
Lydd Town Council - 2 responses.
Northiam Parish Council
Pett Parish Council
Pierce, Mr F C
Romney Marsh Countryside Project
Romney Marsh Research Trust
Rother Catchment Consultative
Rother District Council - 2 responses
Rother Fishery Association
RSPB
Rye Conservation Society
Rye Harbour Nature Reserve
Rye Harbour Boat Owners Association
Rye Harbour Sailing Club
Sandhurst Parish Council
Sedlescombe Parish Council
Seera, Mrs J M
Solvent Resource Management Limited (SRM)
South East Water

Sport England - South East Region - 2 responses
Steele, Mr K G
Street, Dr E
Sussex Ornithological Society
Sussex Sea Fisheries Committee
Tenterden Town Council
Tunbridge Wells Borough Council
Waller, Mr D
Wealden District Council
Wittersham Parish Council

APPENDIX 3: GLOSSARY

Abstraction
Removal of water from surface water or groundwater.

Abstraction Licence
Licence issued by the Agency under the Water Resources Act 1991 to permit water to be abstracted.

Aquifer
A layer of underground porous rock that contains water and allows water to flow through it

Authorisation
A legal licence issued by the Agency under the EPA 90 for industrial processes that use or produce potentially polluting substances in significant amounts.

Biodiversity
The variety of plant and animal life

Catchment
The total area of land which contributes surface water to a specified watercourse or water body.

Consent to discharge
A licence granted by the Agency to discharge effluent of specified quality and volume

Effective rainfall
Rain remaining as runoff after all losses by evaporation, interception and infiltration have been allowed for.

Floodplain
Land adjacent to a watercourse over which water flows or would flow but for flood defences, in times of flood.

Flytipping
The unregulated and, hence, illegal, dumping of waste.

Groundwater
Water contained in underground rocks (aquifers).

Internal Drainage Boards
Autonomous public bodies under the control of board members (including those elected by agricultural ratepayers and those nominated by local authorities), with responsibilities and powers for flood defence on ordinary watercourses (non-Main Rivers) under the Land Drainage Acts.

Main River
All watercourses are designated as either "main river" (defined in maps held by the Environment Agency and MAFF) or ordinary watercourse ("non-main river"). The Agency has permissive powers to carry out works to protect land and property from flooding by improving the drainage of main rivers only, under the Water Resources Act 1991.

Potable water
Water of suitable quality for drinking.

Sea defences
Natural or man-made features protecting land below 5m AOD contour.

Site of Special Scientific Interest
A site given statutory designation and protection by EN because it is particularly important, on account of its nature conservation value under the Wildlife and Countryside Act 1981 as amended.

Special Area for Conservation
Internationally important nature conservation site designated under the EEC Habitats Directive.

Special Protection Areas
Internationally important nature conservation sites designated under the EEC Wild Birds Directive. All SPAs are also SSSIs.

Sustainable development
'Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs' (from World Commission on Environment & Development, 1987. Our Common Future - The Brundtland Report).

APPENDIX 4: ABBREVIATIONS

AEG	Area Environment Group
BAP	Biodiversity Action Plan
CAMS	Catchment Abstraction Management Strategy
CCIRG	Climate Change Impacts Review Group
CCMS	Coastal Centre for Managing Sustainability
CHaMP	Coastal Habitat Management Plan
DETR	Department of the Environment, Transport and Regions
EA 95	Environment Act 1995
EN	English Nature
EPA 90	Environment Protection Act 1990
ERDF	European Regional Development Fund
FDWS	Folkestone & Dover Water Services
FRCA	Farming and Rural Conservation Agency
FWAG	Farming and Wildlife Advisory Group
HORAC	Harbour of Rye Advisory Committee
IDB	Internal Drainage Board
IPC	Integrated Pollution Control
KCC	Kent County Council
KFCA	Kent Fisheries Consultative Association
KWT	Kent Wildlife Trust
LA	Local authority
LA21	Local Agenda 21
LAAPC	Local Authority Air Pollution Control
LEAP	Local Environment Agency Plan
MAFF	Ministry of Agriculture, Fisheries and Food
MK	Mid Kent Water
NFU	National Farmers Union
OFWAT	Office of Water Services
RBCO	Rye Bay Countryside Office
RHNR	Rye Harbour Nature Reserve
RMC	Royal Military Canal
RMCP	Romney Marsh Countryside Project
RRC	River Restoration Centre
RSPB	Royal Society for the Protection of Birds
SAQSG	Sussex Air Quality Steering Group
SEORP	South East Otters and Rivers Project
SEW	South East Water Limited
SME	Small and Medium Enterprises
SOS	Sussex Ornithological Society
SRB	Single Regeneration Bid
SWS	Southern Water

APPENDIX 5: FURTHER INFORMATION

A selection of relevant publications available from the Environment Agency is listed below. This list is only intended as a guide to the type of information available rather than as a complete list as new information is becoming available all the time. Please contact the Customer Contact Department at the Area Office for more information.

Corporate Publications:	• Environment Agency Corporate Plan 2000/01, Bristol. 1999 • An Introduction to the Southern Region, Worthing. 1998. • Regional Review and Forward Look: Southern Region. 2000. • An Environmental Vision - The Environment Agency's contribution to Sustainable Development, Bristol. 2000. • Environment 2000 and Beyond, Bristol, 2000.
Improving Air Quality	• The Environment Agency's Pollution Inventory, Bristol, 1999. • The State of the Environment of England and Wales: The Atmosphere, Bristol, 2000.
Managing Water Resources	• Policy and Practice for the Protection of Groundwater. Bristol. 1998 • Saving Water: Taking Action. Bristol. 1998. • Abstraction Licensing and Water Resources, Bristol. 1997. • Water for Growth - A Fair Share? Southern Region, Worthing, 2000.
Enhancing Biodiversity	• Understanding Buffer Strips, Bristol. 1996. • Freshwater Crayfish in Britain and Ireland, Bristol. 1999. • Freshwater Fisheries and Wildlife Conservation, A Good Practice Guide, Bristol. 1997. • River Habitat Quality, Bristol, 1998. • Understanding Rural Land use, Bristol. 2000. • Focus on Biodiversity, Bristol, 2000.
Managing Freshwater Fisheries	• Fishing in the South. Southern Region, Worthing. 1999. • Anglers and the Environment Agency 1999-2000. Bristol. 1999. • Catch and Release: A Guide to Careful Salmon Handling, Bristol. 1998. • Coarse Fish Biology and Management, Bristol. 1999. • Coarse Fisheries Strategy, Bristol. 1999.
Delivering Integrated River Basin Management	• The Quality of Rivers and Canals in England and Wales, 1995, Bristol. 1997. • The State of the Environment of England and Wales: Fresh Waters – A Summary Report, 1998. Bristol. 1998. • Policy and Practice for the Protection of Floodplains. Bristol. 1997 • Sustainable Urban Drainage Systems - An Introduction, Bristol, 2000. • Southern Region Action Plan for Recreation - 2000/1 - 2004/5, Worthing, 2000.
Conserving the Land	• Action Plan for Land Quality, Bristol. 1998. • Action Plan for Flood Defence, Bristol. 1998. • The State of the Environment in England and Wales: The Land, Bristol, 2000. • The State of the Environment in England and Wales: Coasts, Bristol, 1999.
Managing Waste	• Money for Nothing – Your Waste Tips for Free, Bristol. 1998. • Waste Minimisation and Waste Management, Bristol. 1997. • Strategic Waste Management Assessment 2000: South East, Bristol, 2000.
Regulating Major Industries	• Bringing in Integrated Pollution Prevention and Control, Bristol. 1998. • An Action Plan for Process Industries Regulation, Bristol. 1998 • Radioactive Substances Regulation, Bristol. 1999.

IN ADDITION, FURTHER INFORMATION CAN BE OBTAINED FROM THE AGENCY WEBSITE:
www.environment-agency.gov.uk

MANAGEMENT AND CONTACTS:

The Environment Agency delivers a service to its customers, with the emphasis on authority and accountability at the most local level possible. It aims to be cost-effective and efficient and to offer the best service and value for money.

Head Office is responsible for overall policy and relationships with national bodies including Government.

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Cardiff CF3 0LT
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Fax: 01222 798 555

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.

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EMERGENCY HOTLINE
0800 80 70 60

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