

Box 3

local environment agency plan

EAST HAMPSHIRE AUGUST 2000



ENVIRONMENT
AGENCY

Catchment Overview

East Hampshire LEAP
Map 1

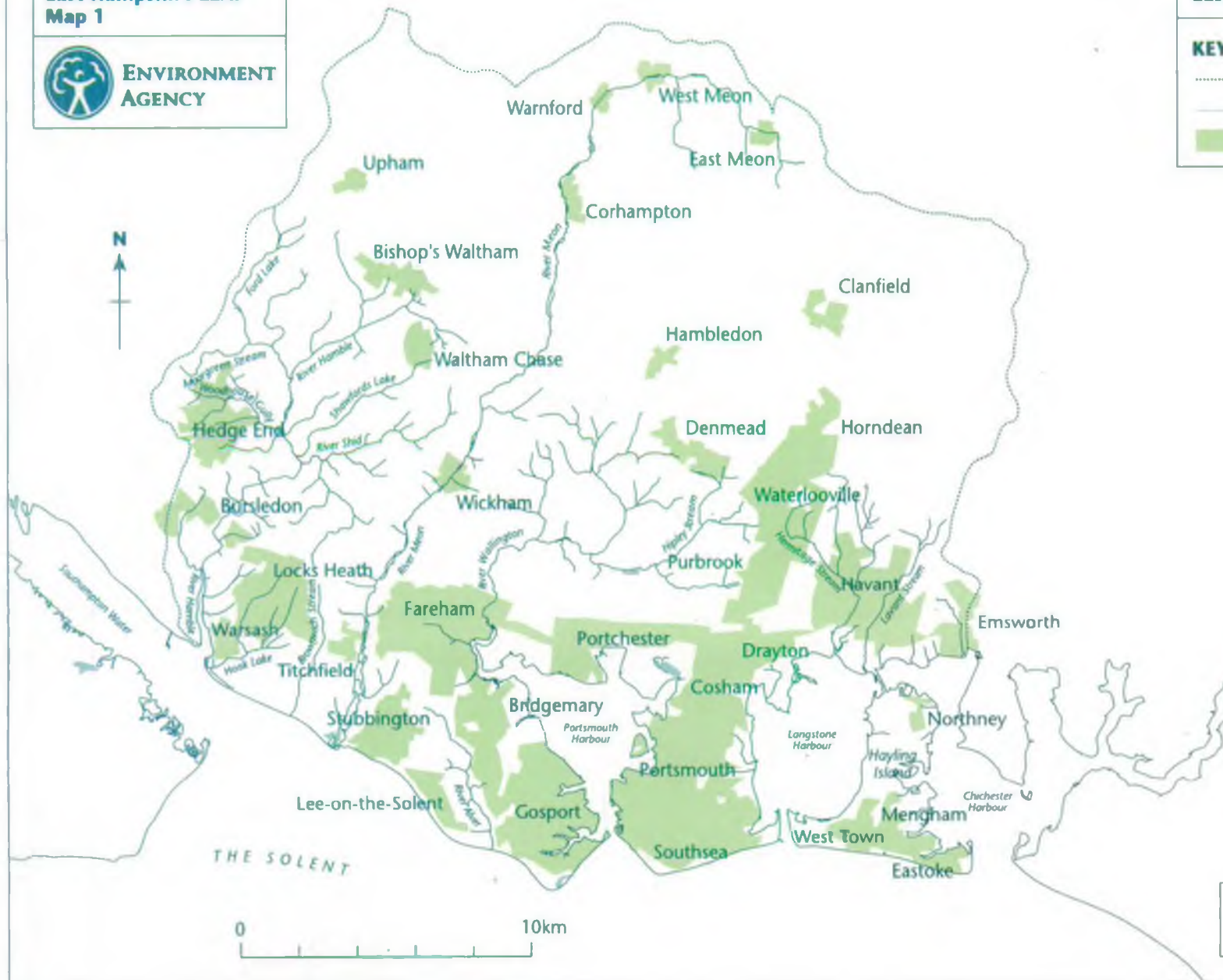


ENVIRONMENT
AGENCY

East Hampshire Area

KEY

- Catchment boundary
- Principal watercourses
- Built up area



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Foreword

Welcome to the Local Environment Agency Plan for East Hampshire.

The Environment Agency is one of the most powerful environmental regulators in the world. By combining the regulation of air, land and water, the Agency has a unique opportunity to look at the environment in an integrated way and further the objective of sustainable development.

Local Environment Agency Plans (LEAPS) provide a means for the Agency to identify local environmental concerns and pressures and set priorities to solve problems so as to protect and improve the local environment in a co-ordinated way.

This LEAP has been produced after public consultation following the launch of the Consultation Draft in July 1999. We are grateful to those people who responded to the draft document. Their comments, and the prioritisation carried out by the Area Environment Group (AEG) have enabled us to evaluate the issues raised in the original report and refine them into an action plan. This plan, or LEAP, sets out the work that the Agency intends to carry out in the catchment in partnership with others over the next 5 years. We will assess our progress against the actions annually and when new challenges to the local environment arise we will include them in the annual review process where appropriate.

Many of the issues in this plan cannot 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 becomes recognised that we can achieve more by working together.

I hope you will 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 East Hampshire.

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.



John Worley
Vice-Chairman Hampshire & Isle of Wight AEG



Peter Quarmby
Hampshire & Isle of Wight Area Manager

August 2000

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1.0 INTRODUCTION

This Plan is the third stage in the process for the East Hampshire LEAP area as shown in Map 1, and follows on from the Consultation Draft which was published in July 1999. The plan sets out a programme of actions which the Environment Agency and partner organisations intend to carry out over the next five years, to protect and enhance the local environment. Progress against the plan will be monitored and reported annually.

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, the Waste Regulation Authorities, the National Rivers Authority 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 in England and Wales. In carrying out our work, the Agency is guided by its duty to protect the environment in a way that works towards achieving *sustainable development*. This involves meeting the needs of the present without compromising the ability of future generations to meet their own needs.

1.2 The Environment Agency's Vision

The Agency's vision is to create: *A better environment for present and future generations.*

A better environment means different things to different people and the Agency has developed the following set of objectives to clearly focus its efforts on what it means by a better environment and what it is trying to achieve. They relate to the Agency's national objectives and to the power and duties that it has been given by Government.

The Agency's aims are:

- to achieve major and continuous improvements in the quality of air, land and water
- to encourage the conservation of natural resources, animals and plants
- to make the most of pollution control and river basin management
- to provide effective defence and warning systems to protect people and property against flooding from rivers and the sea
- to reduce the amount of waste generated by encouraging people to reduce, recycle and re-use their waste
- to improve standards of waste disposal
- to manage water resources to achieve the proper balance between the country's need and environment
- to work with other organisations to reclaim contaminated land
- to improve and develop salmon and freshwater fisheries
- to conserve and improve river navigation
- to tell people about environmental issues by educating and informing
- to set priorities and work out solutions that society can afford

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

2.0 THE LEAP PROCESS

2.1 Local Environment Agency Plans (LEAPs)

Each LEAP takes a long term view of the local environment and sets 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 aims. This document is therefore part of a process that will enable a shared vision to be developed, along with a strategy for the area's management.

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 are primarily responsible.

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. They 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. LEAPs also have a role in:

- promoting open and accountable management of the environment
- developing liaison and partnerships with key groups
- educating the public on local environmental issues
- tackling issues and establishing an action plan for managing and improving the environment of the local area over a period of five years

As Figure 1 indicates, the LEAP process involves several stages and the production of a number of documents.

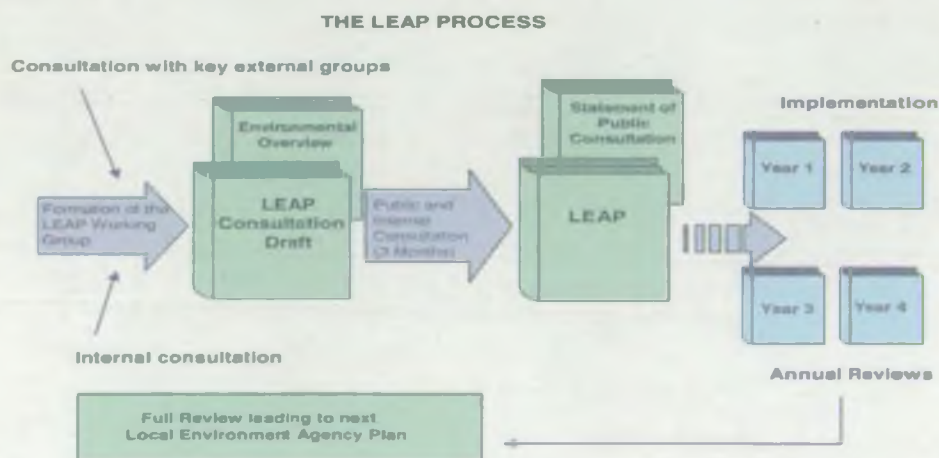


Figure 1

2.2 The East Hampshire LEAP documents

The East Hampshire LEAP sets out a programme of actions which the Agency and partner organisations aim to carry out over the next five years in order to protect and enhance the local environment of the East Hampshire catchments. 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.

This LEAP has been developed from the Consultation Draft and is intended to be a stand-alone document but is best used in conjunction with the documents detailed below which support it and from which it has been developed. The LEAP develops the proposals put forward in the Consultation Draft into agreed actions in the light of comments received during the consultation process. Where more background information or greater detail of an issue is required, reference should be made to the Environmental Overview.

The Consultation Draft, published and launched in July 1999, was the main focus for public consultation. It concentrated on the prioritisation of environmental issues relevant to the Agency and the identification of possible options for action necessary to restore and improve the local environment.

The Environmental Overview provides the background information which supports the Consultation Draft. It is a very useful educational tool for schools and colleges and outlines how the individual issues and actions were selected for inclusion in the Consultation Draft. It is available on request on CD-ROM, which also contains the LEAP Environmental Overview for the Test and Itchen LEAP area. This CD ROM won the Agency's internal award for Plain English for the best electronic production in the Southern Region.

The Statement on Public Consultation summarises the responses of the consultation process. A review of the consultation process is provided in section 3. 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 the light of any changes in the LEAP area and whether any actions need removing or amending where they are no longer appropriate. These Reviews are integrated into the Agency's internal Business Plans so resources can be allocated to tackle the actions. Consequently, in Southern Region we will be reviewing all our LEAPs to coincide with the Business Planning cycle. This will result in all the reviews being published around May each year. One review document will be produced for each of the three Agency Areas i.e. Hampshire and Isle of Wight, Sussex, and Kent. Each LEAP catchment will still be reported upon individually within the report.

After 5 years, or 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.

3.0 REVIEW OF CONSULTATION PROCESS

3.1 LEAPs and Public Consultation

A fundamental objective of the LEAP process is to involve all interested parties in working with the Agency towards planning for the future well being of the local environment. The Agency is committed to the process of public consultation on all of its LEAPs. This section reviews the consultation process and provides a brief summary of the results of consultation.

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 then put together using data and information supplied by Area and Regional staff and the Agency's National Centre for Environmental Data and Surveillance. Further details can be found in the Environmental Overview which is still available on request.

Launch Publicity

The East Hampshire LEAP Consultation Draft was publicly launched in July 1999 marking the start of the 3 month consultation period. The launch was held at Queen Elizabeth Country Show, an event which attracted over 13,000 people. The launch was publicised in the local press and radio.

The Agency distributed over 400 Consultation Drafts and Environmental Overviews prior to and following the launch to individuals and a broad range of organisations. Copies of the documents were also placed in libraries and other public buildings.

LEAPs and the AEG

The Hampshire AEG members have broad experience and interest in environmental matters. The Agency regard the group as fundamental in helping to build relationships with local communities, as it is a forum through which we seek local opinion on environmental issues. The group meets quarterly as a committee.

Summary of Responses

A range of written responses were received. The majority of the respondents filled in questionnaires which made the analysis of the responses easier. The questionnaires allowed the respondents to select the 5 issues which they considered most important. Some consultees commented on the text and suggested inclusion of additional information. Many respondents welcomed and supported the issues and associated actions proposed by the Agency.

The Agency has considered the responses made and have developed the Action Plan so that there is a balance between the opinions expressed and the need to ensure a plan which it believes it can realistically deliver. The issues have been ranked according to the responses from the consultees but, for consistency, are presented in the order in which they appear in the Consultation Draft. The issues in the Consultation Draft Report have identified activities that form the basis of the Action Plan for 2000-2005. During the production of this LEAP, many of the actions were revisited so that the issues identified will be resolved in the most beneficial and effective way. Any comments raised after the production of this final LEAP can become part of the Annual Review process of the plan and so make it into the Agency's business plan for the Area.

4.0 THE ENVIRONMENT OF EAST HAMPSHIRE: AN OVERVIEW

The East Hampshire LEAP area is defined as the surface catchments of the Rivers Meon, Hamble and Wallington (in addition to several smaller watercourses). It extends from the Hamble estuary in the west to Emsworth and Hayling Island in the east, and incorporates Portsmouth Harbour, Langstone Harbour and part of Chichester Harbour. The East Hampshire LEAP area falls entirely within the County of Hampshire. The majority of the area lies within the overall administrative control of Hampshire County Council and Portsmouth City Council. East Hampshire District Council, Winchester City Council, Havant, Fareham, Gosport, and Eastleigh Borough Councils all have jurisdiction over parts of the LEAP area. The resident population of the LEAP area is approximately 600,000. This population and its associated industry create a range of environmental issues. The planned increase in housing within the LEAP area will add further pressures.

Industry is concentrated in the urban coastal strip, especially around Portsmouth Harbour and its commercial port. Away from the coast the area is predominantly rural with arable and mixed farming. Watercress is grown in the chalk valley of the River Meon. The main towns within the LEAP area are Portsmouth, Havant, Fareham and Gosport, situated along the southern coastal strip.

The main hydrogeological feature of the area is the Hampshire chalk block. The chalk is extremely permeable and most rainfall either evaporates or percolates into the groundwater system. This aquifer storage gives rivers a stable flow regime that peaks in Spring, when groundwater levels are high, and recedes to a minimum in late Autumn.

Many streams rise as springs at the southern margin of the chalk where it is overlain by Tertiary sands and clays. The swallow-holes in the chalk in the Lovedean, Cowplain, Horndean and Rowlands Castle area are in direct connection with the Havant and Bedhampton springs and need to be protected against contamination, as these springs are used for potable water supply for Portsmouth and the surrounding area.

The Main Rivers are the Hamble and Meon to the west, and the Wallington to the east. In addition, several small watercourses feed into the three large harbours of Portsmouth, Langstone and Chichester and into the Solent. The River Meon has relatively stable chemical and physical properties due to the long residence time of the water in the chalk aquifer. The river is heavily managed and drains a mainly rural, agricultural catchment. The Rivers Wallington and Hamble also drain mainly agricultural catchments. Water quality in the River Hamble and its tributaries has improved markedly in recent years, mainly as a result of investment in a new sewage works at Bishops Waltham, but also because of farm campaigns to improve the water quality of agricultural run-off. The remainder of the area's streams are found in the heavily populated coastal areas. Water quality varies although it is predominantly of good quality. The main water quality problems in the area are due to the urban pressures of diffuse run-off, storm overflows and industrial inputs. Due to the small size of many of these catchments, low flows also contribute to water quality problems.

By virtue of its location, geology and cultural heritage, East Hampshire has a great diversity of landscape, flora and fauna. The northern part of the catchment is a predominantly rural landscape. In contrast, the south of the catchment consists of a largely flat and heavily urbanised coastal strip. This coastal area (comprising broad enclosed tidal harbours, estuaries and open coastline) has significant nature conservation interest with extensive salt marsh and mudflats, coastal grazing marsh, saline lagoons, vegetated sand dunes and shingle. Large areas are designated as both European and Internationally important sites for wildlife. The reed beds and associated wetland habitats at Titchfield Haven and Farlington Marshes are both National Nature Reserves. The rivers of the LEAP area are also important habitats, particularly the Rivers Meon and the Hamble whose floodplains support areas of wet grassland.

5.0 A BETTER ENVIRONMENT THROUGH PARTNERSHIP

Environmental management is the responsibility of many groups, the Agency, Local Authorities, industry, farmers and water companies, and requires a partnership approach involving many or all of these different groups to achieve improvement. Financial advantages are gained by pooling resources, and increasingly partnerships are being used to secure funding from Central Government, the European Union, and sources such as the Lottery Fund and Millennium Commission.

5.1 Introduction

The Agency is well placed to influence many of the activities affecting the environment through responsibilities placed upon it by the Environment Act 1995 and other associated legislation. However, the Agency must work in partnership with others to ensure that the actions identified in Section 6 of this document are implemented. The Agency cannot achieve these aims alone as in some instances it has neither the statutory powers, nor the resources or technical expertise. For this reason the Agency will continue to work in partnership with Local Authorities and other agencies.

The Agency is the lead regulator for the water environment and also has regulatory powers over waste management activities. Together with Local Authorities it shares the regulation of emissions to the air. The Agency does however, have little direct control over land use which is primarily the responsibility of Local Authorities.

The Agency is currently involved in a number of projects and activities that rely on partnerships. Close links have already been established with Local Authorities, water companies, industry, farmers, landowners, conservation bodies, angling clubs and recreation groups. More details on the type of partnership projects the Agency is working on outside of the LEAP are detailed in the Consultation Draft. However, the Agency is always seeking opportunities for new partnerships with others. If you wish to find out more about becoming involved in a partnership with the Agency in the Hampshire and Isle of Wight Area please contact the Customer Contact Team Leader on 01962 764866.

An important aspect of partnership working is the involvement of local communities in decisions affecting their local environment. Greater environmental awareness should also bring with it more responsible citizenship as people become aware of their choices and the consequences of their actions. The LEAP process is one way of increasing local involvement.

The Agency is currently reviewing the LEAP process. As part of this review it has started an independent research and development project to investigate ways in which the Agency can improve its involvement with local communities. This project is aimed at developing close and responsive relationships with local communities and in developing local programmes and priorities that have public support and understanding.

It is hoped that this LEAP will help the Agency to achieve even more by working closely with others to address issues in the East Hampshire catchment and secure a stronger basis for environmental protection and enhancement. Some of the major opportunities for the Environment Agency to work in partnership are highlighted on the following pages.

5.2 Role of the Agency in the Planning Process

Although the Agency operates within an extensive regulatory framework, it must be recognised that its actual controls in respect of development are limited. The Agency is therefore dependent upon effective planning legislation to ensure the protection of the environment and to prevent future problems arising as a result of development (see issue 11).

The Agency liaises with the Local Authorities in the LEAP area in order to:

- advise on where proposed development may pose a risk to the public or to property from pollution and / or flooding
- protect the environment from any adverse effects of potential development
- wherever possible, enhance the environment in conjunction with development proposals
- identify demands on our duties and responsibilities, including flood protection, water resource management, conservation and recreation
- avoid unnecessary conflict between the granting of planning permission and the granting of consents or licences by the Agency on the same proposals

These aims are achieved by effective liaison with the Local Planning Authorities (LPAs) under the Town and Country Planning legislation. Government planning guidance and by the provision of co-ordinated responses to the LPAs on development plans and planning applications.

In March 2000 the Area launched a document entitled *Planning Policy Principles for Hampshire* at the "Water in Hampshire" conference which was a joint conference organised with Hampshire County Council. This guidance document provides a tool in which to examine and develop environmental initiatives in response to concerns specific to Hampshire and provides principles for use by Local Authorities in Development Plans.

Inappropriate development may lead to increased flooding, pollution and / or the need for additional water resources. Measures to overcome such problems can result in increased public expenditure. With the benefit of appropriate planning controls and co-operation with LPAs, the Agency can:

- require developers to implement pollution prevention measures
- regulate discharges of surface water from new developments (for example by promoting the Agency policy on Sustainable Urban Drainage Systems (SUDS))
- resist development in floodplains

5.3 Environment Agency and Local Government Association Plan

The Environment Agency and Local Government Association have recently developed and produced a plan titled "Working Better Together". The Agency and Local Authorities both share the aim of sustainable development and have environmental powers and duties that largely compliment one another, such as development control, flood defence, waste regulation, contaminated land and enhancing biodiversity. The plan aims to provide a strategic framework for working together, agreeing the duties and responsibilities of the two organisations to evolve a framework of co-operation and prevent duplication of effort. National protocols are being agreed which are being discussed and implemented at a local level.

5.4 Development and Water Supply

Water resources in the LEAP area are already under pressure with heavy demands on existing water resources. Major developments proposed in the Hampshire Area will put greater pressure on water supplies.

The Environment Agency works closely with the water companies, Local Authorities, and developers in the Hampshire Area to achieve the proper balance between water development objectives and the needs of the environment. The Environment Agency, Local Authorities and the Water Companies are all represented on the "Hampshire Water Consultative Group" which meet to exchange ideas and discuss current issues relating to water. The Agency operates its abstraction licensing system to regulate the water companies and other abstractors to ensure the sustainable use of water resources and to protect the environment. Where water resources are fully committed locally, demand must be met by improved management of existing resources. However, it is vital that development takes account of the full social and environmental costs. The Agency will work with the relevant water supply companies and planners to ensure this is achieved. Catchment Abstraction Management Strategies (CAMS) will allow the Agency to manage abstraction in the whole catchment in an integrated and sustainable way taking into account the demands on available water resources (see issues 3 and 4).

The Agency is also placing greater emphasis on demand management (eg promoting greywater recycling) when this will reduce pressures on the environment and prevent the need for the development of new resources. The Agency encourages initiatives to build water conservation measures into new developments (for example through low water use appliances) and believes that the new Major Development Areas (MDAs) could be constructed without a net increase in abstraction.

5.5 Air Quality

Local Authorities environmental health departments regulate air pollution from thousands of industrial premises under Part I of the Environmental Protection Act 1990. These are premises which generally have a lesser potential to pollute than those (Part B processes) which the Agency regulates. Local Authorities will be required to review present and future air quality against air quality standards and objectives prescribed in regulations made by the Government. The Agency works with Local Authorities' Air Quality Forums and provides appropriate data for them to assess compliance against National Air Quality Targets. Reviews are in the form of Local Air Quality Plans for which the Agency will be a consultee.

5.6 Education

The Agency believes that education is an important part of its role and seeks to educate and influence individuals and industries to promote best environmental practice and to work in partnership with statutory and voluntary groups to carry out improvement projects and develop a wider public awareness of environmental issues (see issues 7, 8, 14, 15 and 17).

The Agency considers environmental education to be vital and is actively developing an educational strategy to help local schools and colleges at all levels of the curriculum. It encourages local liaison

and project-related work with schools such as initiatives which assist schools with environmental enhancement projects.

It is also part of the Agency's routine business to promote environmental education in other sectors of society, including business and industry, Local Authorities and other key players. The LEAP process positively contributes towards education in a fundamental way. The Agency also undertakes pollution prevention visits, attends shows and science fairs such as the Romsey Show, the New Forest show and the Portsmouth and East Hampshire Science Fair, provides speakers, distributes educational documents and generally works in a pro-active way to protect the environment.

5.7 Fisheries, Ecology and Recreation (FER)

Fisheries

The Agency is supporting the Hampshire Rivers Trusts application for landfill funds to prevent the decline of Hampshire's chalk stream flora and fauna by diffuse pollution. This bid for habitat works, is a collaborative projects with riparian owners and estates and is an example of how partnership working can help deliver shared objectives.

Ecology

In partnership with a number of organisations including English Nature, Hampshire and Isle of Wight Wildlife Trust, National Farmers Union, the County Landowners Association and the Agency, Hampshire County Council produced a Biodiversity Action Plan (BAP) for Hampshire (Volume I was published in 1998). The Agency will continue to work with the Hampshire Biodiversity Partnership towards the aims and objectives of the Hampshire BAP which translates national targets into effective action at a local level (see issue7). Volume II of the Hampshire BAP has recently been published and contains detailed programmes of work to conserve high priority habitats and species in the county. The Agency will assist in implementing species action plans for the otter, water vole, southern damselfly and white clawed crayfish.

The recently announced "Joint Ventures" programme implements the 1997 Concordat between English Nature and the Agency, recognising the links necessary between the two agencies to deliver common objectives for the environment.

Recreation

The Agency works to promote water based recreation wherever possible (see issue 9 and 20). It supports the present government's initiative to increase access to the countryside. This will be achieved by consultation and involvement in any proposal in relation to access to water and watersides. Together with local planning authorities the Agency works to safeguard and improve access and riverside walks where this does not conflict with conservation or recreational requirements. The Agency will continue to look for partners and external funds to help fund additional work and influence the work of our other functions to improve recreational opportunities.

The Agency, Havant Borough Council and the Environment Agency have transformed the Hermitage Stream from a concrete channel to a natural river course, providing a valuable amenity for the people of Leigh Park, a habitat for wildlife and an educational resource for local schools.

This restoration project has recently been awarded a Millennium Marque from the Tidy Britain Group for proving its Environmental Excellence and demonstrating sustainable development.

5.8 Pollution Prevention

The Agency has a duty to monitor, protect, manage and where possible enhance the quality of all controlled waters through the prevention and control of pollution. The basic premise being that prevention is better than cure. In undertaking this duty the Agency often maximises its impact by working in partnership with other organisations. Examples of this valuable type of working are shown below:

It is acknowledged that diffuse pollution (the cumulative impact of run-off during heavy rain from fields, roads, etc) is affecting our rivers and associated ecology. The Agency is working to identify areas at risk from diffuse pollution, from both rural and urban sources, and subsequently reduce its impact. Working with the farming community, MAFF, Local Authorities and developers helps raise awareness and deliver improvements to a far larger extent than if the Agency worked alone.

Oil pollution has been an ongoing problem in the area. Working with partners such as oil distributors and oil tank installation engineers augments the statutory and enforcement powers of the Agency to reach a far wider audience. In the marine environment the Agency has been actively involved with the British Marine Industry Federation to raise the profile of oil pollution from recreational boating and with Port and Harbour Authorities (and other statutory bodies) to develop effective marine contingency plans in the event of estuarine and coastal oil pollution (see issue 18).

To help protect public drinking water supplies the Agency undertook over 300 visits to industrial sites in the last year to offer pollution prevention advice. A programme of visits to agricultural sites has also been undertaken with further visits planned. Important partnerships with the water companies have facilitated this work which also includes pollutant travel studies and a communications protocol in the event of a pollution incident threatening public drinking water supplies.

An ongoing awareness campaign is in place between the Agency and Hampshire Fire Brigade. The aim of this is to increase knowledge of pollution prevention in the Fire Brigade and to increase Agency's officer's knowledge of how to work most effectively with the Fire Brigade at potential pollution incidents.

The Agency also relies on the general public to help protect the environment by reporting environmental incidents and emergencies on the Emergency Pollution Hotline – 0800 807060.

5.9 Summary

Many partnerships projects are happening 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. It is through these partnerships that the Agency is able to fully contribute towards the goal of sustainable development.

6.0 ACTIONS FOR THE EAST HAMPSHIRE AREA

This plan sets out the work that the Agency intends to carry out in partnership with others over the next 5 years. Implementation of the plan is based on the actions identified to address the 22 issues which are deemed to be of particular significance in East Hampshire.

Where possible, costs have been outlined for the 5 year period covered by the plan. They do not necessarily reflect the total cost of the schemes to the Agency and are 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 Agency function which is leading each action is identified as are supporting functions and potential partners.

In general, the plan represents the non-routine investment of the Agency and others in the catchment. They are not matters that can be addressed by the Agency through its day to day responsibilities such as regulating water abstraction licences, issuing discharge consents or responding to planning applications.

The document is produced in good faith recognising current priorities both within the Agency and in other organisations. As stated in the introduction, the implementation of the actions will be subject to, amongst other things, availability of resources (financial and manpower). The timescales for action may vary depending on future political change and priority changes within the economic and environmental sectors.

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 wherever possible.










Environment Agency Business Planning Process

Actions which are taking place in the first year of this plan are those which are already in the Agency's Hampshire and Isle of Wight Business Plan for 2000/2001 and in the majority of cases are already underway. Actions listed under subsequent years are actions the Agency is intending to carry out but which need to be prioritised in conjunction with the Agency's core duties via the annual Business Planning Cycle.

The Actions Tables

The Agency recognises that environmental problems invariably need to be dealt with together. To achieve this, the Agency has adopted an integrated approach to understanding, managing, regulating and improving air, land and water. The Agency has set out environmental goals across nine themes which have been published in 'An Environmental Strategy for the Millennium and Beyond' (Sept 1997). The Agency is currently revising its strategy to take account of the UK's revised Sustainable Development Strategy and will also use the revision to provide its vision for an improved environment over a 20 year period and focus on achieving improvements in the quality of life. The Agency's new Environmental Vision, called 'Viewpoints to Visions', will replace the current strategy and, following a period of consultation, the new Vision should be launched later this year.

The nine environmental themes which will be delivered at a local level through LEAPs are:

-  addressing climate change
-  regulating major industry
-  improving air quality
-  managing waste
-  managing our water resources
-  delivering integrated river-basin management
-  conserving the land
-  managing freshwater fisheries
-  enhancing biodiversity

This LEAP has been written so that it can be used as a stand-alone document and for each issue there is a short section of explanatory text. For more detail, and background information, reference should be made to the Environmental Overview which is available on CD-ROM. A list of the issues is shown on the following page.

ISSUES

	Issue	Ranked by Consultees
1	The need for the sustainable management of landfill gas to minimise the effects on climate change.	=18 th
2	The odour problem at Ryvan chemical plant.	=21 st
3	Groundwater abstraction for public water supply poses a risk to river flows and to the Moors Site of Special Scientific Interest.	=8 th
4	Summer abstraction from watercourses is contributing to low river flows.	5 th
5	The potential impact of exploiting the Upper Greensand aquifer is not fully understood.	=21 st
6	The hydrometric monitoring network in the LEAP area is inadequate.	17 th
7	Certain key species and habitats are especially threatened.	10 th
8	Significant sections of rivers have been damaged by insensitive management.	16 th
9	Lack of public angling facilities.	=18 th
10	A sustainable coastal defence strategy is required.	1 st
11	Development proposed in the upper areas of sub-catchments has the potential to increase flood risk downstream.	=6 th
12	Piecemeal management of coastal defences at Hayling Island is environmentally damaging and ineffectual.	=6 th
13	The Havant and Bedhampton Springs, critical for water supply, are vulnerable to pollution.	2 nd
14	Diffuse pollution of watercourses from developed areas and intensive agriculture.	4 th
15	The potential effects of watercress farms on the River Meon require investigation.	15 th
16	The effects of Combined Stormwater Overflows are unknown.	14 th
17	The environmental effects of Tributyl Tin (TBT) and alternative anti-fouling paints used on boats, are of concern.	=18 th
18	The Agency's formal contingency plan for oil and chemical pollution incidents in the marine environment needs development and integration with the plans of other organisations.	3 rd
19	The Environment Agency requires more information on the extent of recycling of sewage sludge as a soil conditioner for agricultural benefit, and needs to ensure compliance with best practice.	=12 th
20	Intensive recreational use of the coastal strip, estuary and river valleys has the potential to result in damage and disturbance to the nature conservation interest and people's enjoyment of the environment.	=12 th
21	The significant amount of contaminated land in the LEAP area will have resource implications under new legislation.	11 th
22	The environmental cost of waste disposal is significant.	=8 th

ISSUE 1 - THE NEED FOR THE SUSTAINABLE MANAGEMENT OF LANDFILL GAS TO MINIMISE THE EFFECTS ON CLIMATE CHANGE

Landfill gas is generated by the decomposition of organic waste within landfill sites. Whilst it contains many trace elements which give it odour, the most significant components of landfill gas are carbon dioxide and methane. Methane is a flammable, asphyxiate and powerful greenhouse gas. There are former and current landfill sites in the LEAP area that contribute to the greenhouse gases in the atmosphere.

A draft UK Climate Change Programme is due to be published by the Government shortly. This outlines the range of measures, including the relevant contributions expected from the Agency in achieving these reductions. From 2000/2001 the Agency will put in place a programme with quantifiable targets for the reduction of methane emissions from landfill operations that is consistent with the Government's UK Climate Change Programme. The Agency is also playing a part in the UK Climate Impacts Programme, developing policy for how to respond to potential impacts on water quality, water quantity, flood risk, use of land and ecological systems.

In June 1999 the Government produced a draft strategy for England and Wales "A Way with Waste" (see issue 22). As part of the overall strategy the Government produced a consultation paper on limiting landfill. Published in October 1999, this document, known as "Limiting Landfill" is designed to stimulate debate on what are the best mechanisms for limiting landfill to meet the EC Landfill Directive's targets for the landfill of biodegradable municipal waste. These targets require the UK to take action on 2 levels:

- limit the amount of biodegradable municipal waste going to landfill to meet specified targets
- build up alternatives to landfill to deal with the diverted waste eg incineration, recycling, composting





The Government intends to produce a National Waste Strategy in the summer of 2000 which will incorporate the outputs/outcomes of the consultation exercises and draft strategies.

The Landfill Directive sets targets for the reduction of municipal biodegradable waste to landfill and will provide restrictions on landfill emissions. By 2003 the UK must develop a National Strategy to deal with levels of this type of waste. Member states which in 1995 sent more than 80% of their collected municipal waste to landfill (such as the UK) may postpone the attainment of these targets.

The Integrated Pollution Prevention and Control Directive is currently in the process of being implemented in the UK. The Directive is designed to prevent, reduce and eliminate pollution to air, land and water at source through the prudent use of natural resources. It will regulate emissions from landfill sites based on the Best Available Techniques.

Feedback from Consultees

This issue was ranked equal 18th by the consultees. The RSPB would like to see the Agency develop an overall strategy to address the causes and effects of climate change. Not all aspects of climate change come under the remit of the Agency, however the Agency's work is currently based around 9 key environmental themes, one of which is Climate Change, and much of the Agency's work is now based around this strategy.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
<p>Target operators via risk based prioritisation and practical analysis for installation of control and utilisation schemes</p> <p>Agency lead – EPI</p>	<p>Encourage flaring at sites</p> <p>Establish mechanism for producing ranked list of landfill sites according to levels of gas emissions</p> <p>The Landfill Directive will impose an action on the Agency to Control emissions from all operating landfill sites</p> <p>Implement IPPC framework for regulation</p>	<p>Help deliver National targets</p> <p>Highlights those sites where action will be most beneficial in reducing the amount of methane emitted to the atmosphere</p>	MP	MP	MP	MP	MP	<p>Local Authority/Industry</p> <p>Agency Function: EP</p>	 
<p>Use Waste Management Licence conditions to encourage operators of key sites to manage the enclosed flaring or energy recovery from landfill gas</p> <p>Agency lead – EPI</p>	<p>Identify key sites</p> <p>Review licences</p>	<p>Partnership approach to solving an environmental problem</p> <p>Reduce methane emissions from landfill operations in line with the Government's UK Climate Change Programme</p>	MP	MP	MP	MP	MP	<p>Local Authority/Industry</p> <p>Agency Function: EP</p>	 

ISSUE 2 – THE ODOUR PROBLEM AT RYVAN CHEMICAL PLANT (NOW RESOLVED)

In recent years, the Agency received complaints from the public about the unpleasant odours emanating from the Ryvan chemical plant at Hedge End. The Agency has worked with the operator of the site to develop and introduce strategies to reduce odours from their operations. Following these changes the number of justified complaints in 1999/2000 declined to one. The Environment Agency welcomes the co-operative approach of Ryvans.

The Agency will continue to provide support to Local Authorities if emissions from Part A industrial processes are found to be major contributors to incidences of poor air quality.

Feedback from Consultees

This issue was ranked equal 21st by the consultees.

ISSUE 3 – GROUNDWATER ABSTRACTION FOR PUBLIC WATER SUPPLY POSES A RISK TO RIVER FLOWS AND TO THE MOORS SITE OF SPECIAL SCIENTIFIC INTEREST

The Rivers Meon and Hamble have been recognised by the Agency as suffering from low flows caused by abstraction for public water supply. Where over abstraction occurs there can be considerable effects upon the conservation and recreational value of the river valley. Many of the most threatened species and habitats depend upon suitable water levels to survive (see issue 7), and the recreation which is based upon using this environment, e.g. fishing, canoeing, birdwatching are also threatened. The specific problem in this case is the potential decline of the Moors SSSI.







Although flows on the river Meon are not heavily depleted by Public Water Supply abstraction, if the licences at Soberton and West Street were used at their maximum abstraction rates, there could be a significant impact. Negotiations with Portsmouth Water should ensure that the licences are capped, which will protect the River Meon from depletion in the future. The Environment Agency is working with Local Authorities to promote water conservation measures in new developments. This will be especially important during the development of the Major Development Areas.

Hoe Pumping Station is adjacent to The Moors SSSI at Bishops Waltham. Hoe is only used as a stand-by source but when it is used, water levels and river flows on The Moors decline dramatically. The Moors was identified in the Agency's National Environment Programme which has been approved by the Government. As a result, Hoe Pumping Station will be closed by 2003.

The DETR's water resource licensing review (see issue 4) offers an improvement on current licensing policy, together with the Asset Management Planning programme will lead some of the way towards the integrated programme of water resource management to include a strategy for protecting habitats dependent upon adequate water resource supplies as recommended by the RSPB.

Feedback from Consultees

This issue was ranked equal 8th by the consultees. The Liberal Democrats entirely support the Agency's water resources strategy, and are of the opinion that abstraction licences require regular reviews.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Promote water conservation measures through the planning process Agency lead: CS	Promote <i>Planning Policy Principles for Hampshire</i> Continue involvement in Water in Hampshire Project	Reduction in volume of water abstracted Reduced risk to river flows Promotes sustainable management of Water Resources	MP	MP	MP	MP	MP	Portsmouth Water Plc Agency Function: WR	 
Under the National Environment Programme agreed by the environment minister, Hoe pumping station will shut by 2003 Agency lead: WR	The Agency will work with the water company to assess whether a replacement source is required	Protect The Moors SSSI and maintain flows in the river Hamble Promotes sustainable management of Water Resources	MP	MP	MP	-	-	Portsmouth Water Plc	 
Reduce the licensed abstraction at Soberton in order to alleviate the low flow problems on the River Meon Agency lead: WR	Continue negotiations with Portsmouth Water to reduce the licence at Soberton	Promotes sustainable management of Water Resources	Costs are limited to providing manpower unless the proposal is disputed and a public enquiry is required					Portsmouth Water Plc	 

ISSUE 4 – SUMMER ABSTRACTION FROM WATERCOURSES IS CONTRIBUTING TO LOW RIVER FLOWS

The Regional Licensing Policy clearly states that there is a presumption against summer abstractions from surface water unless winter storage is provided. Licences that were issued before clear policies were developed permitted summer abstraction from watercourses. Many of these licences were issued in the 1960s, as Licences of Right with no flow conditions and no assessment of environmental impact.

The DETR's recent licensing review will give the Agency powers to curtail or reduce environmentally damaging abstractions. All damaging summer abstractions from surface water should be identified and solutions investigated. Wherever possible this should be achieved by negotiations with licence holders. Following the DETR's recent licensing review, licences can be curtailed after 4 years of non-use and after 2012, compensation will not be payable if action is taken within the scope of the future Catchment Abstraction Management Strategy (CAMS). Unlicensed trickle irrigation causes problems in the south of the LEAP area, where significant volumes of water are abstracted with no form of control and during the droughts of the 1990's rivers such as the River Meon were severely impacted by these forms of abstraction. The DETR licensing review will make trickle irrigation licensable over a transitional period.





The key results from the DETR licensing review are:

- All new abstraction licences will be issued on a time limited basis
- Trickle irrigation will become a licensed activity
- Licences not used for beneficial purposes within four years can be revoked by the Agency
- The Agency will continue to seek voluntary reductions where there are abstractions damaging to SACs, SPAs and SSSI, but can proceed with a programme of curtailment in cases where no agreement can be reached
- Compensation will end from 1st July 2012 for losses arising from revocations or variations of abstraction licences imposed to protect the water environment
- Catchment Abstraction Management Strategies (CAMS) – these allow the review or revocation of licences and the rejection of applications. A CAMS officer will be appointed in each Agency Area by end 2000

The Agency has other National Programmes in place including Restoring Sustainable Strategies (RSAs). A new Regional Water Resources Strategy will be published in December 2000 following feedback from the recently published consultation document in May 2000.

Feedback from Consultees

This issue was ranked 5th by the consultees. Low flows were of concern to a number of consultees including the Chairman of the Bishops Waltham Society, who was concerned over the lack of water in Bishops Waltham North Pond during the summer months.


Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Curtailment of Licences of Right that are known to cause problems and the issuing of modern and sustainable conditions under DETR licensing review Agency lead: WR	Implemented through the Catchment Abstraction Management Strategies (CAMS)	Reduction of environmental impacts Improved water resources management	MP	MP	MP	MP	MP	Water Companies	 
Introduce licensing for trickle irrigation under DETR licensing review Agency lead: WR	Complete within 5 year transitional period	Increased control of summer abstraction rates. Protection of licensed abstraction	MP	MP	MP	MP	MP	Spray irrigators	 

ISSUE 5 – THE POTENTIAL IMPACT OF EXPLOITING THE UPPER GREENSAND AQUIFER IS NOT FULLY UNDERSTOOD.

With policy restrictions on abstraction from the Chalk, abstraction from the Upper Greensand in the north eastern part of the LEAP area may be seen as an alternative. An application has recently been made to increase abstraction from the Upper Greensand aquifer for spray irrigation of grass. This is of concern to the Agency as little is known about the Upper Greensand aquifer and its interaction with the Chalk aquifer. To assess the resource balance of the upper greensand aquifer, more needs to be known about the groundwater flow, its interaction with the chalk aquifer and the impact of abstraction from the surface water features at the top of the river Rother

Feedback from Consultees

This issue was ranked equal 21st by the consultees.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Assess the implications of abstraction from the Upper Greensand aquifer, based on borehole investigations Agency lead: WR	Drill additional boreholes	Would facilitate the development of an appropriate policy towards the Upper Greensand	20	20	MP	-	-	Abstractors	

ISSUE 6 – THE HYDROMETRIC MONITORING NETWORK IN THE LEAP AREA IS INADEQUATE


The groundwater monitoring network in East Hampshire is well developed but contains many shallow wells which dry out in the summer. Records from these wells are often incomplete and the observation wells need replacing with deeper, purpose-drilled observation boreholes.


There is a small outcrop of Chalk in the south of the LEAP area at Portsdown Hill, but only four observation boreholes. This makes assessment of groundwater flow direction difficult. Knowledge of groundwater flow is vital in protecting adjacent Public Water supply sources at Maindell and Havant & Bedhampton. It also makes it difficult to predict the interaction of rivers flowing over the outcrop with the Chalk aquifer.

Measurement of river flow is vital to the management of water resources. Mislingford Gauging Station (situated on River Meon) requires further assessment and work to bring it back into operation.

Feedback from Consultees

This issue was ranked 17th by the consultees.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Investigate ways of improving flow gauging at Mislingford Agency lead: WR	Rebuild flume at Mislingford to ensure that both low flows and flood flows are adequately monitored	Improve understanding of river flows on the River Meon	100	-	-	-	-	None Agency Function: FD	

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Drill new observation boreholes	Drill three boreholes in the chalk aquifer on Portsdown hill by 2003	Improved understanding of aquifers	10	10	15	-	-	None	
Agency lead: WR	Drill at least 4 boreholes in East Hampshire by 2003	Improve monitoring of Groundwater levels							

ISSUE 7 – CERTAIN KEY SPECIES AND HABITATS ARE ESPECIALLY THREATENED






The Environment Agency plays a key role in helping to conserve and enhance biodiversity for the benefit of present and future generations. The Agency has specific responsibilities for a number of species and habitats under both the national and Hampshire Biodiversity Action Plans (BAPs). Under the national BAP, the Agency is the lead agency for one habitat (chalk streams) and 13 species. The Meon is a chalk stream habitat and, in addition, a number of species for which the Agency is lead agency are either known to be present in the LEAP area or for which the LEAP area provides suitable habitat. These are: otter; water vole; southern damselfly; white clawed crayfish; and wetland and river molluscs (fine lined pea mussel and Desmoulin's whorl snail). Pipistrelle bat, for which English Nature is the lead agency, and bittern, for which the RSPB is the lead agency, are also considered to be a priority for action by the Environment Agency. Actions and targets from these plans are incorporated into the day to day work of the Agency. The Agency will continue to deliver the aims and objectives set out in these plans in collaboration with others, forging new partnerships where possible.

The wetlands of East Hampshire are of particular concern to the Agency. The post war years have seen a reduction in the extent of wetland areas, possibly due to increased abstraction, and a reduction in the biodiversity of the remaining areas as a result of agricultural intensification. Chichester Harbour Conservancy identified saltmarsh as a specific habitat, which is threatened, this is covered as an action in issue 12.

There are a range of further actions (listed below) that could be completed to improve the conditions and populations of key species. The completion of the majority of these actions will require collaborative projects and partnership funding but would be led by FER. The resourcing of species actions plans will rely heavily on these sources of funding. The appointment of a BAP officer would help co-ordinate the delivery of these actions but would require National Agency funding.

Feedback from Consultees

This issue was ranked 10th by the consultees. The Hawk and Owl Trust identified in their comments the possibility of the installation of boxes for barn owls and kestrels across the East Hampshire LEAP area. This would follow similar schemes in the New Forest, River Test, River Ouse in Sussex and the River Trent in Nottinghamshire where the Agency has worked in partnership with the Hawk and Owl trust.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Provide guidelines and advice to landowners and managers on the ecological needs of key species, how to manage land to benefit them and the availability of further free technical advice and resources Agency lead: FER	Work with partners to establish collaborative projects to deliver these objectives	Improves habitat for key species Promotes good practice	MP	MP	MP	MP	MP	Fisheries interest groups, English Nature, Local Authorities, FWAG, FRCA, HWT	 
Implement species action plans for otter, water vole, southern damselfly and white clawed crayfish Agency lead: FER		Contribute to the enhancement of biodiversity in the East Hampshire area	MP	MP	MP	MP	MP	Hants Biodiversity Partnership	
Initiate surveys to determine the status, distribution and ecological requirements of key species where it is not already known Develop species action plans Agency lead: FER	Species include southern damselfly, water vole, native crayfish and brook water crow-foot Produce species action plans for fine lined pea mussel and Desmoulin's whorl snail Work with English Nature and RSPB on action plans for bitterns and pipistrelle bat	Will improve understanding of ecology and habitat distribution Will underpin review of consents/authorisations under the Habitats Directive; input to AMP4 process; help to guide Agency plans and operations; achieve BAP objectives; contribute to Hants BRC	Additional resources (estimated at £30k per year) are required Funding may be available from partnership organisations and National Environment Agency budgets					Sparsholt College, Southampton University, English Nature, HWT, Local Authorities's, Landowners, Southern Water, FRCA, FWAG, Landowners, ESA, Local Authorities, Hants Biodiversity Partnership, Hawk and Owl Trust	 

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Enhance biodiversity in the East Hampshire area Agency lead: FER	Promote agricultural incentive schemes to maintain, restore and increase wetland grassland habitats, and to protect saltmarsh Arrange demonstration sites and hold workshops where Agency has undertaken collaborative works Regenerate rough grassland habitat along river corridors Install nest boxes for barn owls and kestrels	Promotes good practice Maintain and increase this habitat in the LEAP area.	As above.						

ISSUE 8 – SIGNIFICANT SECTIONS OF RIVERS HAVE BEEN DAMAGED BY INSENSITIVE MANAGEMENT

Substantial work has historically been undertaken on the rivers in this and other LEAP areas (especially the New Forest) to increase their drainage capacity and ability to rapidly disperse storm water. Much of this work was carried out in the 1940's and 1950's as the country strove to increase food production. Agricultural intensification and mechanisation following the second world war left a legacy of over-engineered rivers at the expense of associated flora and fauna, river corridors and the continuity between in-stream and floodplain habitats.

The Agency will continue to seek opportunities to work with landowners in the LEAP area to undertake in-stream and riparian habitat enhancement schemes to benefit biodiversity and maintain the important role of river corridors (see issue 7). In-stream opportunities range from full river restoration schemes of concrete channels such as the Monks Brook, to restoring channels dredged for agricultural improvements to more natural profiles. The promotion of environmentally friendly schemes and management strategies would be greatly furthered by the implementation of a Landcare Project. Through an assessment of the priorities and responsibilities of other interested parties and organisations the Agency could promote a bid to secure LIFE funding to implement a Landcare Project focussing on diffuse pollution.



River restoration and enhancement is a key component of the Agency's practical habitat works and in-stream opportunities range from full river restoration schemes of concrete channels e.g. sections of the Hermitage Stream, to restoring channels dredged for agricultural improvements to more natural profiles. Some work has already been undertaken on improving rivers in the area but there is potential for improving other rivers in the area (for example by restoring natural meanders). Information on the requirements of these species is well documented as are the methods of river restoration, such as meanders and the frequency and location of riffles. There are also a number of obstructions to migratory fish passage (such as Mills) up the river Hamble and its tributaries. There may be an opportunity to construct fish passes to enable fish to avoid these obstructions. This should be considered during restoration and enhancement works.





Hampshire County Council has undertaken a landscape assessment of the county, including the East Hampshire LEAP area. With the exception of the River Mcon, there is a lack of detailed landscape assessment information relating to the river corridors of the LEAP area. Consequently, the Agency cannot take into consideration potential impacts on landscape character when carrying out works on rivers. Landscape assessments could also be used to identify enhancement projects to improve the character of river corridors.

Feedback from Consultees

This issue was ranked 16th by the consultees. The British Canoe Union in their comments identified their ability to offer technical information on the design of facilities for canoeists if weirs or other river structures are restored or modified. The Agency will take into account the needs of canoeists should any such schemes be undertaken in the LEAP area.

The Inland Waterways Association support the aim to restore over engineered rivers with a view that recreational facilities could be improved at the same time. They would especially like to see the plan include the canal remains of the area. The Agency will work closely with any organisations who have plans to protect or enhance the sections of the environment for which the Agency has responsibilities (these key responsibilities are set out in Appendix 1).

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Work with flood defence to promote the inclusion of biodiversity objectives to river engineering projects Agency lead: FER		Improve landscape and nature conservation value of rivers	MP	MP	MP	MP	MP	None Agency Function: FD	 





Actions	Targets	Benefits	Cost £k	Partners	Agency Theme
			00/01 01/02 02/03 03/04 04/05		
<p>Identify sites requiring restoration and enhancement schemes and carry out appropriate work</p> <p>Agency lead: FER</p>	<p>This will be done on a reactive basis as and when the opportunity arises</p> <p>Identify structures which may cause obstructions to fish</p> <p>Explore the opportunity to use fish passes at these locations</p>	<p>Most needy areas would be identified and work targeted at them</p> <p>Provides method for deciding which schemes to undertake.</p> <p>Enable easier passage of migratory fish</p>	<p>Costs are site dependant</p>	<p>Site dependent</p> <p>Agency Function: FD</p>	 
<p>Implement a Landcare Project to focus on diffuse pollution</p> <p>Agency lead: EPI/CS</p>	<p>Liaise with partners to maximise use of best practice and disseminate information to relevant parties promoting shared aims</p> <p>Co-ordinate targeted work to reduce diffuse pollution with interested stakeholders</p>	<p>Would help reduce levels of pollution reaching the river</p> <p>Would help promote biodiversity</p> <p>Targeting gives best use of resources. Builds upon on-going work – eg farm visits</p> <p>Results in actions to identify and reduce potential algal and eutrophication problems</p>	<p>A landcare project would require additional funding from the Agency</p>	<p>FRCA, English Nature, Local Authorities, DETR, Landowners, NFU, CLA, Highways Agency, Farming Community, Planners, oil distributors</p> <p>Agency Function: FER</p>	 

ISSUE 9 – LACK OF PUBLIC ANGLING FACILITIES

Most of the fishing lakes and river fisheries in the LEAP area are owned/managed by fishing clubs or syndicates. As a result, there are few public waters that can be fished. The Agency will seek to promote greater opportunities for junior anglers and urban communities in partnership with Local Authorities, parish councils, and fishing clubs. In other LEAP areas the Agency has already carried out improvements and enhancements to existing fishing lakes to provide more better quality public fishing. The Agency is keen to promote fishing opportunities within easy reach of urban communities.

Feedback from Consultees

This issue was ranked equal 18th by the consultees. The Inland Waterways Association (IWA) supports the encouragement of angling activities to provide an attainable source of recreation. Improved access for anglers would also increase opportunities for other informal recreation and the IWA would like to see projects approached with this wider remit in mind.

Actions	Targets	Benefits	Cost	Partners	Agency Theme
			00/01 01/02 02/03 03/04 04/05		
<p>Work in partnership to enhance existing public fishing lakes or create new lakes within reach of the urban population</p> <p>Agency lead: FER</p>	<p>Identify resources required for identified projects (list of projects has already been produced)</p> <p>Undertake projects according to budget availability</p>	<p>Provision of a facility that could be used to promote angling. If designed and landscaped properly, it could also provide a significant public amenity</p> <p>Increased opportunities for junior anglers and others with limited access to fishing</p>	<p>Cost approximately £20k per fishing lake. Enhancements will be made depending on annual budget</p> <p>Awaiting project budgets.</p>	Angling Clubs, Local Authorities	 
<p>Work with developers to create a new coarse fishery and associated new balancing ponds in the upper catchment</p> <p>Agency lead: FER</p>		<p>Provision of public amenity.</p> <p>Could be developed to provide a dual flood defence/fishery facility associated with the River Wallington</p>	To be established	Local Authorities, Developers	 

ISSUE 10 - A SUSTAINABLE COASTAL DEFENCE STRATEGY IS REQUIRED

Much of the East Hampshire coastline is at or below sea level, including built up areas (such as Portsmouth and Hayling Island) and important conservation sites (such as Farlington Marshes, Titchfield Haven NNR and saline lagoons in Portsmouth Harbour). These conservation areas include designated sites such as Sites of Special Scientific Interest (SSSIs), candidate Special Areas of Conservation (cSACs), Special Protection Areas (SPAs) and Ramsar sites. These areas are protected by sea defences, without which considerable loss and damage would occur to property, land and nature conservation interest.

The strategy for the management of the East Hampshire coastline is recommended in the East Solent and Western Solent / Southampton Water Shoreline Management Plans. These plans, produced collaboratively with a range of organisations, identify the long term strategy for the management of coastal defence planning in this LEAP area. In partnership with the three main Shoreline Management Plan groups, the flood defence function is carrying out the Solent study - a study of the coastal processes within the Solent. The preferred option in the majority of Management Units is Hold the Line (i.e. maintain the sea defences), although this is not appropriate in all units. This strategy raises two issues relating to the sustainability of the coastal defences:

(i) As flood defence structures deteriorate, the difficulty and expense of maintaining sea defences is likely to increase. The continued maintenance of sea defences for the protection of important conservation sites may be difficult to justify on a financial basis alone since their economic value is limited.

(ii) It appears that the extent of intertidal habitats, on the seaward side of sea defences, is diminishing in size. With rising sea level, intertidal habitats would naturally migrate inland but "hard" sea defences prevent this process. This is of particular relevance to the Agency as a "Competent Authority" to assist in maintaining the "favourable conservation status" of sites afforded statutory protection under the Habitats Directive and Wild Birds Directive. Compensatory habitat may need to be created to replace areas of habitat lost.










The ability of the Agency to address these issues is hindered by inadequate understanding of both natural coastal processes and the impact of human activity (in particular land reclamation and dredging) on coastal areas.







One of the first actions towards the preparation of a sustainable coastal management strategy is to undertake a study to improve understanding of coastal processes. From this basis, the feasibility of "managed realignment" (favoured by English Nature in certain locations) and saltmarsh regeneration should be investigated. The Solent Study, carried out within the Solent and its harbours, in partnership with all the Coastal Local Authorities, should help to address these issues. The Solent Harbours Study will build upon the results of the Solent Study and a project called the Saltmarsh Project aims to stimulate Solent wide practical action to demonstrate saltmarsh management and replacement techniques. These projects should all contribute to a better understanding of coastal processes and saltmarsh regeneration.

A joint Environment Agency/English Nature EU funded programme - 'Living with the sea' aims to predict the likely impact of coastal change on habitats of European importance and to work to offset those effects through the production of Coastal Habitat Management Plans (CHAMPS). For the areas of the Solent in this LEAP this is the responsibility of Hampshire County Council. The review of the Shoreline Management Plan (within 2 years) will take account of the CHAMPS, the Solent Study and the Solent Harbours Studies.

Feedback from Consultees

This issue was ranked as the most important by the consultees. In their comments, the Hampshire and Isle of Wight Liberal Democrats favour the principle of managed realignment provided it creates a new inter-tidal habitat inland of the current sea defences.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Develop Solent Study - Study of coastal physical processes within the Solent and its harbours Agency lead – FD	Publication of Solent Study Carry out Solent Harbours Study in 2002/2003 Recommend future strategy	Would help to inform the Agency's long term strategy for sea defence, including managed retreat	25		200			Local Authorities, English Nature, Agency Function: FER	 
Assess the impacts of sea level rise on intertidal habitats in the LEAP area Agency lead – FD	Support production of CHAMPs	Allows impacts of sea level rise on intertidal habitats in the LEAP area to be assessed	Part of Solent and Solent Harbours Study					English Nature, and Local Authorities, MAFF Agency Function: FER	 
Identify areas where managed retreat may be possible Agency lead – FD		Opportunity to increase area of intertidal habitats Financial savings	Part of Solent and Solent Harbours Study, and SMP Part of Hayling Island Strategy (Issue 12)					Local Authorities, Landowners Agency Function: FER	 
Research into whether it is possible to recreate intertidal habitats Agency lead – FD		Opportunity to create intertidal habitats	Part of Solent and Solent Harbours Study and SMP Part of Hayling Island Strategy (Issue 12).					English Nature, MAFF Agency Function: FER	 
Produce internal Agency guidance for the management of dredging Agency lead – FD	Provide local input Consider the impact from the release of antifoulants such as TBT during dredging operations (see issue 17)	Policy development ensures consistency of approach to environmental protection	Nationally and Regionally funded					English Nature, MAFF, Portsmouth Commercial Port, Queen's Harbour Master Agency Function: FER	

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Assess impact of mudflat recharge by sediment Agency lead – FD	Support research Site specific - may be covered in site strategies	Would allow informed decisions about dredging management	Part of Solent and Solent Harbours Study					English Nature Agency Function: FER	
Promotion of saltmarsh regeneration schemes Agency lead – FD	Support these MAFF schemes where applicable Carry out regeneration where it can be economically justified on a flood defence basis	Opportunity to contribute to halting the current decline in habitat area	MP	MP	MP	MP	MP	English Nature , MAFF Agency Function: FER	  
Based on studies and research, develop a sustainable strategy for sea defence for each vulnerable stretch of coastline Agency lead – FD		Would assist the Agency and other responsible authorities in managing sea defences in an economical and environmentally acceptable manner	100					English Nature, Local Authorities Agency Function: FER	 

ISSUE 11 – DEVELOPMENT PROPOSED IN THE UPPER AREAS OF SUB-CATCHMENTS HAS THE POTENTIAL TO INCREASE FLOOD RISK DOWNSTREAM

Unless carefully controlled, development in the upper parts of sub-catchments can accelerate the speed of run-off and increase the risk of flooding downstream. These problems are already occurring in the Hamble and the Meon sub-catchments where development has taken place. Further proposed development to the south east of Eastleigh would exacerbate this situation, and large-scale development to the west of Waterlooville could increase the risk of flooding from the River Wallington. Surface water runoff levels are likely to increase as a result of new developments because impermeable surfaces such as roofs, roads and pavements replace brown or green-field sites. The Agency seeks to control this runoff by promoting Sustainable Urban Drainage Systems (SUDS) which aim to return the runoff to the site. SUDS can also be used to control the passage of silt to rivers and contaminants to rivers and groundwater. The Agency would like to see source control on all new development incorporating the latest available technology and best practice.

Flood retention lakes, such as those constructed at Whitely, can be used to enhance habitats and provide an amenity, as well as ensure effective mitigation against flooding. However, they are costly to develop and it is necessary to ensure that the costs are borne by developers. To be effective in the long term, it is imperative that flood attenuation measures are properly maintained – preferably under the supervision of a competent authority, such as the Agency or the Local Authority.

The Agency recently produced an Environmental Planning document for Hampshire titled "Planning Policy Principles for Hampshire". Launched at the Water in Hampshire Conference in March 2000, the aim of the document is to educate and provide local authority planners with guidance on the Agency's principles on current and future issues relating to planning and the environment. This is especially important for those aspects for which the Agency acts only in an advisory role, such as discouraging developments in flood plains. Its purpose is to identify concerns specific to the Hampshire Area and highlight Agency policies, which can be incorporated in development plans for the area.




All Local Authorities in the Hampshire and Isle of Wight area have been visited and given presentations by the planning liaison and flood defence teams, and a major seminar was held in November 1999 for planners and councillors on the Agency's flood plain policy.






The Agency will promote CD ROM's of flood plain maps which were sent to Local Planning Authorities in 1999, as an action from the Bye report. These maps will be updated annually by the Agency.

Groundwater flooding can and does occur across sections of the LEAP area. Groundwater flooding did occur for example at Rowlands Castle in 1995. However following a study there was found to be no cost benefit to carrying out any works to prevent flooding.

Feedback from Consultees

This issue was ranked equal 6th by consultees. This issue was the highest priority for Rowlands Castle Parish Council and was mentioned by another of the consultees. Rowlands Castle has a history of surface water drainage problems. This is especially relevant to the EHDC who have proposals for Rowlands Castle in their Local Plan. One of the consultees felt that the Agency should be actively resisting development rather than mitigating effects.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Object to inappropriate development through the planning process Agency lead: CS	Promote " <i>Planning Policy Principles for Hampshire</i> " Establish closer links with GOSE, DETR and advise on RPG's and PPG's	Would help to ensure that there is no further increase in flood risk	MP	MP	MP	MP	MP	Local Authorities, Developers Agency Functions: All	  

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Promote Sustainable Urban Drainage Systems Agency lead: CS	Work with developers and Local Authorities to incorporate SUDS into the planning process	Will reduce runoff from the site Will reduce flooding downstream of new developments Will help to control the passage of silt to rivers and contaminants to rivers and groundwater	MP	MP	MP	MP	MP	Local Authorities, Developers	  
Monitor objections to inappropriate development Agency lead: CS			MP	MP	MP	MP	MP		 

ISSUE 12 – PIECEMEAL MANAGEMENT OF COASTAL DEFENCES AT HAYLING ISLAND IS ENVIRONMENTALLY DAMAGING AND INEFFECTUAL




The Agency and Havant Borough Council have jointly produced a draft strategy plan for Hayling Island. This strategy comprises of 3 sub-strategies – one for Eastoke, one for Mengham and one for the remainder of Hayling Island. Following consultation with all interested parties, the Agency will seek to implement the strategy in partnership with frontages, district councils, the public and conservation organisations.

Neither the Agency or Havant Borough Council own the existing defences, but the Agency has the power to manage existing sea defences and provide new defences. However, these powers do not require the Agency to maintain all defences or provide every new defence requested. The strategy includes a separate Strategic Environmental Assessment that reviews all environmental data, assesses the impacts of proposals and outlines guidance for any future construction works.

The production of the draft strategy by the Agency in partnership with others means that any new defences will be built and maintained in a co-ordinated and sustainable manner. This issue links closely with issue 10.

Feedback from Consultees

This was ranked equal 6th by the consultees. The Liberal Democrats are concerned about piecemeal action by various responsible authorities without overall control, and the RSPB would like to see a continuing partnership to develop the sustainable coastal defence strategy. The Hayling strategy should help provide a more co-ordinated approach.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Produce final strategy plans for Hayling Island Agency lead – FD	Complete consultation exercise on sub plans by 2001	Provide long term security to the residents of Hayling Island	100	MP	-	-	-	Local Authorities, MAFF	
Produce environmental assessments as part of planning applications for each sub-strategies Agency lead – FD		Will identify the environmental implications of the strategies						Local Authorities, MAFF	
Implement strategies in phased approach Agency lead – FD	Construct sea defences and allow Managed Retreat as appropriate	Enables work to be carried out according to priority		500	1.2 m	1.4 m		Local Authorities, MAFF, English Nature, Harbour Authorities, Landowners	







ISSUE 13 – THE HAVANT AND BEDHAMPTON SPRINGS, CRITICAL FOR WATER SUPPLY, ARE VULNERABLE TO POLLUTION

Areas already at risk include Source Protection Zones (SPZs) which show areas around major drinking water supplies and some private boreholes that require protecting to prevent pollution. SPZ maps have recently been published and will be used to influence LA's and developers. It is important to have the best information available to be able to monitor the impact of SPZs, the groundwater regulations, and source control methods upon groundwater quality.

Swallow holes in the Rowlands Castle and Horndean area have a direct connection with the Havant and Bedhampton Springs to the south. These springs are utilised as a major public water supply for the Portsmouth area. The springs are supplied from a large catchment, in which there is considerable potential for pollution (for example from domestic heating oil).

Feedback from Consultees

This issue was ranked 2nd by consultees. This was the concern of a number of consultees including Rowlands Castle Parish Council and the Hampshire and Isle of Wight Liberal Democrats, who see safeguarding of the critical water supplies as paramount and would expect to see the Agency implementing notices under the 1998 Groundwater Regulations without further delay. It was suggested that any study of swallow holes should include identifying the geological factors, which result in open fissure paths between swallow holes and the springs. This is something the Agency is investigating as part of their Hazard Mapping work which involves the Hazard Mapping of solution features (these features can act as conduits for contamination to reach the watertable).

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Implementation of SPZs. SPZ maps will be sent to all Local Authorities in the LEAP area. These will be promoted and updated regularly Agency lead – EPI	The Agency may object or discourage developments in SPZs which threaten the ability to use the aquifers for Water Supplies as per the POPPG (Policy on Planning and Protection of Groundwater)	Relates specific areas to actual risk	1	1	1	1	1	Water Companies, Local Authorities Agency Function: CS	 
Implement Notices under the Groundwater Regulations 1998 Agency lead – EPI	As sites which pose a risk are identified, the Agency will work with the site owners to ensure a voluntary adherence to Codes of Good Practice or issue notices enforcing compliance	Potentially very effective in protecting water supplies Will ensure compliance with Regulations at sites identified as at risk	£65,000 has been made available Regionally for implementation and enforcement of the Groundwater Regulations					Local Authorities Agency Function: EP	 
Identify the aquifers which are most threatened by pollution incidents Agency lead: EPI	Build upon pilot project Extend areas which are assessed When delivered, add information from Southern Water to database	Pro-active management of water supply Allows targeting of pollution prevention work More effective response to planning consultations Further delivery of Groundwater Regulations	Delivery depends on availability of additional resources					Southern Water Agency Function: EP	 

ISSUE 14 – DIFFUSE POLLUTION OF WATERCOURSES FROM DEVELOPED AREAS AND INTENSIVE AGRICULTURE

Diffuse pollution (pollution arising from a large number of locations, both rural and urban) can result in cumulative effects which can result in increased sediment loadings or increased nutrient levels.

The following inputs have an adverse effect on the LEAP area's water quality:

- leaching/pollution from former landfill sites
- pollution of groundwater and surface watercourses from leakage of septic tanks (domestic effluent is discharged to septic tanks in rural areas)
- diffuse pollution from urban land uses (mainly industrial estates) and construction sites
- run-off from impermeable surfaces in urban areas can wash oil, silt and other contaminants into watercourses via the surface water drainage system. The Agency will promote the use of source control techniques on new developments (such as sustainable urban drainage), through its Environmental Planning document
- pollution of surface watercourses and groundwater from pesticides, nitrates and diffuse pollution sources from agricultural intensification

Land vulnerability maps of the LEAP area have been developed. The information from these maps will act as a tool for identifying siltation pathways to the rivers, assisting in the identification of areas where excessive siltation from runoff may occur, and allowing targeted diffuse pollution mitigation work to be undertaken at those sites identified at greatest risk. The Agency currently works closely with farmers and other landowners to avoid diffuse pollution from nitrates, phosphates and sediments.




The promotion of environmentally friendly schemes and management strategies would be greatly furthered by the implementation of a Landcare Project. Through an assessment of the priorities and responsibilities of other interested parties and organisations the Agency could promote a bid to secure LIFE funding to implement a Landcare Project focussing on diffuse pollution. This would enable the Agency to expand this area of work to encourage best practice, and to promote the take-up of grants in Environmentally Sensitive Areas and the uptake of schemes such as the Countryside Stewardship scheme.

The Agency need to increase the awareness of the construction industry of the impacts of run off from development sites, especially those in vulnerable areas (see issue 11) and to ensure that future development incorporates the best available techniques. Moreover the regular maintenance of sites such as oil / petrol interceptors for roads run off is essential.

The Agency monitors fresh watercourses to determine whether 'River Quality Objectives' (RQOs), which are tied to the potential uses of the water, are being met. Whilst not statutory, RQOs provide a basis for water quality planning and for targeting investment. Statutory EC Directives also have to be met.

Feedback from Consultees

This issue was ranked 4th by the consultees

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Appraisal of the impact of, and sources of, diffuse pollution in the LEAP area Agency lead: EPI	Build on completed initial data gathering exercise Identify areas at risk from diffuse pollution and then work to reduce its impact	Analysis of data could provide solutions to a range of problems including siltation, levels of eutrophication, etc	MP	MP	MP	MP	MP	Universities, ADAS, MAFF, Farmers, Industry, NFU, CLA, Developers Agency Functions: EP	 
Implement a Landcare Project to focus on diffuse pollution Agency lead: EPI/CS	Liaise with partners to maximise use of best practice and disseminate information to relevant parties promoting shared aims Co-ordinate targeted work to reduce diffuse pollution with interested stakeholders Refer to National protocol which is being developed	Would help reduce levels of pollution reaching the river Would help promote biodiversity Targeting gives best use of resources. Builds upon on-going work – eg farm visits Results in actions to identify and reduce potential algal and eutrophication problems	A landcare project would require additional resources and partnership working					FRCA, English Nature, Local Authorities, DETR, Landowners, NFU, CLA, Highways Agency, Farming Community, Planners, oil distributors Agency Functions: FER	

ISSUE 15 – THE POTENTIAL EFFECTS OF WATERCRESS FARMS ON THE RIVER MEON REQUIRE INVESTIGATION

Watercress beds were first established in Hampshire in the nineteenth century, and account for around 70% of total watercress production throughout the UK, which has an annual turnover of around £21 million. The watercress farms are situated on the Chalk streams of the LEAP area due to the requirement for high quality water. There are a number of operational issues, which have the potential to impact on receiving waters;

Watercress production has become more intensive with year round cultivation, a process that has been assisted by the use of chemicals and nutrients. The use of such substances including zinc and malathion is carefully monitored. The Agency does this through the use of discharge consents and is currently working with the Watercress Growers Association and the Horticulture Development Council to develop best practice advice for watercress growers to evaluate and reduce potential impacts of their operations on the environment. A number of the growers are working to an Assured Produce Scheme to encourage integrated crop management and limit the use of pesticides in crops. The Agency is also concerned with pesticide use on cress farms, as with all pesticide use near water, although the range of chemicals that can be used on cress is limited.

The Agency is currently reviewing data on the release of Isothiocyanates, which may be released from the cress during cropping. It is believed by the watercress industry that this natural chemical may be a causative factor in biological deficiencies (e.g. lack of *Gammarus pulex*) downstream of cress beds.

Cress farm waste from cress beds is agricultural waste and therefore not controlled by waste legislation. There is a risk of pollution of ground and surface waters due to liquid leaching out of the material, which has a high organic content and may be controlled by the Groundwater Regulations (see issue 6). It should be noted that packaging waste generated from salad packaging plants is controlled by waste legislation.



Although most of the watercress farms on the River Meon have taken measures to ensure their discharges meet the consents set by the Agency, it is known that water quality problems have arisen from the following operations:

- crop harvesting
- bed cleaning
- fertilisation practices
- chemical / pesticide use and storage and
- produce preparation

The Agency needs to establish the impact of these operations and ensure that appropriate environmental mitigation measures are in place. In addition, derelict cress farms could be restored to improve their importance for biodiversity

Feedback from Consultees

This issue was ranked 15th by the consultees.

Actions	Targets	Benefits	Cost					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
<p>Continue to assess the effects of the watercress industry both generically and site specifically</p> <p>Ensure that mitigation measures are implemented</p> <p>Agency lead: EP/EPI</p>	<p>Local action is ongoing as is inter-Regional progress on consenting issues</p> <p>Encourage further mitigation measures by growers</p> <p>Undertake review of watercress-farm consents</p>	<p>Allows informed decisions to be made regarding environmental protection to reduce the impact of the industry on the environment</p> <p>Ongoing action will continue to deliver information on impacts of watercress farms.</p>	MP	MP	MP	MP	MP	<p>Producers, NFU, Watercress Growers Association, Horticultural Development Council</p> <p>Agency Functions: Environment Agency (SW Region)</p>	 

ISSUE 16 – THE EFFECTS OF COMBINED STORMWATER OVERFLOWS ARE UNKNOWN



Combined sewer overflows (CSOs) discharge water from sewerage systems that take both surface and foul drainage during intense and/or prolonged rainfall events. These discharges are designed to alleviate pressure on the sewerage system and any subsequent sewage treatment works. Although any foul drainage is diluted by surface water run-off, only screening is normally required for these discharges.

The majority of unsatisfactory CSOs affecting bathing water compliance were identified for improvement under the Water Industries Second Asset Management Plan (AMP2). In total 126 CSOs were identified across the Southern Water Area, however only one of these (on Pier Road in Portsmouth) is in this LEAP and proposals for the improvement of this CSO are currently being developed. Under AMP3 further CSOs in the LEAP area will be funded for improvements. The majority of these improvements will be driven by the Urban Waste Water Treatment Directive and the Shellfish Waters Directive.

The Agency continues to carry out investigations to assess whether improvements to particular CSOs would benefit the environment and enable waters to achieve better compliance with UK and EU legislation.

Feedback from Consultees

This issue was ranked 14th by the stakeholder group

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Ensure completion of actions under AMP2 and AMP3 Agency lead: EPI	Deadline for scheme completions: AMP2 – 31/03/2000 AMP3 – 31/03/2005 Will involve use of consultants for Sewerage Network Modelling for Coastal and Estuarine schemes	Will result in considerable environmental improvement	10	10	10	5	5	Southern Water services Ltd. Agency Function: EP	
Identify locations of unsatisfactory CSOs to allow work to be targeted under the AMP4 improvement programme Agency lead: EP	Agreed list of existing CSOs now produced Confirmation of the status of these CSOs will be required (<i>groundtruthing</i>)	Improvements can become part of AMP4 Compliance with mandatory and guideline standards of legislation (eg Bathing Waters Directive) Allows informed decisions to be made about future investment Ensure satisfactory operation of CSOs Ensure water companies carry out routine maintenance of CSOs	MP	MP	MP	MP	MP	Southern Water services Ltd. Agency Function: EPI	

ISSUE 17 – THE ENVIRONMENTAL EFFECTS OF TRIBUTYL TIN (TBT) AND ALTERNATIVE ANTI-FOULING PAINTS USED ON BOATS ARE OF CONCERN


Tributyl Tin (TBT) is used as an anti-fouling paint on vessels over 25m in length and on MOD vessels. Due to concerns over environmental impacts, its use has been banned on vessels under 25m in length since 1987. By 2006, its use will be banned entirely. Since the ban TBT concentrations in the water column have declined but the release of TBT from sediments (especially during dredging activities) and from the hulls of larger vessels has meant that it has not been eliminated from the water column at many coastal and estuarine locations.


This is a national problem as well as a local one, and the Agency is working on a national scale to try and resolve the key issues. Following a consultation exercise the Agency developed a new National Endocrine Disrupting Substances Strategy in March 2000, with actions planned for the next five years. The Strategy will provide cost effective action to reduce the risk of potential endocrine disrupting substances (such as TBT) causing harm to the environment. Recommendations from this strategy will identify local actions which may be included in future LEAP annual reviews. There are also specific local issues which are dealt with below.

The impact of alternative anti-fouling paints, which can be used on vessels of less than 25m in length, is also a concern – particularly in harbours or estuarine locations (especially marinas) where numerous boats are present and water exchange is limited. The Agency supports the ban and will seek to influence the adoption of satisfactory alternatives.

Feedback from Consultees

This issue was ranked equal 18th by the consultees. The Chichester Harbour Conservancy suggests examining options that do not use anti-fouling agents at all. Options include better, cheaper scrubbing facilities.

Actions	Targets	Benefits	Cost £k	Partners	Agency Theme
			00/01 01/02 02/03 03/04 04/05		
Keep abreast of current research and Agency strategies Agency lead: EPI	Take forward and further any recommendations for action from National Strategy	Highlight potential problems and identify possible remedial measures National work should recommend improvements to solve or minimise problems	Recommendations for action from National Strategy will determine resource requirement	Local Authorities, Port and Harbour Authorities, MAFF, Health and Safety Executive, English Nature, Royal Yachting Association Agency Function: EP	

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
<p>Establish and support collaborative projects and best practice guidelines for the use and disposal of marine anti-fouling agents</p> <p>Agency lead: CS</p>	<p>Promote recommendations of National Endocrine Disrupting Substances Strategy</p> <p>Provide guidance for the management of dredging activities with respect to the release of TBT from sediments during dredging activities (see issue 10)</p> <p>Work to eliminate contaminated discharges during antifoulant scrubbing</p>	<p>Would minimise risk to the environment</p>	MP	MP	MP	MP	MP	<p>Local Authorities, Port and Harbour Authorities, MAFF, Royal Yachting Association, British Marine Industries Federation, Marina Development Ltd.</p> <p>Agency Functions: EP, EPI</p>	




ISSUE 18 - THE AGENCY'S FORMAL CONTINGENCY PLAN FOR OIL AND CHEMICAL POLLUTION INCIDENTS IN THE MARINE ENVIRONMENT NEEDS DEVELOPMENT AND INTEGRATION WITH THE PLANS OF OTHER ORGANISATIONS

In the LEAP area there is considerable potential for oil pollution from industrial sources, especially shipping. Under the Oil Pollution Response and Co-ordination Regulations 1998 (OPRC Regulations) all Port and Harbour Authorities have to develop a contingency plan, which must be co-ordinated with that of neighbouring Authorities. The Solent area is fortunate in having a comprehensive and co-ordinated plan between adjacent Authorities (the Solent Emergency Plan). The Solent Plan is co-sponsored by the Queens Harbour Master (Portsmouth), ABP and the MCA and is utilised, with the Local Authorities and the emergency services, for the planning, co-ordination and control of any major incident in the Solent. The Agency's main role in the Plan is to mitigate the impacts of oil spill incidents. However, it is important that the Agency's contingency planning for major pollution events and the subsequent disposal of waste oil and oiled material, is developed and integrated effectively into this Plan.

The Agency works with the emergency services, developing efficient working relationships for dealing with pollution incidents. The Agency is also introducing a new Emergency Planning Process Handbook and developing and promoting an Area Emergency Plan.

Feedback from Consultees

This issue was ranked 3rd by consultees. Portsmouth City Council was particularly concerned to see that the Agency did not have a contingency plan which was integrated with that of other organisations, and hope to see future liaison between the Agency and the council in developing an integrated plan.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
Liaise with relevant port and harbour authorities to promote integration (oil spill contingency plans) Agency lead – EPI	Organisation and participation in emergency exercise	Integrated plans developed for the Solent	MP	MP	MP	MP	MP	Local Authorities, Port and Harbour Authorities, Maritime and Coastguard Agency Agency Function: EP	
Arrange 'dry runs' to test contingency planning procedures Agency lead – EP	Organisation and participation in emergency exercise Develop partnerships with major stakeholders	Verify efficiency/effectiveness of proposed plans Will validate Agency emergency procedures and systems	MP	MP	MP	MP	MP	Local Authorities, Port and Harbour Authorities, Marine and Coastguard Agency Agency Function: EPI	
Evaluate waste disposal options Agency lead – EPI	Implement National database after further development Carry out workshops	Find solution to waste disposal problem	Manpower. Workshops would require additional resources					Local Authorities, Oil Industry, Port and Harbour Authorities, Marine and Coastguard Agency, Waste Operators Agency Function: EP	

ISSUE 19 – THE ENVIRONMENT AGENCY REQUIRES MORE INFORMATION ON THE EXTENT OF RECYCLING OF SEWAGE SLUDGE AS A SOIL CONDITIONER FOR AGRICULTURAL BENEFIT AND NEEDS TO ENSURE COMPLIANCE WITH BEST PRACTICE.



The land application of waste, such as sewage sludge, to agricultural land has the potential to cause serious pollution and potential risk to health if not properly managed and controlled. This activity is currently carried out in the LEAP area and is likely to increase over the next few years due to increased sewage treatment, higher landfill costs and the cessation of sewage sludge disposal at sea since the end of 1998.

The Agency has responsibility for effectively enforcing regulation which allow the application of wastes to agricultural land where beneficial effects can be demonstrated. The treatment and use of sewage sludge on land is subject to European and UK legislation and is controlled by regulators and also by industry codes of practice and agreements between retailers and water companies. The Sludge (Use in Agriculture) Regulations 1989 regulations are due to be revised to require improved treatment of sewage sludge before application to land. This will include the phasing out of the use of untreated sludge for grassland and most crops by the end of 1999, with a full ban by the end of 2001. SWS has a sludge strategy for the treatment and use of sewage sludge to ensure directives and codes of practice are complied with. This will eliminate liquid sludges recycled to land. The exemption of industrial waste spread on land from waste licensing and future guidelines for land spreading are under review by the government. There is concern regarding the long term environmental capacity of the land to absorb these wastes. Careful monitoring and regulation is required to ensure the procedure does not represent a hazard to health via the food chain and that it is carried out without harming the environment, including the pollution of sensitive groundwater resources.

The Environment Agency Southern Region has recently agreed a Regional Strategy for the Disposal of Sewage Sludge on Farmland. In summary, this seeks to ensure compliance with exemption conditions and appropriate monitoring by the Agency's Environment Protection officers. A best practice guide has been produced and the Agency is progressing its audit role.

Feedback from Consultees

This issue was ranked equal 12th by the consultees.

Actions	Targets	Benefits	Cost £k					Partners	Agency Theme
			00/01	01/02	02/03	03/04	04/05		
<p>Ensure implementation of the Regional strategy for the disposal of sewage sludge and other controlled waste on agricultural land</p> <p>Agency lead: EP</p>	<p>Increase registration of sites receiving waste (including initial screening to ensure protection of groundwater supplies from contamination)</p> <p>Produce Risk Plans (sets out communications procedures between water companies and the Agency)</p> <p>Pollution prevention advice</p>	<p>Avoidance of potential harm to the environment. Improved public perception of the risk to the environment</p> <p>Protection of groundwater supplies</p>	MP	MP	MP	MP	MP	HCC, Water companies, MAFF, Landowners and farmers	 

ISSUE 20 – INTENSIVE RECREATIONAL USE OF THE COASTAL STRIP, ESTUARY AND RIVER VALLEYS HAS THE POTENTIAL TO RESULT IN DAMAGE AND DISTURBANCE TO THE NATURE CONSERVATION INTEREST AND PEOPLE'S ENJOYMENT OF THE ENVIRONMENT.




Portsmouth, Langstone and Chichester Harbours, the Upper Hamble Estuary, and the sand dunes and shingle of the coastal strip, act as magnets for recreational activity. In addition to the more formal activities such as sailing, canoeing and water skiing, the area provides opportunities for people to enjoy wildlife (in particular bird watching) and to appreciate the openness and tranquillity of the landscape. However, the area supports a number of habitats and species of European importance, reflected in designation of large areas as Special Area for Conservation and Special Protection Areas under the Habitats Directive and Wild Birds Directive.

The potential for adverse impacts on nature conservation has been identified (from direct damage due to trampling of vegetation or by disturbance of wildlife such as nesting birds). There is also the potential for impacts on people's enjoyment of the environment, particularly people undertaking informal and quiet activities. However, there is at present insufficient information to fully assess the impact of recreation on biodiversity and people's enjoyment of the environment in the LEAP area. Information on recreational use of the river valleys is also limited.

The Agency works together with local planning authorities to safeguard and improve access and riverside walks where this does not conflict with current conservation or recreational requirements and works to promote water based recreation wherever possible. It supports the present government's initiative to increase access to the countryside. The Agency will continue to look for partners and external funds to help fund additional work and influence the work of our other functions to increase recreational opportunities. The Agency has a responsibility to promote water and associated land for appropriate recreational use and is involved in restoring habitats such as the Hermitage Stream which can provide benefits for both conservation and recreation (see issue 8). It also has particular responsibility for maintaining the favourable status of sites protected under European directives. However, the Agency has little direct involvement or control over recreational activities undertaken in the LEAP area.

Feedback from Consultees

This issue was ranked equal 12th by the consultees. The British Canoe Union in their comments identifies that their current approach is to seek access to waters through agreement with riparian owners. The Agency have produced a booklet which can be used as a guide in such situations called 'Agreeing Access to Water for Canoeing'. The Liberal Democrats identify the potential of the Forest of Bere to remove the strain of tourism from heavily used areas, and the Agency will encourage human activity in areas away from those with the potential to become adversely affected.

Actions	Targets	Benefits	Cost £k 00/01 01/02 02/03 03/04 04/05	Partners	Agency Theme
Support research to identify impacts of recreation on both biodiversity and on people's enjoyment of the environment eg Solent Forum Agency lead: FER	Support Work of Solent Forum Support National R&D work which may be carried out by the Agency	Identifies the impacts of recreation on both biodiversity and on people's enjoyment of the environment	The Agency will support work carried out by others by providing expertise and project management skills. Also provide part funding for Solent Forum	Harbour Masters, Solent Forum, Langstone Harbour Board, Hampshire Wildlife Trust, RSPB, Local Authorities, English Nature	 
Support promotion of best practice management of recreational activities in the LEAP area Agency lead: FER		Reduce impacts of recreation on the environment	The Agency will support work carried out by others by providing expertise and project management skills	Harbour Masters, Solent Forum, Langstone Harbour Board, Local Authorities	

ISSUE 21 – THE SIGNIFICANT AMOUNT OF CONTAMINATED LAND IN THE LEAP AREA WILL HAVE RESOURCE IMPLICATIONS UNDER NEW LEGISLATION

Local Authorities are required to inspect their areas to identify contaminated land, to assess the impact of land identified as contaminated, and to encourage the remediation of that land. They have until June 2001 to prepare a strategy for achieving this and to produce a register of sites. The Government recently (April 2000) introduced new contaminated land legislation to deal with the most seriously polluted sites, which are unlikely to be remediated voluntarily. Under this legislation Local Authorities will transfer regulatory responsibility for 'special sites' to the Agency.


The implementation of the Environment Act 1995, and Section 57 of the new Contaminated Land Regulations, gives the Agency the following responsibilities:

- registration of special sites under P11A, including maintaining a public register of special site remediation
- inspection (at the request of and on behalf of Local Authorities) of land that if found to be contaminated land would be a special site under the Contaminated Land Regulations (England) 2000
- provision of information to support Local Authorities' inspection of land
- provision of advice on matters related to pollution of controlled waters and where the Agency considers it appropriate, site specific advice on remediation of sites not designated as special sites
- reporting on the state of contaminated land under P11A in England and Wales
- dissemination of *best practice* and sponsorship of relevant R&D

The Agency has appointed a contaminated land officer in the Hampshire and Isle of Wight Office to liaise effectively with Local Authorities and ensure the Agencies above duties are delivered for the area.

Feedback from Consultees

This issue was ranked 11th by the Consultees. The Liberal Democrats in their comments stated that there was an urgent need to assess all polluted land within the LEAP area including MOD sites and then prepare a published management programme.

Actions	Targets	Benefits	Cost £k	Partners	Agency Theme
			00/01 01/02 02/03 03/04 04/05		
Support Local Authorities in the production of their strategies Agency lead – EPI	Ensure the Agencies above duties are delivered for the area	Deliver the requirements of new and existing legislation	Costs cannot be specified at present although they could be significant	Local Authorities	

ISSUE 22 - THE ENVIRONMENTAL COST OF WASTE DISPOSAL IS SIGNIFICANT

The solid waste produced from quarrying, construction and demolition, agriculture, other industry and commerce, and households, presents a significant stress on the area's environment. Landfill capacity in Hampshire is limited and greater effort will be required to achieve sustainable waste management.

The Agency was given a key role in implementing the former Government's White Paper 'Making Waste Work', which is based on three key objectives:

- to reduce the amount of waste that society produces
- to make the best use of the waste produced
- to choose waste management practices which minimise the risks of immediate and future environmental pollution and harm to human health

The current Government issued 'Less Waste More Value – a consultation paper on the waste strategy for England and Wales' in June 1998. This indicates that 'there is a need for a substantial increase in recycling and recovery going beyond the targets set by the previous Government and emphasises the importance of managing our waste more sustainably. It promotes the waste hierarchy: "reduce, re-use and recycle" and outlines the Environment Agency's current roles in relation to waste management and seeks views on whether they are the right ones.

Following the Consultation exercise the Government produced the draft strategy for England and Wales in June 1999 "A Way with Waste". Building on the widespread support for Less Waste: More Value the draft strategy sets out the actions we will need to take to achieve sustainable waste management and a better quality of life. As part of the overall strategy to achieve these objectives the Government produced a consultation paper on limiting landfill. Published in October 1999, this document, known as "Limiting Landfill" is designed to stimulate debate on what are the best mechanisms for limiting landfill to meet the to meet the EC Landfill Directive's targets for the landfill of biodegradable municipal waste. These targets require the UK to take action on 2 levels:

- limit the amount of biodegradable municipal waste going to landfill to meet specified targets
- build up alternatives to landfill to deal with the diverted waste eg incineration, recoiling, composting.

The Government intends to produce a National Waste Strategy in the summer of 2000 which will incorporate the outcomes of the consultation exercises and draft strategies.

Within the parameters of the Hampshire Minerals and Waste Local Plan, the potential for increasing the amount of municipal waste recycled or composted will depend on a number of factors including finding suitable sites for collection banks, instigating kerb-side recycling schemes, and increasing public participation. The Agency licences sites to ensure proper controls for the protection of the environment.


The Landfill Directive sets targets for the reduction of municipal biodegradable waste to landfill. By 2003 the UK must develop a National Strategy to deal with levels of this type of waste. Member states which in 1995 sent more than 80% of their collected municipal waste to landfill (such as the UK) may postpone the attainment of these targets.

The Producer Responsibility Obligations (Packaging Waste) Regulations 1997 aim to decrease the amount of packaging waste going to landfill by setting business targets for recycling and recovering packaging waste. The regulations will help to ensure that the real environmental costs of producing, using and disposing of packaging falls directly on those who produce or use it.

The Agency is encouraging Waste Minimisation Clubs, such as the Southampton and Eastleigh Waste Minimisation Club which is helping Hampshire business get the commercial benefits from reducing their waste.

Feedback from Consultees

This issue was ranked equal 8th by consultees.

Actions	Targets	Benefits	Cost £k 00/01 01/02 02/03 03/04 04/05	Partners	Agency Theme
<p>Promote waste minimisation through education of the public and industry</p> <p>Agency lead – EPI</p>	<p>Ensure business compliance with targets in Packaging Regulations</p> <p>Promote Waste Minimisation Clubs</p> <p>Work closely with Local Authorities which are responsible for municipal waste management</p> <p>Promote the 'waste hierarchy': reduce; re-use; recycle</p>	<p>Achieve UK's mandatory packaging waste recovery and recycling targets</p> <p>Less material to landfill and more value gained from resources</p>	<p>This has been considered a low priority for 2000/2001. Waste minimisation will be chiefly encouraged as part of other activities</p> <p>Further resources or a reprioritisation of other activities could allow more proactive work related to waste minimisation</p>	<p>Local Authorities, Industry, Waste Minimisation Clubs, SIEnA (Southampton Environment Centre)</p> <p>Agency Function: EP</p>	

7.0 FUTURE REVIEW AND MONITORING

Regular monitoring and updating of the plan are an integral part of the LEAP process.

The Environment Agency is jointly responsible, with other identified organisations and individuals, for implementing the actions in this plan. These Reviews are integrated into the Agency's internal Business Plans, so resources, where possible, can be allocated to tackle the actions. Consequently, in Southern Region the Agency will be reviewing all its LEAPs to coincide with the Business Planning cycle. This will result in all the Reviews being published in around May each year. One review document will be produced for each of the three Agency Areas i.e. Hampshire and Isle of Wight, Sussex, and Kent. Each LEAP catchment will still be reported upon individually within the report.

The Annual Review will be disseminated to all the key partners and other interested parties and will identify any additional actions needed to maintain progress in the light of any changes in the LEAP Area and also whether any actions need removing or amending where they are no longer appropriate. A number of the actions rely on external funding and heavily on the changing priorities of partnership organisations.

The Annual Review will take the form of a short progress report 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
- roll forward the detailed actions

After 5 years, or 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: ABBREVIATIONS

ABP	Associated British Ports	SAC	Special Area of Conservation
AMP	Asset Management Plan	SPA	Special Protection Area
AONB	Area of Outstanding Natural Beauty	SSSI	Site of Special Scientific Interest
BAP	Biodiversity Action Plan	SUDS	Sustainable Urban Drainage Systems
BATNEEC	Best Available Technique Not Entailing Excessive Costs	UWWTD	EC Urban Waste Water Treatment Directive
CAMS	Catchment Abstraction Management Strategies	WWTW	Waste Water Treatment Works
CEFAS	The Centre for Environment, Fisheries, Aquaculture Studies		
CLA	Country Landowners Association		
DETR	Department of the Environment, Transport and Regions		
FRCA	Farming and Rural Conservation Agency		
FWAG	Farming and Wildlife Advisory Group		
GIA	Grant in Aid		
HWT	Hampshire Wildlife Trust		
LA	Local Authority		
LEAP	Local Environment Agency Plan		
LGA	Local Government Association		
LPA	Local Planning Authority		
MAFF	Ministry of Agriculture, Fisheries and Food		
MCA	Marine and Coastguard Agency		
MDA	Major Development Area		
MP	Manpower		
NFU	National Farmers Union		
NRA	National Rivers Authority		
OFWAT	Office of Water Services		
RQO	River Quality Objective		
RSPB	Royal Society for the Protection of Birds		

AGENCY FUNCTIONS

WR	Water Resources
CS	Customer Services
EPI	Environment Planning
EP	Environment Protection
FD	Flood Defence
FER	Fisheries, Ecology and Recreation

APPENDIX 2

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 information therefore summarises the Agency's duties, powers and interests and their relationship to land use planning in Southern Region.

WATER RESOURCES

Agency Duty

- The Agency has a duty to conserve, redistribute, augment and secure the proper use of water resources.

The Agency has powers to:

- Grant or vary water abstraction and impoundment licences on application.
- Revoke or vary existing licences to reinstate flows or levels to surface-waters or groundwaters which have become depleted as a result of abstraction, and are subject to a liability for compensation.
- Secure the proper use of water resources through its role in water-resources planning, the assessment of reasonable need for abstractions and promotion of more efficient use of water resources.
- Monitor and enforce abstraction and impoundment licence conditions.

The Agency has an interest (but no powers) in:

- The more efficient use of water by water companies, developers, industry, agriculture and the public and the introduction of water-efficiency measures and suitable design and layout of the infrastructure.

Partnership

- The Agency is committed to water-demand management and will work closely with water companies and developers, Local Authorities and relevant organisations to promote the efficient use of water.
- The Agency acknowledges that new resources may be needed in the future and supports a twin track approach of planning for water resource development alongside the promotion of demand-management measures. The Agency seeks to influence planning decisions for new development by encouraging the inclusion of water-conservation measures in new properties, particularly in areas where water resources are under stress, and by ensuring that planning authorities allow for the lead time for resource development.

FLOOD DEFENCE

Agency Duty

- The Agency has a duty to exercise general supervision over all matters relating to land drainage and flood defence throughout each catchment. The principal aim is to provide effective defence and warning systems to protect people and property against flooding from rivers and the sea.

The Agency has powers to:

- Control, through land drainage consents, development within 8m of main river (15 m on a tidal main river) (Water Resources Act, 1991 Section 109) or construction of a structure that would affect the flow of an ordinary watercourse (Land Drainage Act, 1991 Section 23).
- Produce flood risk maps for all main rivers under s105 of Water Resources Act 1991.
- Undertake works to main rivers using permissive powers.
- Issue flood warning relating to main river to the public, Local Authorities and the police.
- Control through Land Drainage Bylaws erections, excavations, etc which may affect sea defences.
- Supervise the maintenance of tidal flood defences within the Agency's jurisdiction. (Note: Many of the sea defences within the Southern Region are controlled by Local Authorities).
- Maintain and operate flood control structures.

The Agency has an interest (but no powers) in:

- Granting of planning permission throughout a catchment but especially floodplains where development can significantly increase flood risk. This permission is granted by Local Planning Authorities.
 - Installation of surface water source control measures eg flood attenuation structures.
 - Supervising the maintenance of ordinary watercourses which is a Local Authority remit, but may impact on main rivers.
 - Installation of buffer zones which reduce flood risk and have significant environmental benefits.
 - Urban and rural land use and measures that can reduce flood risk or the need for watercourse maintenance.
-

Partnership

- As a statutory consultee on planning applications the Agency offers advice based on knowledge of flood risk. It also advises on the environmental impacts of proposed flood plain development.
- The Agency advises solicitors on potential flood risk during property searches for prospective purchasers.
- The Agency will encourage best practice, including source control measures and common standards, among Local Authorities and riparian owners to protect and enhance the environment.
- The Agency works with the civil authorities to prepare flood-warning dissemination plans and supports their endeavours to protect communities at risk.

WATER QUALITY**Agency Duty**

- The Agency has a duty to monitor, protect, manage and, where possible, enhance the quality of all controlled waters including rivers, groundwaters, lakes, canals, estuaries and coastal waters through the prevention and control of pollution.

The Agency has powers to:

- Issue discharge consents to control pollution loads in controlled waters.
- Regulate discharges to controlled waters in respect of water quality through the issue and enforcement of discharge consents.
- Issue 'works notices' where action is required to reduce the risk of pollution.
- Prosecute polluters and recover the costs of clean-up operations.

The Agency has an interest (but no powers) in:

- The control of run off from roads and highways. This is a Highways Agency duty.
- The greater use of source-control measures to reduce pollution by surface-water run off.
- Prevention and education campaigns to reduce pollution incidents.

Partnership

- The Agency will liaise with Local Authorities, developers, the Highways Agency, industry and agriculture to promote pollution prevention and the adoption of source-control measures.
- As a statutory consultee on planning applications, the Agency will advise Local Planning Authorities on the water-quality impact of proposed developments.

AIR QUALITY**Agency Duty**

- The Agency has a duty to implement Part 1 of the Environmental Protection Act 1990.

The Agency has powers to:

- Regulate the largest technically-complex and potentially most polluting prescribed industrial processes such as refineries, chemical works and power stations including enforcement of, and guidance on, BATNEEC and BPEO.
- Have regard to the government's National Air Quality Strategy when setting standards for the releases to air from industrial processes.

The Agency has an interest (but no powers) in:

- The vast number of smaller industrial processes which are controlled by Local Authorities.
- Control over vehicular emissions and transport planning.

Partnership

- The Agency provides data on IPC processes and advice on planning applications to Local Authorities.
- The Agency is willing to offer its technical experience to Local Authorities on the control of air pollution.
- The Agency wishes to liaise with Local Authorities in the production of their Air Quality Management Plans.
- The Agency will advise and contribute to the government's National Air Quality Strategy.

RADIOACTIVE SUBSTANCES

Agency Duty

- The Agency has a duty under the Radioactive Substances Act 1993 to regulate the use of radioactive materials and the disposal of radioactive waste.

The Agency has powers to:

- To issue certificates to users of radioactive materials and disposers of radioactive waste, with an overall objective of protecting members of the public.

The Agency has an interest (but no powers) in:

- The health effects of radiation.

Partnership

- The Agency will work with users of the radioactive materials to ensure that radioactive wastes are not unnecessarily created, and that they are safely and appropriately disposed of.
- The Agency will work with the Nuclear Installations Inspectorate to ensure adequate protection of workers and the public at nuclear sites.
- The Agency will work with the Health and Safety Executive on worker protection issues at non-nuclear sites.

WASTE MANAGEMENT

Agency Duty

- The Agency has a duty to regulate the management of waste, including the treatment, storage, transport and disposal of controlled waste, to prevent pollution of the environment, harm to public health or detriment to local amenities.

The Agency has powers to:

- Vary waste management licence conditions.
- Suspend and revoke licences.
- Investigate and prosecute illegal waste management operations.

The Agency has an interest (but no powers) in:

- The siting and granting of planning permission for waste management facilities. This is conducted by the waste industry and Local Planning Authorities.
- The Agency, as a statutory consultee on planning applications, can advise on such matters.

Partnership

- The Agency will work with waste producers, the waste-management industry and Local Authorities to reduce the amount of waste produced, increase re-use and recycling and improve standards of disposal.

CONTAMINATED LAND

Agency Duty

- The Agency has a duty to develop an integrated approach to the prevention and control of land contamination ensuring that remediation is proportionate to risks and cost-effective in terms of the economy and environment.

The Agency has powers to:

- Regulate the remediation of contaminated land designated as special sites.
- Prevent future land contamination by means of its IPC, Water Quality and other statutory powers.
- Report on the state of contaminated land.

The Agency has an interest (but no powers) in:

- Securing with others, including Local Authorities, landowners and developers, the safe remediation of contaminated land.

Partnership

- The Agency supports land remediation and will promote this with developers and Local Authorities and other stakeholders.

CONSERVATION

Agency Duty

- The Agency will further conserve the environment, wherever possible, when carrying out water-management functions; have regard to conservation when carrying out pollution-control functions; and promote the conservation of flora and fauna which are dependent on an aquatic environment.

The Agency has powers to:

- Exploit opportunities for furthering and promoting conservation with regard to water management and pollution control. The Agency has no direct conservation powers.

The Agency has an interest (but no powers) in:

- The conservation impacts of new development. These are controlled by Local Planning Authorities.
- Protection of specific sites or species, which is a function of English Nature. The Agency does, however, provide advice to Local Authorities and developers to protect the integrity of such sites or species.
- Implementation of the UK Biodiversity Plan for which it is the contact point for 12 species and one habitat.

Partnership

- The Agency supports action to sustain or improve natural and man-made assets so that they are made available for the benefit of present and future generations. Many development schemes have significant implications for conservation.
- The Agency will work with developers, Local Authorities, conservation bodies and landowners to conserve and enhance biodiversity.

LANDSCAPE

Agency Duty

- The Agency will further landscape conservation and enhancement when carrying out water-management functions; have regard to the landscape when carrying out pollution control functions; and promote the conservation and enhancement of the natural beauty of rivers and associated land.

The Agency has powers to:

- Further the conservation and enhancement of natural beauty when exercising its water-management powers and have regard to the landscape in exercising its pollution control powers.

The Agency has an interest (but no powers) in:

- The landscape impact of new development, particularly within river corridors. This is controlled by Local Planning Authorities.

Partnership

- The Agency produces River Landscape Assessments and Design Guidelines which it uses when working with Local Authorities and developers to conserve and enhance diverse river landscapes.

ARCHAEOLOGY

Agency Duty

- The Agency has a duty to consider the impact of all of its regulatory, operational and advising activities upon archaeology and heritage, and implement mitigation and enhancement measures where appropriate.

The Agency has powers to:

- Promote its archaeological objectives through the exercise of its water-management and pollution-control powers and duties.

The Agency has an interest (but no powers) in:

- Direct protection or management of sites of archaeological or heritage interest. This is carried out by LPAs, County Archaeologists and English Heritage.

Partnership

- The Agency will liaise with those organisations which have direct control over archaeological and heritage issues to assist in the conservation and enhancement of these interests.

FISHERIES

Agency Duty

- The Agency has a duty to maintain, improve and develop salmon, trout, freshwater and eel fisheries.

The Agency has powers to:

- Regulate fisheries by a system of licensing.
- Make and enforce fisheries bye-laws to prevent illegal fishing.
- Promote the free passage of fish and consent fish passes.
- Monitor fisheries and enforce measures to prevent fish entrainment in abstractions.
- Promote its fisheries duty by means of land-drainage consents, water abstraction applications and discharge applications.

The Agency has an interest (but no powers) in:

- The determination of planning applications which could affect fisheries.

Partnership

- Many development schemes have significant implications for fisheries.
- The Agency will work with anglers, riparian owners, developers and Local Authorities to protect fisheries.

RECREATION

Agency Duty

- The Agency has a duty to promote rivers and water space for recreational use to such an extent as it considers desirable.

The Agency has powers to:

- Contribute towards its recreation duty through the exercise of its statutory powers and duties in water management.

The Agency has an interest (but no powers) in:

- Promotion of water sports. This is carried out by the Sports Council and other sports bodies.

Partnership

- The Agency will work with the Countryside Commission, the Sports Council, British Waterways and other recreational and amenity organisations to optimise recreational use of the water environment.

NAVIGATION

Agency Duty

- The Agency has no navigation duties in the Hampshire and Isle of Wight Area

The Agency has powers to:

- The Agency has no navigation duties in the Hampshire and Isle of Wight Area

The Agency has an interest (but no powers) in:

- The Agency has no navigation duties in the Hampshire and Isle of Wight Area

Partnership

- The Agency has no navigation duties in the Hampshire and Isle of Wight Area

APPENDIX 3: ORGANISATIONS/INDIVIDUALS WHO RESPONDED TO THE CONSULTATION DRAFT

Organisations	Public
Royal Society for the Protection of Birds	PW McDowell
MAFF	V Birkett
Portsmouth Water	Dr C G Richards
Southern Water	W R Russell
Hampshire and Isle of Wight Trust for Maritime Archaeology	Fred Haynes
Inland Waterways Association	Fred Hefford
Horndean Parish Council	R Shore
East Meon Parish Council	S Wallbridge
Bishops Waltham Society	
Rowlands Castle Parish Council	
Hampshire and Isle of Wight Liberal Democrats	
Chichester Harbour Conservancy	
Clean Rivers Trust	
Portsmouth City Council	
British Canoe Union	
Pagham and West Sussex Wildlife Trust	
Farming and Rural Conservation Agency	
Society of Sussex Downsmen	
Southsea Marina	
Atlantic Salmon Trust	
The Hawk and Owl Trust	

APPENDIX 4: GLOSSARY**Abstraction**

Removal of water from surface water or groundwater, usually by pumping.

Abstraction Licence

Licence issued by the Environment Agency under Section 38 of the Water Resources Act 1991 to permit water to be abstracted.

Aquifer

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

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.

Catchment Abstraction Management Strategies (CAMS)

A way of managing abstraction in the whole catchment in an integrated and sustainable way taking into account the demands on available water resources.

Combined sewer overflow

An overflow structure which allows discharge from the sewerage system to a watercourse during wet weather conditions.

Controlled waters

Defined by the Water Resources Act 1991 Section 104. They included groundwaters, inland waters and estuaries.

Effective rainfall

The rain remaining as runoff after all losses by evaporation, interception and infiltration have been allowed for.

Environmentally Sensitive Area

An area defined by MAFF for which grant aid is available for appropriate agricultural and water/land management.

Floodplain

This includes all 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 which is contained in underground rocks (aquifers).

Heritage Coast

Stretches of the most undeveloped coastline, designated by the Countryside Commission, in order to protect and conserve the coast's vulnerable beauty, and enhance people's enjoyment of the coast without risking its conservation.

Potable water

Water of suitable quality for drinking.

Ramsar sites

Internationally important wetland sites adopted from the Ramsar Convention on Wetlands of International Importance especially as waterfowl habitats (1971) and ratified by the UK government in 1976.

Sea defences

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

Shoreline Management Plans

A strategy for sustainable coastal defence

Site of Special Scientific Interest

A site given statutory designation and protection by English Nature 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.

Special Sites

Sites which contain substances which may cause serious harm or pollution of controlled waters.

Sustainable development

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

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:	<ul style="list-style-type: none"> • An Environmental Strategy for the Millennium and Beyond, Bristol. 1997. • A Better Environment For England and Wales, Bristol. 1998. • Environment Agency Corporate Plan 2000 –2001, Bristol. 1999 • An Introduction to the Southern Region, Worthing. 1998. • Regional Review and Forward Look: Southern Region. 1999-2000.
Improving Air Quality	<ul style="list-style-type: none"> • The Environment Agency's Pollution Inventory, Bristol, 1999.
Managing Water Resources	<ul style="list-style-type: none"> • Policy and Practice for the Protection of Floodplains. Bristol. 1997 • Policy and Practice for the Protection of Groundwater. Bristol. 1998 • Saving Water: Taking Action. Bristol. 1998. • Abstraction Licensing and Water Resources, Bristol. 1997. • Sustaining Our Resources. Southern Region, Worthing. 1997. • Water for Growth – a fair share? Southern Region. 2000
Enhancing Biodiversity	<ul style="list-style-type: none"> • Understanding Buffer Strips, Bristol. 1996. • Freshwater Crayfish in Britain and Ireland, Bristol. 1999. • Freshwater Fisheries and Wildlife Conservation – A Good Practice Guide, Bristol. 1997. • Biodiversity Action Plan for Hampshire, Hampshire County Council – Volume I (1998) and II (2000).
Managing Freshwater Fisheries	<ul style="list-style-type: none"> • 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.
Delivering Integrated River Basin Management	<ul style="list-style-type: none"> • 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. • Water Related Recreation Strategy for the Southern Region – Consultation Draft, 1997, Worthing. 1998. • An Action Plan for Recreation, Environment Agency Southern Region – 1999/2000-2009/2004 - June 1999.
Conserving the Land	<ul style="list-style-type: none"> • Action Plan for Land Quality, Bristol. 1998. • Action Plan for Flood Defence, Bristol. 1998. • Hayling Island Flood Defences – Consultation Documents – 1998-2000 • Western Solent and Southampton Water Shoreline Management Plan – 1998 • Eastern Solent Shoreline Management Plan – 1998
Managing Waste	<ul style="list-style-type: none"> • Money for Nothing – Your Waste Tips for Free, Bristol. 1998. • Waste Minimisation and Waste Management, Bristol. 1997.
Regulating Major Industries	<ul style="list-style-type: none"> • 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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Fax: 01925 415 961

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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.

ENVIRONMENT AGENCY EMERGENCY HOTLINE

0800 80 70 60



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