

Box 2

# local environment agency plan

## SUSSEX AREA ANNUAL REVIEW MAY 2000



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## EXECUTIVE SUMMARY

The Cuckmere and Pevensey Levels Local Environment Agency Plan Annual Review reports on the progress of actions in the first year of the plan and lists any new actions that have developed over the course of the year. The delivery of these actions demonstrates the contribution the Environment Agency and its partners are making towards sustainable development.

Last year saw the formation of the South East England Development Agency (SEEDA) as one of the eight Regional Development Agencies (RDAs). The Environment Agency has taken the opportunity to contribute to the development of their policy and strategy with regard to sustainable development, and to help achieve this, we seconded a member of staff to SEEDA.

While we all recognise the importance of achieving economic growth in East Sussex, it is crucial that such growth is not at the expense of the natural environment. The challenge is to ensure that development proceeds in ways that are not only compatible with environmental protection, but also forward opportunities for environmental enhancement. This can be achieved by:

- forwarding initiatives to encourage the development of brownfield sites;
- locating and phasing new development to make effective use of existing or planned infrastructure and services;
- protecting and identifying opportunities for enhancing ecological value and biodiversity;
- maintaining and improving the quality of air, land and water through the control and prevention of pollution;
- protecting natural river and vulnerable tidal floodplains from development;
- forwarding sustainable urban drainage initiatives;
- promoting and forwarding sustainable waste management facilities including proximity principles;
- reducing waste generation, increasing the re-use and treatment of waste and minimising the disposal to land;
- forwarding water demand management efficiencies: leakage control, metering, water-saving devices and using greywater;
- restoring rivers and wetlands degraded by engineering and urbanisation and improving river corridors;
- protecting and improving landscape character, visual amenity and heritage;
- forwarding sustainable recreation facilities;
- ensuring policies/guidance are included in Development Plans/Briefs to forward environmental protection and enhancement initiatives;
- working in partnership with local authorities, environmental bodies, developers, businesses etc to increase environmental awareness and forward initiatives.

In the Cuckmere and Pevensey LEAP area, negotiations into key flood defence works are continuing at Pevensey Bay, where there is an eroding coastline. Additional financial aid for environmental enhancements at Pevensey Levels is being pursued with the Heritage Lottery Fund, with some funding already secured in a partnership with English Nature. Sussex Area will be holding a week of activities in the community in October to mark the Millennium. Projects include the creation of a pocket park in Hastings and a week of environmental educational activities at Seven Sisters Country Park.

The Annual Review also presents a forward look for agreed actions and includes any new actions that have developed over the course of the year.

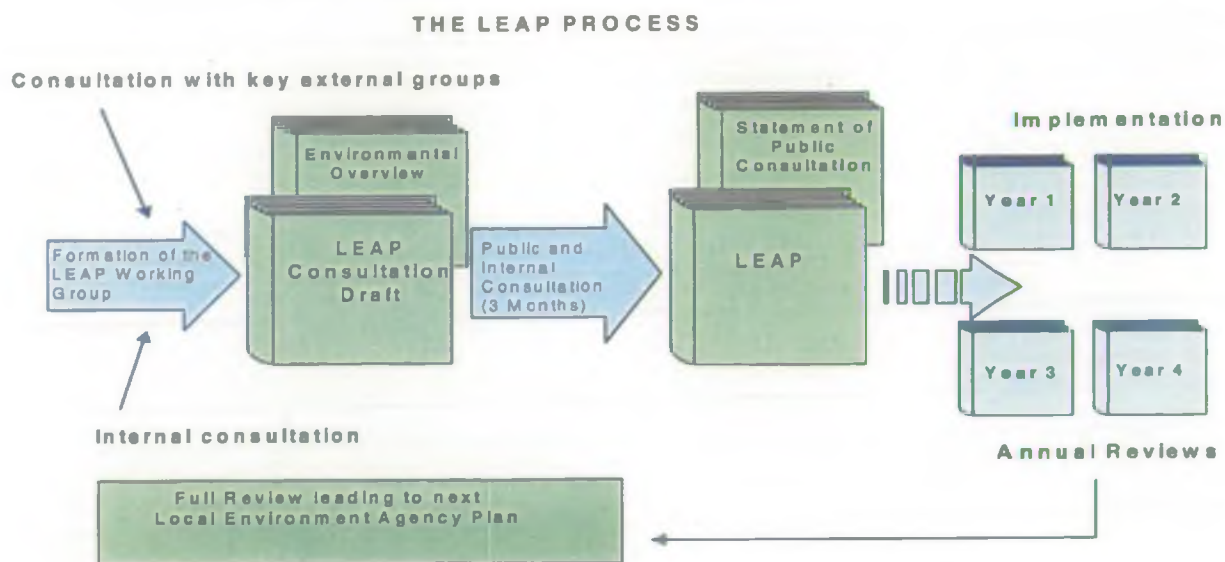
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<b>CONTENTS</b>	<b>Page No</b>
<b>1.0 Introduction.....</b>	<b>1</b>
1.1 Annual Review Process.....	1
1.2 Sustainable Development.....	2
1.3 Main Impacts of New Burdens.....	2
<b>2.0 New Pressures.....</b>	<b>3</b>
2.1 Habitats Directive.....	3
2.2 Housing requirements .....	3
<b>3.0 Key Achievements and Disappointments.....</b>	<b>3</b>
3.1 Notable Achievements .....	3
3.2 Disappointments.....	5
<b>4.0 Update of the Action Plan .....</b>	<b>5</b>
4.1 Action Table.....	5
4.2 Key to Table .....	5
4.3 List of Issues.....	7
4.4 Future Review and Monitoring .....	8
<b>APPENDIX 1.....</b>	<b>43</b>
Publication of Sussex LEAPs .....	43
<b>APPENDIX 2.....</b>	<b>44</b>
Abbreviations.....	44
<b>APPENDIX 3.....</b>	<b>45</b>
Glossary .....	45

1.0 INTRODUCTION

1.1 ANNUAL REVIEW PROCESS

This is the first annual review of the Local Environment Agency Plans (LEAPs) published in the Agency's Sussex area. These integrated environmental management plans have been produced to help us identify, assess, prioritise and solve local environmental issues related to our functions, taking account of the views of our local customers. The LEAP process involves several stages, as illustrated below. These plans set out proposed action for the Agency and partners to deliver over a five year period.



The Agency now has complete coverage of all 13 Consultation Drafts for the Southern Region. In the Sussex Area two Consultation Drafts have so far been converted into Action Plans (Cuckmere/Pevensey Levels and Adur/Ouse) with the third (Arun and Western Streams) due for publication in June 2000. (See Appendix 1 for list of completed documents). The majority of the actions highlighted in these plans not surprisingly require funds for implementation. The Agency has to determine this resource requirement alongside other national and regional priorities and this is carried out through the yearly business planning process. In order to link the Business Plan with LEAPs more effectively a decision has been made to review all LEAPs in the region at the same time to coincide with the business planning cycle. As the majority of the LEAPs have only just been published, there will be little progress to report this year. However, there will be a full progress report on the full suite of area LEAPs in the following year.

To summarise, the Annual Review process enables the Agency to assess progress on a regular basis and incorporate changing local and national priorities as necessary. This document is a review of the Cuckmere and Pevensey Levels Action Plan, published in August 1999.

## 1.2 SUSTAINABLE DEVELOPMENT

Efforts to improve quality of life have resulted in environmental problems. As the climate changes, forests disappear and air pollution increases, it is evident that much greater care must be taken if we are to avoid paying the heavy price of living beyond our environmental means.

Sustainable development, in simple terms, is development which balances three issues: people, profit and the planet. It is based on the idea that people's lives, and the state of our communities, is affected by a combination of economic, social and environmental factors. By understanding the links between them we can develop lasting solutions.

At a strategic level a regional Sustainable Development Framework is currently being drafted for the south east, which is due to be published by the end of the year. It will be consistent with the UK strategy for sustainable development and is intended to be a simple, accessible and inclusive framework which sets out the context for the achievement of sustainable development in the South East of England. At a local level, LEAPs will aid the achievement of sustainable development by helping to develop solutions, which have regard to the economy, society and the environment.

## 1.3 MAIN IMPACTS OF NEW BURDENS

The Agency continues to face pressures on its resources from new responsibilities e.g. the implementation of the new Groundwater Regulations and the Habitats Directive. Other areas of work which will be introduced over the following year include Integrated Pollution Prevention (IPPC), the Contaminated Land Regime, the Control of Major Accident Hazards Regulations 1999 (COMAH) and recommendations from the Easter Flood Action Plan resulting from the Bye report 1998. The Agency remains committed to recycling efficiencies to offset the costs of carrying out new work to improve the environment. However, the pace and size of change will far outstrip our capacity to do this. Although there will be additional resources to cover some of these additional responsibilities, there will be an impact on other areas of work. This highlights the increasing importance of working in the partnership to achieve environmental improvements and enhancements.

The Agency has also identified that a more proactive and co-ordinated approach to securing external funds is necessary in helping deliver objectives. Thus, an area external funding officer has been appointed to help identify high priority activities which present the best opportunities for generating external funds and develop bids.

## **2.0 NEW PRESSURES**

### **2.1 HABITATS DIRECTIVE**

As a proposed RAMSAR site, the Pevensey Levels fall within the scope of the Habitats Directive. This requires the Agency to review all existing authorisations for water abstraction, effluent discharge and waste licensing and decide whether any could be having a significant effect on the designated features of the Levels. Where detriment is identified, such authorisations should be amended or revoked. Where no detriment is likely to result, the authorisations are confirmed. Similarly, all new applications for authorisations and ongoing operations within the Levels will be scrutinised with the Directive in mind. This will inevitably mean some tightening of the authorisation process in and around the Levels and in some cases place additional burdens on applicants to demonstrate that their proposals will not have an adverse effect on the site.

### **2.2 HOUSING REQUIREMENTS**

In March 2000 Draft Regional Planning Guidance for the South East (RPG9) was published for public consultation. This guidance sets out the housing requirements for the region based on a "Plan, Monitor and Manage" approach outlined in PPG3 (Housing). The draft RPG states that housing should be provided at the annual average rate of 43,000 dwellings for the region (excluding London). At this stage figures for East Sussex have not been specified, but it is anticipated that the figures for the period to 2016 will be higher than those currently included in the adopted East Sussex and Brighton and Hove Structure Plan 1991-2001. The Agency will work closely with the Local Authorities to ensure that any additional development which needs to be accommodated within the LEAP area proceeds in ways that are not only compatible with environmental protection, but also forward opportunities for environmental enhancement.

## **3.0 KEY ACHIEVEMENTS AND DISAPPOINTMENTS**

### **3.1 NOTABLE ACHIEVEMENTS**

- All licensed waste management sites in the area have been assessed for their potential environmental risk and operator competence, as part of the Agency's risk assessed approach to site inspections. The methodology is now in routine use allowing officers to target their inspections and enforcement activity to those sites with the highest risk of causing environmental harm.
- Environment Protection Officers carried out a survey of over one hundred commercial/industrial premises on the Diplocks Way Estate at Hailsham as concern had been expressed about the Estate by both Wealden District Council and South East Water. Although no serious breaches of water quality/waste regulation legislation were found, a number of follow up visits will be made to premises where potential problems were identified. It is hoped that the survey will result in fewer pollution incidents affecting the Knockhatch Stream.

- The need for pollution prevention campaigns such as this is highlighted by the view expressed by one company which was fined £800 with £200 costs after being found guilty of causing polluting matter (waste offal) to enter the Knockhatch Stream 1 km south of the Diplocks way Industrial Estate. In mitigation it was said that the pollution caused was insignificant as the stream was already polluted. It is this type of attitude which pollution prevention surveys are designed to alter.
- In response to the problem of flytipping on the Pevensey Levels, Environment Protection staff carried out an undercover enforcement operation code name "operation spider". Working in partnership with the District Council it was aimed at unregistered carriers advertising rubbish removal in the local papers. Carriers were invited to remove waste from an industrial unit occupied by Protection officers posing as businessmen. Several of the loads were found fly tipped, and in other cases illegal waste sites were discovered. Eight cases resulting from this operation are currently being considered for prosecution by the Agency's solicitors.
- A one day workshop and training session has been organised for the District Councils to promote a greater understanding of the evidence needed to bring successful fly tipping cases to court. In partnership with the East Sussex Waste Management Group it is hoped that this will allow all parties to work more effectively in combating the fly tipping problems in the LEAP area.
- This year, in partnership with English Nature, the Environment Agency has secured funding to help with the restoration of Pevensey Levels. A Pevensey Project Officer was appointed on August 2nd 1999.
- The Pevensey PPPP/PFI negotiations continued and contract signing is anticipated for summer 2000.
- Emergency works undertaken by the Agency at Pevensey during the storms of October and Christmas 1999 prevented a possible major breach of the sea defence and potential flooding of hundreds of properties and risk to lives.
- Maintenance contract completed for main river and sea defences.
- In partnership with Sussex University and Le Havre European, the Agency has secured Interreg II funding for a research and development project into endocrine disrupters in fish.
- Successful trials were undertaken of solar energy to power hydrometric instruments in remote locations. This will be extended from Pevensey to other areas in 2000, saving on the use of batteries and thus reducing the number of used batteries to dispose of. Instruments are also more reliable than under battery power.
- Sussex Otters and Rivers Project in place to progress habitat and species enhancement in East Sussex.



- Ecological Study initiated on Hurst Haven catchment, which will form a baseline for assessing the environmental benefits resulting from planned improvements to sewage treatment works at Hailsham.
- In partnership with East Sussex County Council we produced an education CD Rom on the Environment aimed at key stages 2 and 3.

### 3.2 DISAPPOINTMENTS

- Development continues at Sovereign Harbour, Eastbourne, contrary to Agency advice that this be deferred until adequate sea defence protection is provided.
- The two ponds upstream of Buckshole Reservoir in Alexandra Park, Hastings were again polluted by sewage. (The last event was in February 1998 when a significant fish loss occurred.) The cause was again a result of a blocked sewer and, because of the remote location, the discharge went unnoticed until the ponds in Alexandra Park were affected to an extent where fish were in distress. Pressure has been brought on Southern Water by both the Agency and the Borough Council to resolve this issue.
- Floating Pennywort was not eradicated in 1999.

### 4.0 UPDATE OF THE ACTION PLAN

#### 4.1 ACTION TABLE

The Agency continually works towards resolving the issues within LEAPs. The following action table provides information on the progress that has been made in the last year on the issues identified in the Cuckmere and Pevensey Levels Action Plan. (For a fuller account of the issues please refer to the Action Plan.) The opportunity has also been taken to incorporate new issues and actions.

#### 4.2 KEY TO TABLE

The following tables provide detail of the actions for each issue. An explanation of the columns in the table is given below.

- Action in year indicated
- MP Manpower – no additional cost to annual budgetary provision
- U Unknown cost at this time
- K £1000
- \* Total cost for the Sussex Area, not the catchment
- # New action
- > Less than

We recognise that environmental problems are interrelated and need to be dealt with in a holistic manner. Our document "Environmental Strategy for the Millennium and Beyond (Sept 1997)" adopted an integrated approach to understanding, managing, regulating and improving the quality of air, land and water by introducing nine themes as shown overleaf.

Each action has been cross referenced to between one and three of these environmental themes by using the appropriate symbols within the table.



Addressing climate change



Improving air quality



Managing our water resources



Enhancing biodiversity



Managing freshwater fisheries



Delivering integrated river basin management



Conserving the land



Managing waste



Regulating major industries

***Environment Agency Departments***

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

***Responsibility***

AM Area Manager  
 TL Team Leader

Note: The shaded activities in the table represent completed actions.

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### 4.3 LIST OF ISSUES

1. Environmental impacts of Climate Change in Sussex.
2. There is a need to continue to raise awareness of and improve Air Quality.
3. Sustainable water resources management must be forwarded to meet public water supply.
4. Deterioration of control gates on Wallers Haven and Pevensey Haven.
5. Decline in nature conservation value of Pevensey Levels.
6. Opportunities to further the protection and enhancement of biodiversity need to be identified and forwarded.
7. Loss and degradation of wetland and riverine habitats and opportunities for enhancement.
8. The sustainable management of the Cuckmere Estuary.
9. Free passage of sea trout and coarse fish is restricted by obstructions in the rivers.
10. Sustainable fisheries management must be forwarded.
11. Lack of water level control due to the deterioration of land drainage structures and equipment on the Pevensey Levels can impact on conservation and fisheries.
12. There is a lack of sustainable access to the water environment for recreation.
13. Compliance with EU Standards and Agency objectives for water quality.
14. Need to protect archaeological heritage in wetland, riverine and coastal areas.
15. Intermittent pollution of watercourse.
16. The impact of marine pollution on the coastal environment.
17. Standards and maintenance of sea defences including the Pevensey Bay Scheme.
18. Sustainable Urban Drainage Systems (SUDs) should be utilised in new development.
19. The need to protect floodplains.
20. The impact of the new Contaminated Land Regulations.
21. New development will pose increased pressure on the environment in the LEAP area.
22. The sustainable management of wastes must be forwarded to reduce impacts on the environment.
23. The capacity of landfill sites for the disposal of waste runs out in 2003.
24. Potential increase in land application of wastes.
25. Illegal waste disposal (fly tipping) must be controlled in liaison with local authorities.
26. Rubbish in watercourses and the storage of materials on channel bank tops can lead to increased flooding.
27. Potential risk of water pollution from closed landfills.
- \* 28. Methane from landfill sites is contributing to greenhouse effect.
- \* 29. Providing an effective flood warning system.
- \* 30. The effect of oestrogenic hormones (endocrine disrupters) on the aquatic environment.

\* New issues

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#### **4.4 FUTURE REVIEW AND MONITORING**

Regular monitoring and updating of the issues and actions are an integral part of the LEAP process. The Agency will continue to monitor progress and report back annually to all interested parties. A full review will normally be undertaken after five years.

If you require further information about LEAPs in this area or wish to discuss partnership opportunities please contact:

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**ISSUE 1: ENVIRONMENTAL IMPACTS OF CLIMATE CHANGE IN SUSSEX**

The climate of the South-east is already changing and greater climate changes are predicted for this century, with warmer weather all year round, wetter winters and drier summers. Weather extremes may occur more frequently than in the past century. The science of climate change has uncertainties, but is continually developing. An improved understanding of how climate change will affect extreme events is therefore urgently required.

No.	Action	Responsibility (a) Agency Lead (b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
1.1	Review standards of Sea Defences	} Please refer to issue 17 (action 1 to 3)								
1.2	Monitor Climate Change impacts									
1.3	Identify and forward schemes for increased protection									
1.4	To take account impacts of climate change on Sussex environment in undertaking our duties	a) All functions	MP	•	•	•	•	•	•	Principles of "Rising to the Challenge" produced by the Agency and other partners will be followed.


**ISSUE 2: THERE IS A NEED TO CONTINUE TO RAISE AWARENESS OF AND IMPROVE AIR QUALITY**






The Agency is committed to helping the Government deliver the National Air Quality Strategy which sets statutory air quality standards for eight key pollutants and objectives to be achieved by 2005. We do this primarily through the regulation and authorisation of emissions to air (and to water and land) from major industrial processes. Air Quality will be an important issue in any new proposals for a waste incinerator in East Sussex.



No.	Action	Responsibility (a) Agency Lead (b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
2.1 	Continue to work with the Sussex Air Quality Steering Group to forward AQ improvement	a) EPl - PIR TL b) LAs	50*	10	10	10	10	10	•	Agency Representatives have continued to attend and advise the Sussex Air Quality Steering Group.

**ISSUE 3: SUSTAINABLE WATER RESOURCES MANAGEMENT MUST BE FORWARDED TO MEET PUBLIC WATER SUPPLY**

There is a perceived concern by the public that there are insufficient water resources in the south to meet future demands. The greatest pressure on water resources is from public water supplies and this is a particular issue in the south-east due to the rising per capita household consumption. Within the Southern Region our strategy is to promote demand management options, water conservation, new resource development and transfers of supplies. The possible effects of climate change must also be addressed.




No.	Action	Responsibility (a) Agency Lead (b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
3.1 	Promote and encourage demand management and water conservation	a) WR - Manager b) Water Cos. Ofwat, Developers, Public Industry, LAs, Agriculture	15*	•	•	•	•	•	•	Part of area wide promotion.

No.	Action	Responsibility (a) Agency Lead (b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	04/ 05	
3.2 	Continue long term water resource planning for the south-east	a) WR - Manager b) Water Cos., Ofwat, DETR	180*	0	36	36	36	36	36	A review of the effects of abstraction by SEW has been included in AMP3 and the investigation will be progressed by the Company in consultation with the Agency and EN.
3.3 	Investigate reliable yield and sustainable abstraction from Wallers Haven	a) WR - TL b) SE Water, EN, Farmers	8		8					A feasibility study into relocating the river flow gauge at Borcham Bridge will be undertaken as part of the improvements in managing water resources in Wallers Haven.  The two actions above are part of the drive to arrive at sustainable abstraction regime for the Wallers Haven.
3.4 	Promote proactive role in development planning	a) CS - Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Initiatives promoted externally, particularly with LPAs.
3.5 	Promote wastewater recycling and reuse	a) WR - TL	MP	•	•	•	•	•	•	Part of area wide promotion.
3.6 	Develop and implement strategy for targeting activities which pose particular risk to groundwater	a) EPI - WQ Consenting TL b) LAs, Water Cos, Industry	MP	•	•	•	•	•	•	During 1999 the Agency implemented the new Groundwater Regulations. During the period 1999-2000 authorisations were issued under the new Regulations.


No.	Action	Responsibility <i>(a) Agency Lead</i> <i>(b) Partners</i>	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
3.7 	Develop waste minimisation initiatives for water with the public and external organisations	<i>a) WR - TL</i> <i>b) LAs, Water Cos, Industry</i>	U	<1	•	•	•	•	•	No. of initiatives dependent on partnership and external funding opportunities. During 1999/2000 30 businesses in Hastings received advice on how to minimise waste and reduce their water consumption as a result of work done by the Hastings Sustainable Business Partnership in which the Agency is a partner.
3.8 # 	Prepare, implement and maintain an abstraction protection plan for the Hazards Green abstraction on the Wallers Haven	<i>a) WR-Tactical Planning TL</i> <i>b) Southern Water</i>	16	0	10	2	2	2	•	No work undertaken during 99/00. Estimated cost of "time of travel" studies is £7K. Preparation of plan is dependent on identification of additional funding.

**ISSUE 4: DETERIORATION OF CONTROL GATES ON WALLERS HAVEN AND PEVENSEY HAVEN**

The Wallers Haven and Pevensey Haven are important channels in the Pevensey Levels network. Water levels are kept high to provide water for wetfencing and irrigation and for the Wallers Haven to maintain security of surface water abstraction for public water supply. The condition of the control gates is deteriorating and opportunities for funding to repair or replace the gates will need to be investigated.



No.	Action	Responsibility <i>a) Agency Lead</i> <i>b) Partners</i>	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
4.1   	Identify funding options to repair or replace gates	<i>a) FD - TL</i> <i>b) MAFF, LAs</i>	3	0	0	3				Flood Defence Asset Surveys and Flood Defence Management System will identify needs






No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
4.2 	Repair/replace gates	a) FD - TL b) MAFF, LAs	U	0			•	•	•	Subject to economies and funding.

#### ISSUE 5: DECLINE IN NATURE CONSERVATION VALUE OF PEVENSEY LEVELS






Drainage schemes implemented since the early 1950's, together possibly with abstraction for public water supply from the Wallers Haven and changes in land management, have significantly reduced the ecological value of the Levels. The management of the Levels to arrest the decline in nature conservation value is an important issue and the implementation of Water Level Management Plans will be a key factor.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
5.1 	Identify and forward opportunities for external funding	a) CS - FER Project Officer b) EN, SWT	MP	•	•	•	•	•	•	Area External Funding Manager appointed. Bids have been made to the EU Life Fund and regeneration fund which were unsuccessful. Bids have been successful with EN for £200K over 2 years and through the Wildlife Enhancement Scheme (£50K over the next 10 years). Bids are also being pursued with the Heritage Lottery Fund.
5.2 	Appoint Project Officer for the area	a) CS - FER Project Officer b) EN, SWT	52.5	17.5	17.5	17.5	•	•	•	English Nature are contributing £5K/year towards the Project, SWT £2K/year and the Agency 17.5K/year. Richard Hull, Project Officer, was appointed in August 1999. He is currently progressing the restoration of the Levels working with landowners.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
5.3 	Identify spring flooding appropriate for key species to increase bird numbers	a) CS - FER Project Officer b) Landowners & key organisations	MP	•	•	•	•	•	•	No costs available yet. Need RSPB advice and Sussex Ornithological Society etc.
5.4 	Further develop pilot areas to study raised water levels	a) FER - Project Officer b) Landowners & key organisations	MP	•	•	•	•	•	•	Ongoing preparations of Heritage Lottery Bid will enable pilot areas to be developed.
5.5 	Promote extension of the Wildlife Enhancement Scheme	a) FER - Project Officer b) EN	MP	•	•	•	•	•	•	Ongoing. Recent review completed.





**ISSUE 6: OPPORTUNITIES TO FURTHER THE PROTECTION AND ENHANCEMENT OF BIODIVERSITY NEED TO BE IDENTIFIED AND FORWARDED**


The Agency is one of the lead partners in the conservation of biodiversity in the UK and the responsible organisation for a number of water-related species and habitats under the UK Biodiversity Action Plan. There are various actions which need to be undertaken in order to help achieve the commitments in the Sussex Biodiversity Action Plan.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
6.1 	Develop targets for Species Action Plans and forward implementation	a) FER - Con/Rec TL b) Sussex Biodiversity Partnership	MP	•	•	•	•	•	•	Species Action Plans completed at a National Level for the Little Whirlpool Ramshorn Snail, the Shining Ramshorn Snail, True Fox Sedge, Cut Grass, Great Crested Newt. Progress against each of the Plans reported to DETR in September 1999. Agency Biodiversity Report due to be published in 2000.
6.2 	Identify rare plant species that could be encouraged to recolonise areas by habitat creation	a) FER - Con/Rec TL b) EN, SWT	MP	•	•	•				Medium priority, to be carried out when resources become available.
6.3 	Prepare an otter management strategy	a) FER - Otter Project Officer b) SWT, SE Water, Holly Trust, Sussex Biodiversity Partnership	MP	•	•	•				Otter Species Action Plan for Southern Region produced in 1999. Sussex Otter Project Officer appointed, January 2000, as collaborative project with SE Water, SWT, the Holly Trust and the Agency.
6.4 	Assess the level of data on headwaters and identify priorities for completing species level surveys of selected headwaters	a) FER - Biology TL b) LAs, SWT	10	4	3	3				This is also a national issue. Sussex Area have taken the lead nationally on looking at the conservation value of headwaters.
6.5 	Identify strategy for protection of headwaters	a) FER - Biology TL b) LAs, SWT	3	3						This is also a national issue. Sussex Area have taken the lead nationally on looking at the conservation value of headwaters.

### ISSUE 7: LOSS AND DEGRADATION OF WETLAND AND RIVERINE HABITATS AND OPPORTUNITIES FOR ENHANCEMENT


Agricultural improvements, previous river engineering practices and lack of, or poor, maintenance have all contributed to the destruction and degradation of wetlands and riverine habitats. Action is required to prevent further damage to, or loss of, remnant habitats and to create new and improve existing wetland habitats.


No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	04/ 05	
7.1 	Promote the retention of undisturbed buffer strips along watercourses	a) FER - Con/Rec TL/ Planning Liaison TL b) MAFF, Landowners, FWAG	MP	•	•	•	•	•		On-going through responses to planning enquiries and development plans and advice given to landowners.
7.2 	Identify and prioritise areas for habitat enhancement	a) FER - Con/Rec TL b) EN, SWT, LAs, Conservation groups & organisations	MP	•	•	•	•	•	•	Present Priorities: a) Pevensey Levels b) Cuckmere Haven c) West Dean Brooks with SDCB
7.3 	Identify and forward opportunities for environmental enhancement through external funding and planning obligations / agreements	a) FER - Con/Rec TL b) LAs, EN, SWT, conservation groups & organisations, water cos.	MP	•	•	•	•	•	•	Ongoing as opportunities arise. National R & D Project on Planning obligations completed.
7.4 	Establish management programmes for undesirable alien species	a) FER - Con/Rec TL /Development Control TL b) LAs, EN, SWT	U	•	•	•	•	•	•	Very high priority particularly Floating Pennywort on Pevensey. Management incorporated into annual maintenance programme for 2000/01.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
7.5 	Investigate extent to which nutrients in sewage discharges are affecting invertebrates, particularly downstream of Hailsham STW	a) FER - Biology TL/ Tactical Planning TL b) SWS	6	2	2	2				Chemical and Biological monitoring upstream and downstream of Hailsham north and south was undertaken during 1999. One additional site in the LEAP area is being investigated for potential designation as a sensitive area, namely the River Cuckmere downstream of Vines Cross STW. A report will be prepared putting this site forward for designation during 2000.

### ISSUE 8 : THE SUSTAINABLE MANAGEMENT OF THE CUCKMERE ESTUARY


The lower River Cuckmere is of particular importance for its landscape, ecology, geology and amenity/recreational value, which attracts large numbers of visitors. Pilot studies have indicated the potential opportunities for enhancement associated with a flood defence strategy which allows some natural evolution of the shoreline and realignment of the total defences along the Cuckmere.





No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
8.1 	Hold the line of the sea defence embankment	a) FD - Manager b) SDCB, MAFF, CC, EN, LAs, NT	MP	•	•	•	•	•	•	SMP preferred option. Coastal Strategy to be completed. The SMP states that in the short term the line of the Sea Defence embankment should be held, but that managed realignment should be actively explored. Following the storms in October and December the shingle ridge has been flattened and widened and the number of groynes is likely to be reduced as they were badly damaged.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
8.2 	Forward opportunities for habitat enhancement through phased sequence of realignment of tidal defences along the Cuckmere	a) FER - Manager b) SDCB, MAFF, DC, EN, LAs, NT	66	6	10	50	•	•	•	Feasibility completed in 1998. Detailed level survey of Southwest quadrant completed in 1999. Public exhibition, a joint venture with NT/EN/SDCB and Wealden DC erected at Seven Sisters Country Park Visitors' Centre in August 1999. Detailed design to be produced for pilot area in 2000. Approval needed from SFDC and National Trust committee. Further public consultation required in summer 2000, running parallel with application for footpath diversion and development of plan to relocate Bare Cockles. Pilot area to be progressed in 2001/2002.

### ISSUE 9 : FREE PASSAGE OF SEA TROUT AND COARSE FISH IS RESTRICTED BY OBSTRUCTIONS IN THE RIVERS



The Agency is committed to maintaining, improving and developing fisheries and seeks to ensure the free passage of native fish. There are a number of obstacles to the free passage of sea trout within the catchment. In addition coarse fish can be washed downstream of weirs and sluices in high flow conditions. Fish passes have been designed for salmonid populations and the flow velocities are too great for coarse fish. This results in an impoverished fish stock on the rivers.



No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
9.1 	Investigate operation of sluices and evaluate option for replacement/ removal where identified to be required	a) FD - TL /Fisheries Scientist/ Fisheries TL b) Angling clubs, landowners	U	0						No action due to lack of resources.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
9.2 	Assess effectiveness of fish passes. Identify obstacles where fish passes or improvements / replacements to existing fishpasses required.	a) FER - Fisheries Scientist b) S E Water	U	MP	•	•	•	•	•	Work with SE Water at Arlington. Research and implementation dependent upon resources available and partnership opportunities.
9.3   	Identify areas for fish refuges and reduction in steepness of bank profile	a) FER - Fisheries TL b) Angling clubs	MP	•	•	•	•	•	•	The Agency has completed a £10K "strip desilting" project at Borcham Street on the Wallers Haven. The increased water depth will act as a fish refuge, retaining fish at the "top" of the widened section.

### ISSUE 10 : SUSTAINABLE FISHERIES MANAGEMENT MUST BE FORWARDED


Problems have been identified with the unlicensed netting of eels and concurrently, by catches of coarse fish not being returned. Some river reaches have fish populations lower than expected and they do not appear to be self-sustaining.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
10.1 	Assess the scale of netting and its impact on stocks of eels in the River Cuckmere and Pevensey Levels	a) FER - Fisheries TL b) Eel fishermen, angling organisations	MP	•	•	•	•	•	•	Targeted enforcement continuing. No increase of netting detected. Applications for elver / eel licences in decline. Cuckmere surveyed autumn 1999.
10.2 	Maintain or improve current levels of enforcement	a) FER - Fisheries TL b) Eel fishermen, angling organisations	MP	•	•	•	•	•	•	Reduced resource allocation forcing 20% reduction in activity.


No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
10.3 	Identify specific enhancements to improve fish habitats and spawning sites, particularly in the main havens and channel	a) FER - Fisheries TL b) Angling organisations, landowners	U	•	•	•	•	•	•	Present enhancements identified for: Clive Vale Reservoir Boreham Street - £50K project. Permissions process slow. Start date 21.02.00.
10.4 	Forward funding opportunities for improvement schemes	a) FER - Fisheries TL	MP	•	•	•	•	•	•	Area External Funding Manager appointed. Action includes opportunity for improvements to land drainage structures detailed in issue 11 of the original Action Plan.

**ISSUE 11: LACK OF WATER LEVEL CONTROL DUE TO THE DETERIORATION OF LAND DRAINAGE STRUCTURES AND EQUIPMENT ON THE PEVENSEY LEVELS CAN IMPACT ON CONSERVATION AND FISHERIES**

The land drainage of the Pevensey Levels is very complex and relies on an extensive system of sluices and pumps which are approaching the end of their design life. The requirement for these structures needs to be appraised and where appropriate, repaired so that the Levels can be managed to achieve the priorities of each area.







No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
11.1 	Undertake asset condition survey and correlate with WLMPs into overall strategy for area	a) FD - Strategic Planning TL/Pevensey Levels Project Officer b) Pevensey Levels Study Group, Landowners, Farmers, EN, MAFF, SWT, RSPB	MP	•	•	•	•	•	•	Main river complete under MAFF High Level Target. Pevensey Levels Project Officer appointed, funded by Agency/EN.





No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
11.2 	Repair leaks on smaller sluices under general river maintenance	a) FD - Strategic Planning TL /Pevensey Levels Project Officer b) Landowners, Farmers, EN	U	•	•	•	•	•	•	Work completed on structure RO6 (a marsh sluice that drains into Rickney Sewer). Opportunities to repair leaks will be forwarded under External Funding Manager where this meets environmental criteria. WLMP being implemented.

**ISSUE 12: THERE IS A LACK OF SUSTAINABLE ACCESS TO THE WATER ENVIRONMENT FOR RECREATION**


The Agency has a duty to provide for and promote water recreation having regard to other environmental factors. We are concerned at the potential risk of erosion and loss of integrity of floodbanks with increased use of embankments, particularly for cycleways and horseriding and also the safety of users. We need to establish and maintain liaison with organisations in relation to waterside access and recreation.



No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
12.1   	Forward opportunities for access to water in planning conditions for waterside development	a) FER - Con/Rec TL/CS Planning Liaison TL b) Landowners, LAs, Developers	MP	•	•	•	•	•	•	40 (approx) planning applications screened for their impact on recreation.
12.2   	Review opportunities for increased recreational access to the water environment, taking into account the natural conservation, needs of disabled persons, safety of users and integrity of defences and access routes for future maintenance and defence	a) FER - Con/Rec TL b) RYA / BCU, LAs, EN, SWT	U	MP	•	•	•	•	•	Pevensey disabled angling facility in project stage. Bid to national fisheries due for 2001/2002.  This action includes identifying recreational projects to forward as collaborative projects.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
12.3 	Prepare and implement management plans for Agency sites	a) FER - Con/Rec TL b) ESCC	90	15	15	15	15	15	15	Site management plan for Parkwood being implemented in partnership with ESCC who provide a warden for the site on a part time basis. (Project continues annually.)
12.4 	Identify and forward opportunities for recreation enhancement when undertaking core function activities	a) FER - Con/Rec TL b) Other functions, Recreation organisations	MP	•	•	•	•	•	•	Impacts on recreation considered as part of Pevensey Bay Flood Defence Scheme. Boreham St. renewal of wetland habitat associated with the meadow where project ran.

**ISSUE 13: COMPLIANCE WITH EU STANDARDS AND AGENCY OBJECTIVES FOR WATER QUALITY**



Although the majority of watercourses in the LEAP area currently comply with EU Directives and the Agency's River Ecosystem (RE) targets, there are some concerns which require investigation by the Agency.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
13.1 	Process consents for AMP2 commitments. Sign off installation and monitor	a) EPl - Water Consenting TL/Tactical Planning TL b) SWS	10	2	2	2	2	2	U	£25m is total estimated cost for Southern Water. 2K/yr Agency Monitoring Cost. It is anticipated that revised consents for Eastbourne and Hastings will be issued by summer 2000.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
13.2 	Check quality of bathing water at Pevensey Bay to ensure continued compliance with Bathing Water Directive	a) EPr - Tactical Planning TL	5	1	1	1	1	1	U	Monitoring at the Pevensey Bay Bathing Beach during the bathing beach season has been carried out by the Agency during 1999. The bathing water quality in 1999 met the Guideline Standards of the EC Bathing Water Directive.
13.3 	Confirm reasons for failure of Freshwater Fisheries Directive and River Quality Objective at Windmill Hill	a) EPr - Tactical Planning TL b) SWS	5	5						Herstmonceux (Windmill Hill) STW is identified for improvements to the standard of sewage treatment in the AMP3 programme. This is a result of the EC Freshwater Fish Directive failure. It is anticipated that improvements in sewage treatment will address the poor water quality of the Nunningham Stream at Windmill Hill.




**ISSUE 14: NEED TO PROTECT ARCHAEOLOGICAL HERITAGE IN WETLAND, RIVERINE AND COASTAL AREAS**



The Agency has a duty to protect and conserve our archaeological heritage. In particular wetlands, owing to their nature and lack of disturbance, have considerable potential for the presence of organic remains.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
14.1 	Identify archaeological implications of coastal defence works at Pevensey	a) FER - Con/Rec TL b) EH, LAs	MP	•	•					Costs included within overall contract. Archaeological implications of works low.
14.2 	Increase awareness through education	a) FER - Con/Rec TL / Customer Contact TL b) EH, LAs	MP	•	•	•	•	•	•	Ongoing through literature and talks.

**ISSUE 15: INTERMITTENT POLLUTION OF WATERCOURSES**



Leakage and accidental spillage of oils and other polluting liquids can cause intermittent pollution of both surface and groundwaters. Pollution from industrial estates is of particular concern in the LEAP area.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
15.1 	Promote environmental awareness throughout business and the community, in particular forward the "Oil Care" campaign, best operational practice and waste minimisation	a) EPr TL b) Industry, LAs	MP	•	•	•	•	•	•	Hastings Sustainable Business Project has been ongoing. Amongst other things this project has educated businesses on pollution prevention through seminars and visits to companies.
15.2 	Carry out pollution prevention survey of industrial units at Diplocks Way Industrial Estate, Hailsham	a) EPr TL	5	5						Baseline biological survey of adjacent stream (Knockhatch Stream) completed.
15.3 	Raise awareness of high pollution risks associated with domestic heating oil tanks	a) EPr - Manager b) LA, Industry	MP	•	•	•	•	•	•	Resources only available to carry out partial campaign.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
15.4 	Ensure industrial estates are controlled with regard to oil storage to the same standards as agriculture	a) EPr TL b) LAs	24	2	2	10	10			Limited resources available due to increasing regulatory pressures. Planning applications received for comment have been returned to LAs with a requirement to include planning conditions setting out how oil should be properly stored. Every unit on the industrial estate at Diplocks Way, Hailsham was visited to advise on oil storage. All staff have undergone detailed training on new powers available to serve notices where oil storage is inadequate. Owing to limited resources only routine visits will be made in 2000/2001. However, the opportunity will be taken to use the Agency's integrated approach when visiting premises for other purposes.
15.5 	Promote pollution prevention measures in land use planning	a) CS - Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Relevant policies incorporated within development plans and planning conditions put on permissions for new development.





**ISSUE 16: THE IMPACT OF MARINE POLLUTION ON THE COASTAL ENVIRONMENT**


The Agency has limited responsibilities to address this problem directly, but works with the emergency services and others to ensure the effective response to any event.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	04/ 05	
16.1 	Draw up and test emergency plan for protecting the Cuckmere Estuary following a marine oil spill	a) EPr TL b) Emergency Services, LAs	1	1						Complete
16.2 	Contribute to external organisations emergency plans	a) EPr TL b) Emergency Services	MP	•	•	•	•	•	•	Ongoing

**ISSUE 17: STANDARDS AND MAINTENANCE OF SEA DEFENCES INCLUDING THE PEVENSEY BAY SCHEME**


There is a need to review standards of protection afforded by sea defences, in particular to consider the predicted impacts of climate change as shingle beaches will be susceptible to sea level rise and increased storm severity. This is particularly relevant in areas of recent and continuing intensive development along the Sussex coast. The Agency is promoting a Scheme to improve the standards of the Sea Defence at Pevensey Bay and funding for this is being investigated through a private public partnership (PPP). We are also concerned about obstructions to our access for shingle movement to maintain the Sea Defence.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
17.1 	Review standards of sea defences in Sussex	a) <i>FD - Strategic Planning</i> <i>TL</i> b) <i>MAFF, LAs</i>	100*		MP	MP	MP	MP	MP	Sea defence survey complete. Population into FDMS ongoing. Defences reviewed twice yearly.
17.2 	Monitor climate change impacts on sea defences	a) <i>FD - Strategic Planning</i> <i>TL</i> b) <i>MAFF, LAs</i>	80*		MP	MP	MP	MP	MP	Ongoing through tide gauge network.
17.3 	Identify and forward schemes for increased protection in Sussex	a) <i>FD - Strategic Planning</i> <i>TL</i> b) <i>MAFF, LAs</i>	200*	200	100	MP	MP	MP	MP	Development of Pevensey PPP/PFI.
17.4 # 	Forward scheme for improved sea defence at Pevensey Bay	a) <i>FD - Strategic Planning</i> <i>TL</i>	28m	•	•	•	•	•	•	£30,000 over 25 years. Preferred bidder agreed. Negotiations continue with Pentium. Contracts hoped to be signed in May with Pentium on site in June. Note: This is the first contract of its kind for sea defence works, hence long period required for development of appropriate contract.





No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
17.5 	Improve liaison and awareness of Agency maintenance requirements with other beach users, property owners and local authorities	a) CS - Development Control TL b) LAs, Fishermen, property owners, boat users, jet skiers	MP	•	•	•	•	•	•	Close liaison with property owners on redevelopment, identifying the risks involved.

**ISSUE 18: SUSTAINABLE URBAN DRAINAGE SYSTEMS (SUDS) SHOULD BE UTILISED IN NEW DEVELOPMENT**

The construction of new development offers opportunities for creative design which will not only address flood concerns, but will substantially reduce diffuse pollution to watercourses and enhance the conservation and recreational value of flood attenuation ponds.






No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
18.1 	Forward strategy for new development SUDs with local authorities	a) CS - Development Control TL b) LAs, developers, SWS, consultants	2 + MP	2	•	•	•	•	•	Produced local information sheets, promoted through Sussex land drainage group and to external organisations.





No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
18.2 	Promote use of wet ponds for surface water attenuation and environmental enhancement	a) CS - Development Control TL b) LAs, developers, SWS, consultants	MP	•	•	•	•	•	•	On-going through planning conditions and development plan policies.
18.3 	Ensure implementation of effective management for future maintenance of SUDs	a) CS - Development Control TL b) LAs, developers, SWS, consultants	MP	•	•	•	•	•	•	Ongoing. Forwarded through planning system and land drainage groups.
18.4 	Forward the use of rainwater harvesting techniques in new development	a) CS - Planning Liaison TL b) LAs, developers, SWS, consultants	MP	•	•	•	•	•	•	Forwarded through planning system.
18.5 	Forward innovative design and encourage best practice through publicity, seminars and workshops	a) CS - Customer Contact TL b) LAs, developers, SWS, consultants	18	3	3	3	3	3	3	Various seminars, presentations undertaken targeting local authorities' members and officers.

**ISSUE 19: THE NEED TO PROTECT FLOODPLAINS**


There is a need to ensure the protection of floodplains from development and any landraising to ensure the natural functioning of rivers and their floodplains and that flood risk to both new and existing property and land is not increased. Zoning of areas at risk to flooding from the sea must be forwarded and inappropriate development in such areas resisted.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	04/ 05	
19.1 	Undertake Maintenance of Watercourses (see issue 26 action 4)									
19.2 	Further promote floodplain protection to local authorities	a) CS - Development Control TL b) LAs	MP	•	•	•	•	•	•	Ongoing through literature and seminars.
19.3 	Complete and provide more detailed flood risk information to local authorities	a) CS - Development Control TL b) LAs	MP							First stage complete, more comprehensive information being produced.
19.4 	Ensure floodplain protection is identified in development plans and planning responses	a) CS - Development Control TL/ Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Ongoing. Policies included in development plans and objections made to planning applications.
19.5 	Provide "expert" evidence to back planning objections and development plan policies at public inquiries	a) CS - Development Control TL / Planning Liaison TL b) LAs	MP		•	•	•	•	•	No inquiries over last year.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
19.6 	Promote natural functioning of floodplains	a) CS - Development Control TL / Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Ongoing through planning process.
19.7 	Educate and encourage best practice through publicity, seminars and workshops	a) CS - Development Control TL b) LAs	MP	•	•	•	•	•	•	Various presentations and seminars undertaken targeting local authorities' members and officers.




### ISSUE 20: THE IMPACT OF THE NEW CONTAMINATED LAND REGULATIONS





Land contamination may be present in many sites as a result of waste disposal, for example, closed landfill sites, or industrial use, such as gas works, petrol stations and scrapyards. Such sites may present risk of harm to the environment as a result of their former uses and will require consideration following implementation on 1st April 2000 of the new Contaminated Land Regulations.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
20.1 	Work with local authorities to assess risks and extent of problems associated with contaminated land	a) EPr - Scientific Support TL b) LAs, landowners, developers	MP	•	•	•	•	•	•	Regulations came into force on 1st April 2000. (Scientific Support TL in Sussex is Agency Lead until Contaminated Land Officer is appointed.)

**ISSUE 21: NEW DEVELOPMENT WILL POSE INCREASED PRESSURE ON THE ENVIRONMENT IN THE LEAP AREA**



The Agency is a statutory consultee on Development Plans and certain types of planning applications. It also has a duty to contribute to the objective of sustainable development. With increasing pressures for development there is an even greater need for the Agency to work closely with local authorities to identify opportunities and forward initiatives and planning policies for the protection and enhancement of the environment.



No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
21.1 	Promote and forward effective liaison with LAs	a) CS - Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Ongoing through presentations and meetings.
21.2 	Provide relevant advice to LAs to ensure environmental policies are forwarded in Development Plans	a) CS - Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Ongoing through presentations and meetings.
21.3 	Identify opportunities for environmental enhancement	a) CS - Planning Liaison TL b) LAs, environmental bodies	8	6	2	•	•	•	•	Future funding dependent upon gaining external funding.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
21.4 	Identify opportunities for environmental protection and enhancement in planning application responses	a) CS - Manager/Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Ongoing through planning responses and development planning.
21.5 	Forward environmental capital and capacity initiatives with Local Authorities	a) CS - Manager/Planning Liaison TL b) LAs	U	10	•	•	•	•	•	Dependent upon partnerships opportunities.
21.6 	Identify / recommend possible planning obligations to forward opportunities for environmental protection and enhancement	a) CS - Manager/Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Forwarded through planning liaison process.
21.7 	Provide evidence to support LAs at Development Plan or Planning Appeal inquiries to back Agency objections / recommendations	a) CS - Manager/Planning Liaison TL b) LAs	MP		•	•	•	•	•	No inquiries over past year.

**ISSUE 22: THE SUSTAINABLE MANAGEMENT OF WASTES MUST BE FORWARDED TO REDUCE IMPACTS ON THE ENVIRONMENT**










The Agency's principal aim is to contribute towards attaining the objective of sustainable development. For waste management this means reducing the amount of waste produced, making the best use of the waste that is produced, reducing the impacts of wastes on the environment and encouraging the movement up the waste hierarchy.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
22.1 	Undertake education campaign to public, business and public sector	a) CS - Customer Contact TL/Tactical Planning TL b) LAs, Industry	MP	•	10	•	•	•	•	<p>Waste Directory detailing companies and organisations able to assist with prioritising sustainable waste management solutions was published in July 1998 and was distributed during 1999. An updated version will be published during the early summer of 2000.</p> <p>The Agency has contributed to the Sussex Business Environment Forum, which was set up to co-ordinate the efforts of public and voluntary organisations attempting to encourage businesses to minimise waste.</p> <p>In July 1999 the Agency organised a national conference at the University of Brighton which considered how best to encourage businesses to minimise their waste.</p> <p>The Agency made an important contribution to the East Sussex Waste Local Plan by providing data and technical advice on the location and types of proposed waste management facilities.</p>
22.2 	Promote composting and recycling initiatives	a) EPI - Tactical Planning TL b) LAs, Public, Private contractors	25	5	5	5	5	5	•	The Agency sponsored the production of a recycling guide for householders in East Sussex.



No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
22.3 	Develop collaborative waste minimisation initiatives with business, schools, hospitals etc.	a) <i>EPI - Tactical Planning TL</i> b) <i>LAs, Industry, Hospital Trusts</i>	250*	50	50	50	50	50	•	<p>The Agency has continued to support Hastings Sustainable Business Partnership. The Partnership enabled waste minimisation audits of 30 companies in Hastings during 1999/2000. In addition seminars for businesses were held on environmental management, legislation and waste minimisation.</p> <p>A pilot waste min. programme was run in Haywards Heath in partnership with LAs in East Sussex and Sussex Business Link. Seven businesses including two from Eastbourne took part through a series of 6 monthly modules designed to show the businesses how they could identify savings through minimising waste.</p> <p>The Agency continued to support ESCC's Avis Way Green Business Project by providing technical advice to companies and seconding a member of staff to work with LA. Specifically £6,500 annual savings were identified at a lighting company. Savings were achieved through reduction in water use and improvements in energy usage. In partnership with ESCC the Agency ran a competition for schools in East Sussex requiring participating schools to submit projects aimed at identifying methods of saving energy and water and reducing solid waste production. The three awards, one for energy, one for water and one for waste were awarded to three schools all based in the LEAP area.</p> <p>Future funding dependent upon gaining external funding.</p>
22.4 	Promote sustainable waste management opportunities in new development	a) <i>CS - Planning Liaison TL</i> b) <i>LAs, developers</i>	MP	•	•	•	•	•	•	Forwarded through development plans.

**ISSUE 23: THE CAPACITY OF LANDFILL SITES FOR THE DISPOSAL OF WASTE RUNS OUT IN 2003**

The East Sussex Waste Strategy recognises that landfill capacity in the County is extremely limited and is estimated to be sufficient only until the year 2003.


No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	04/ 05	
23.1 	Provide relevant waste data to local authorities for planning and waste strategies	a) CS - Planning Liaison TL b) LAs, Industry	MP	•	•	•	•	•	•	Information provided to ESCC.
23.2   	Promote facilities for commercial / industrial waste treatment / recovery / disposal	a) CS - Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Undertaken through planning responses in their input to the East Sussex County Council Waste Plan.
23.3   	Forward sustainable waste management in advising planning authorities on sites, methods of disposal and policies in Waste Local Plans	a) CS - Planning Liaison TL b) LAs	MP	•	•	•	•	•	•	Undertaken through planning responses in their input to the East Sussex County Council Waste Plan. In early 2000 the Environment Agency launched a new software tool enabling local authorities and developers to model different waste management solutions. This tool is known as "WISARD". The tool looks at the relative environmental impacts of different scenarios for dealing with household waste.
23.4  	Promote waste tyre recovery and disposal facilities	a) EPl - Tactical Planning TL b) LAs, Industry	MP	•	•	•	•	•	•	Ongoing



No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
23.5 	Forward opportunities for clinical waste minimisation	a) <i>EPI - Tactical Planning TL</i> b) <i>Industry</i>	U	•						No examples in the catchment, but pilot surveys have been carried out at Lewes and Bognor Regis hospitals.
23.6 	Ensure that any new proposals for the management of waste follow the principles of BPEO	a) <i>EPI - Tactical Planning TL</i> b) <i>Industry, LAs</i>	MP	•	•	•	•	•	•	Few proposals for new waste management facilities have been received. Landfill gas management systems are now being installed at Pebsham landfill site as a result of action taken by the Environment Agency.



#### ISSUE 24: POTENTIAL INCREASE IN LAND APPLICATION OF WASTES

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 area and is likely to increase over the next few years due to increased sewage treatment, higher landfill costs and the cessation of sea disposal of sewage sludge.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
24.1 	Develop and implement a coherent strategy for regulation	a) <i>EPI - Tactical Planning TL</i> b) <i>SWS</i>	MP	•	•	•	•	•	•	Ongoing





**ISSUE 25: ILLEGAL WASTE DISPOSAL (FLY TIPPING) MUST BE CONTROLLED IN LIAISON WITH LOCAL AUTHORITIES**

With the introduction of the Landfill Tax, fly tipping was generally expected to increase although a lack of adequate data on the levels of fly tipping before the introduction of the Landfill Tax means that this is unlikely to be confirmed with accuracy. The Agency has introduced a protocol with the Local Authorities for the regulation of fly tipping.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
1	 Encourage public and landowners to report incidents. Take action against offenders	a) EPr - TL b) LAs, Public	MP	•	•	•	•	•	•	Protocol agreed with all Local Authorities Covert surveillance carried out at well known fly tipping areas.
2	 Educate and increase public awareness	a) EPr - Manager b) LAs, Public	MP	•	•	•	•	•	•	Proactive press release issued. Talks to groups. Workshops arranged with Local Authorities. Suspected persons targeted in undercover operation has led to 8 people being put forward for prosecution. Fly tipping seminar with key partners being organised. Fly tipping hot line promoted.



**ISSUE 26: RUBBISH IN WATERCOURSES AND THE STORAGE OF MATERIALS ON CHANNEL BANK TOPS CAN LEAD TO INCREASED FLOODING**

The disposal of rubbish, including garden refuse/cuttings, into watercourses and the storage of materials and waste on river bank tops are of particular concern. Such materials can be washed downstream in flood flows, causing obstructions within the channel and leading to increased flooding.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
26.1 	Encourage public to report concerns and offenders	a) EPr - TL b) LAs, Public	MP	•	•	•	•	•	•	Fly tipping hot line promoted - Tel No. 0800 807060 Proactive press release issued.
26.2 	Take action against offenders	a) EPr - TL b) LAs	U							No evidence to support prosecution.
26.3 	Educate and increase awareness of flood risk, legal implications and riparian duties	a) FD - TL b) LAs	MP	•	•	•	•	•	•	Various presentations and seminars.
26.4 	Undertake inspection and maintenance works particularly in sensitive areas	a) FD - TL b) LAs, riparian owners	2.7m	300	300	300	300	300	300	Maintenance works programmed in accordance with flood defence management system.


#### ISSUE 27: POTENTIAL RISK OF WATER POLLUTION FROM CLOSED LANDFILLS

Leachate from old unlined landfills has the potential to cause significant environmental impact.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
27.1 	Investigate pollution risk	a) EPr - Scientific Support TL b) LAs	100*	50	50					The Contaminated Land Regulations came into force on 1st April 2000. These regulations provide the Agency with powers to require remediation works to be carried out at closed landfill sites which are causing pollution.
27.2 	Undertake remedial action where necessary	a) EPr - Scientific Support TL b) LAs	U							







**ISSUE 28: METHANE FROM LANDFILL SITES IS CONTRIBUTING TO GREENHOUSE EFFECT**

Methane is estimated to be between 20 and 30 times more damaging as a greenhouse gas than carbon dioxide. Some landfill sites have gas incineration facilities which burn off the methane, producing carbon dioxide and, in some cases, energy for electricity production. Such initiatives should be promoted and further implemented.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
28.1 	Seek to improve management of methane gas generation from landfill sites through flaring or utilisation schemes for energy. Promote use of Landfill Tax to encourage recycling of methane generating waste that would otherwise go to landfill	a) EPI - Tactical Planning TL b) LAs, Operators of landfills	MP	•	•	•	•	•	•	Ongoing. Pebsham Landfill site should have gas extraction and gas utilisation later in 2000.


**ISSUE 29: PROVIDING AN EFFECTIVE FLOOD WARNING SYSTEM**

There is a need to provide a seamless and integrated service to give a timely warning of possible flooding, enabling the public to better protect themselves and their property.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	04/ 05	
29.1 	Promote the flood warning service to the public so as to raise awareness of the hazards and risks from flooding	a) <i>FD - Flood Warning Officer</i>	MP	•	•	•	•	•	•	Ongoing through literature and public meetings.
29.2 	Provide detailed flood risk information to Local Authorities and emergency services	a) <i>FD - Flood Warning Officer</i> b) <i>LA's</i>	MP	•	•	•	•	•	•	First stage complete awaiting more information from the flood plain mapping project.
29.3 	Ensure that flood warning procedures are in place	a) <i>FD - Flood Warning Officer</i> b) <i>LA's, Emergency Services</i>	MP	•	•	•	•	•	•	Being updated to incorporate management changes in flood defence.
29.4 	Provide systems that will disseminate flood warnings from area offices	a) <i>FD - Flood Warning Officer</i>	100*		100	•	•	•	•	Equipment purchased.
29.5 	Run emergency exercise to test systems and procedures	a) <i>FD - Flood Warning Officer</i> b) <i>LA's, Emergency Services</i>	MP	•	•	•	•	•	•	Key areas being identified for exercises.
29.6 	Improve flood forecasting systems such as telemetry for improved early detection of flooding problems	a) <i>FD - Flood Warning Officer</i>	MP	•	•	•	•	•	•	Key sites have been identified as prioritised.

### ISSUE 30: THE EFFECT OF OESTROGENIC HORMONES (ENDOCRINE DISRUPTERS) ON THE AQUATIC ENVIRONMENT

Endocrine disrupters are substances which interfere with the hormonal system of animals, causing physiological effects such as the impairment to reproduction. Invertebrates, fish, birds and mammals (including humans) may all be affected. Research carried out by the Agency nationally on selected rivers has indicated that an oestrogenic effect could be caused in fish when exposed to sewage effluent downstream of outfalls from sewage treatment works.

No.	Action	Responsibility a) Agency Lead b) Partners	Total Cost (£K)	Financial years (1 <sup>st</sup> April - 31 <sup>st</sup> March)						Progress/comments
				99/00	00/01	01/02	02/03	03/04	04/05	
30.1 	Continue with environmental and effluent monitoring and further research to determine the concentrations, behaviour and fate of hormones in the aquatic environment	a) FER - Fisheries Scientist b) Water Companies, universities	U	•	•					In partnership with Sussex University and Le Havre European the Agency has secured Interreg II funding for a research and development project into endocrine disrupters in fish. This £136k project determines the levels of oestrogenic pollutants in waste effluents entering East Sussex and Seine Maritime Rivers and pollutants causing feminisation of fish.

**APPENDIX 1****PUBLICATION OF SUSSEX LEAPS****Cuckmere and Pevensey Levels**

Consultation Draft	November 1998
Environment Overview	November 1998
Action Plan	August 1999
1st Annual Review	May 2000

**Adur and Ouse**

Consultation Draft	April 1999
Environment Overview	April 1999
Action Plan	February 2000

**Arun and Western Streams**

Consultation Draft	October 1999
Environment Overview	October 1999
Action Plan	due June 2000

CD Rom available containing all above documents. Please contact Sussex Area Office:  
Customer Services 01903 215835.

**APPENDIX 2****ABBREVIATIONS**

AMP	Asset Management Plan	LEAP	Local Environment Agency Plan
AOD	Above Ordnance Datum	LPA	Local Planning Authority
AONB	Area of Outstanding Natural Beauty	LNR	Local Nature Reserve
BAP	Biodiversity Action Plan	MAFF	Ministry of Agriculture, Fisheries and Food
BATNEEC	Best Available Technology Not Entailing Excessive Costs	MRF	Minimum Residual Flow
BOD	Biochemical Oxygen Demand	NVZ	Nitrate Vulnerable Zones
BPEO	Best Practicable Environmental Option	OFWAT	Office of Water Services
CPRE	Council for the Protection for Rural England	PIR	Process Industry Regulation (formerly IPC)
CSO	Combined Sewer Overflow	RE	River Ecosystem
DETR	Department of the Environment, Transport and Regions	RQO	River Quality Objective
DOE	Department of the Environment (now DETR)	RSPB	Royal Society for the Protection of Birds
DWI	Drinking Water Inspectorate	RSR	Radioactive Substances Regulation
EA95	Environment Act (1995)	SAC	Special Area of Conservation
EN	English Nature	SAM	Scheduled Ancient Monument
EPA90	Environmental Protection Act (1990)	SAP	Species Action Plan
EQS	Environmental Quality Standard	SDCB	Sussex Downs Conservation Board
ESA	Environmentally Sensitive Area	SMP	Shoreline Management Plan
ESCC	East Sussex County Council	SNCI	Site of Nature Conservation Importance
FDMM	Flood Defence Management Manual	SPA	Special Protection Area
FRCA	Farming and Rural Conservation Agency	SSSI	Site of Special Scientific Interest
FWAG	Farming and Wildlife Advisory Group	STW	Sewage Treatment Works
GPZ	Groundwater Protection Zone	SWQO	Statutory Water Quality Objective
GQA	General Quality Assessment	SWS	Southern Water Services Ltd
HAP	Habitat Action Plan	SWT	Sussex Wildlife Trust
HNDA	High Natural Dispersion Area	UWWTD	EU Urban Waste Water Treatment Directive
IDB	Internal Drainage Board	VOC	Volatile Organic Compound
IPC	Integrated Pollution Control (now PIR)	WCA	Wildlife and Countryside Act 1981
IPCC	Intergovernmental Panel on Climate	WIA91	Water Industries Act 1991
IPPC	Integrated Pollution Prevention and Control	WLMP	Water Level Management Plan
		WRA91	Water Resources Act 1991
		WSCC	West Sussex County Council
		WWTW	Waste Water Treatment Works



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**APPENDIX 3****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.
Anadromous	Fish with a life history which involves growing and maturing in the sea but returning to freshwater to spawn.
Anticline	A geological ridge or fold.
Above Ordnance Datum	Height above mean sea level (Ordnance Survey)
Abstraction Licence	Licence issued by the Environment Agency under Section 38 of the Water Resources Act 1991 to permit water to be abstracted.
Asset Management Plan	Asset Management Plans can be considered as the means by which the water undertakers plan the work required and the capital expenditure necessary, for improvements and maintenance of the water supply, sewage treatment works and sewerage systems. These are drawn up through consultations with the Agency and other bodies to cover a five year period. Asset Management Plans must be agreed by the Department of the Environment Transport and Regions, and OFWAT.
Aquifer	A layer of underground porous rock which contains water and allows water to flow through it.
Area of Outstanding Natural Beauty	Areas of Outstanding Natural Beauty are designated under the National Parks and Access to the Countryside Act 1949 by the Countryside Commission. Their primary purpose is to conserve natural beauty.
Biochemical Oxygen Demand	A measure of the amount of oxygen in water during the breakdown of organic matter.

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Biodiversity Action Plan	Nationally, a Biodiversity Action Plan (BAP) was produced in 1995 by the UK Biodiversity Steering Group as part of the Government's commitment to conserving biodiversity made at the "Earth Summit" in Rio de Janeiro. The plan contains costed targets and proposed actions for over 100 species and 14 habitats. Local Biodiversity Action Plans have now been produced at a county level (e.g. the Sussex BAP) which focus upon the habitats and species plans listed in the national BAP, relevant to that particular area.
Catchment	The total area of land which contributes surface water to a specified watercourse or water body.
Coastal Protection	Natural or man-made features protecting land over 5m AOD contour
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.
Cumecs	Cubic metres per second.
Cyprinid	Family: <i>Cyprinidae</i> . Coarse fish belonging to the carp family.
Discharge Consent	A statutory consent issued by the Environment Agency under Schedule 10 of the Water Resources Act 1991 to indicate any limits and conditions on the discharge of an effluent to a controlled water.
Dissolved Oxygen	The amount of oxygen dissolved in water. Oxygen is vital for life so this measurement is an important, but highly variable, indicator of the "health" of a water. It is used to classify waters.
Dry Weather Flow	Average daily flow in dry weather including trade effluent and an allowance for infiltration, in litres per day.
Effective Rainfall	The rain remaining after losses by evaporation and transpiration have been allowed for.

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Environmentally Sensitive Area	Area designated under law as being particularly desirable to conserve, protect or enhance, for example by the adoption of particular agricultural methods.
Eutrophication	The enrichment of waters by inorganic plant nutrients. Normally referred to when nutrient enrichment arises from human actions e.g. from agricultural run-off or from sewage effluent
Floodplain	This includes all land adjacent to a watercourse and the sea over which water flows or would flow, but for flood defences, in times of flood.
Fly Tipping	The unregulated and, hence, illegal, dumping of waste.
General Quality Assessment	A scheme which identifies sets of standards for the consistent measurement of water quality irrespective of uses applying to a river stretch.
Green Belt	A zone of designated countryside immediately adjacent to a town or city, defined in development plans for the purpose of restricting outward expansion of urban areas, and preventing coalescence of settlements.
Groundwater	Water which is contained in underground rocks (aquifers).
Greenhouse Gas	Natural and man-made gases which influence the greenhouse effect. Gases include carbon dioxide, methane, ozone and chlorofluorocarbons.
Global warming	The rise in the temperature of the globe due to the effects of greenhouse gases which cause the greenhouse effect.
Habitat Action Plan	Conservation Action Plans for specific habitats as documented in both national and local Biodiversity Action Plans.
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.

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High Natural Dispersion Area	Coastal or estuarine areas which have been identified by the DETR as having high natural dispersion characteristics.
Hydrograph	The graph of groundwater levels, river levels, or river flow.
Internal Drainage Boards	Autonomous public bodies under the control of board members (including those elected by agricultural ratepayers and those nominated by local authorities), with responsibilities and powers for flood defence on ordinary watercourses (non-Main Rivers) under the Land Drainage Act.
Landfill Tax	A levy per tonne or cubic metre of waste sent to landfill, used to encourage the use of recycling and waste minimisation.
Local Nature Reserve	Areas of local conservation importance as designated by Local Authorities (and in consultation with English Nature) under section 21 of the National Parks and Access to the Countryside Act 1949.
Macroinvertebrate	Animals lacking a backbone which are retained on a 0.5mm sieve.
Main River	All watercourses are designated as either 'Main River' (defined in maps held by the EA and MAFF) or 'ordinary watercourses' ('non-Main River'). Main Rivers include all watercourses which contribute significantly to catchment drainage, although ordinary watercourses may be significant locally. The EA has powers to carry out works to protect land and property from flooding by improving drainage of Main Rivers only, under the Water Resources Act 1991. Local authorities (and in some areas Internal Drainage Boards) have powers for flood defences on ordinary watercourses, and the EA has a supervisory role.
Mld	Megalitres (million litres) per day.
$\mu\text{g/l}$	Microgrammes per litre.
mg/l	Milligrams per litre.
National Nature Reserve	An area of land designated by English Nature under Section 35 of the Wildlife and Countryside Act 1981. They are managed by, or on behalf of, English Nature specifically for nature conservation purposes.

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Nitrate Vulnerable Zones	Areas containing waters which are particularly susceptible to nitrate pollution, as designated under the EU Nitrates Directive .
PM <sub>10</sub> Potable Water	Particulate matter smaller than 10 microns in diameter. Water of suitable quality for drinking.
Prescribed Flow Condition	A condition attached to an abstraction licence such that if the river flow is less than a given flow, abstraction must cease until flows are restored.
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.
Return Period	The return period of a flood. Flood events are described in terms of the frequency at which, on average, a certain severity of flood is exceeded. This is usually expressed as a return period in years, e.g. 1 in 100 years.
Riparian Owner	A person or organisation with property rights on a river bank.
River Corridor	Land which has visual, physical or ecological links to a watercourse and which is dependent on the quality or level of the water within the channel.
River Quality Objective	The level of water quality that a river should achieve in order to be suitable for its agreed uses.
Salmonid	Family: <i>Salmonidae</i> . Game fish including salmon, sea trout and trout.
Sea Defences	Natural or man-made features protecting land below 5m AOD contour.
Shoreline Management Plan	Locally initiated by the South Downs Coastal Group for the Shoreline from Selsey Bill to Beachy Head, with the main option to hold the line. Will continue to evolve as strategies are developed through consultation with specialists and local people.
Site of Nature Conservation Importance	Site of local nature conservation importance as designated by Local Authorities for planning purposes.

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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 EU Habitats Directive (92/43/EEC). All SAC's are also SSSIs.
Special Protection Area	Internationally important nature conservation site designated under the EU Wild Birds Directive (79/409/EEC). All SPA's are also SSSIs.
Species Action Plans	Conservation Action Plans for specific species, as documented in both national and local Biodiversity Action Plans
Statutory Water Quality Objectives	Water Quality objectives set by the Secretary of State for the Environment, in relation to controlled waters.
Strata	Layers of rock, including unconsolidated materials such as sands and gravel.
Strip Desilting	A method of desilting a watercourse which prevents 100% disturbance, protects diversity and limits the amount of silt to be spread.
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

# SOUTHERN REGION LEAPS

## 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.

Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol BS32 4UD

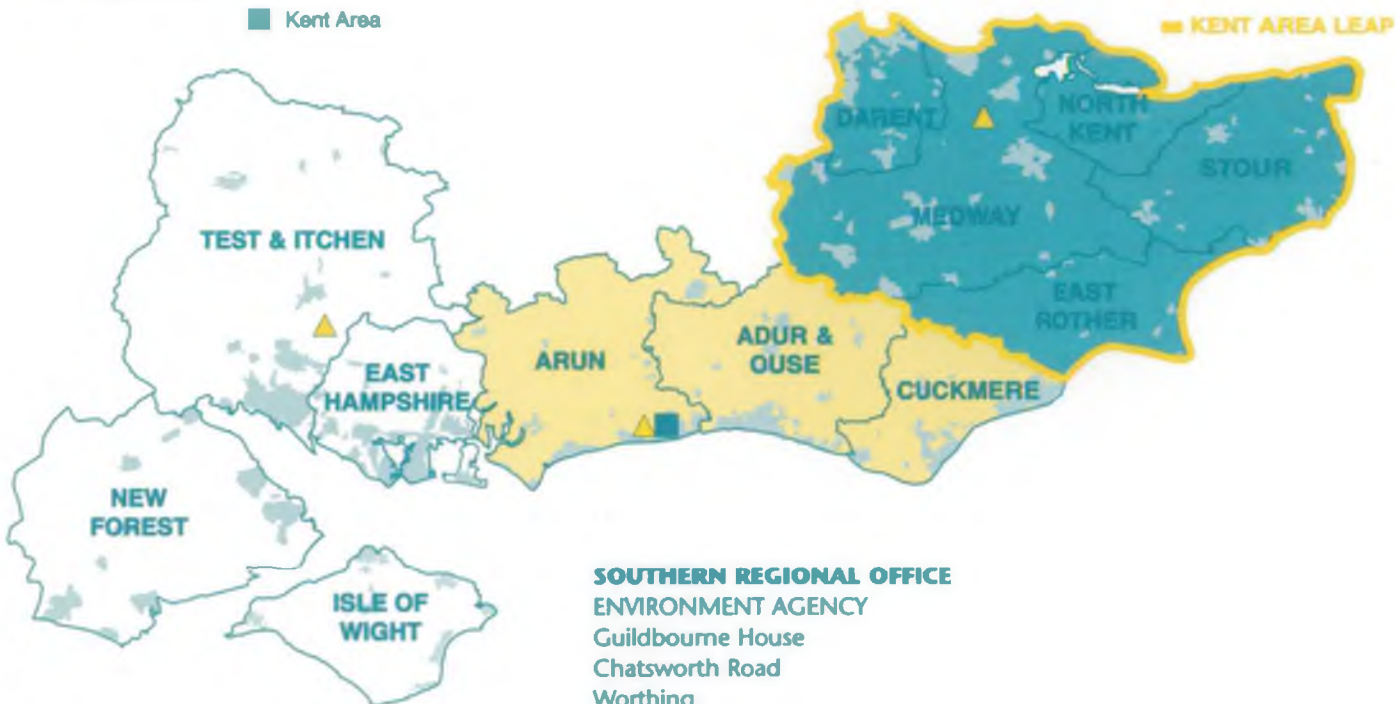
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- Hampshire & Isle of Wight Area
- Regional HO
- Sussex Area
- Kent Area



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**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**

